

## **Abstracts of the IPOS 12th World Congress of Psycho-Oncology, 25–29 May 2010, Quebec City, QC, Canada**

### **SYMPOSIUM ABSTRACTS**

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#### **S1808**

##### **Psychopharmacologic Management of Depression, Delirium, and Anxiety in Psycho-oncology for Non-Psychiatrists**

**SYMPOSIUM DESCRIPTION:** Delirium, Depression, and Anxiety Disorders comprise over 90% of the psychiatric disorders diagnosed and treated in various cancer treatment settings. Most psycho-oncology care is provided by clinicians who are not psychiatrists, but rather psychologists, social workers, psychotherapists, counselors, as well as nurses and oncologists, with limited expertise in psychopharmacologic management of these common psychiatric syndromes. While Anxiety and Depression are common in both the ambulatory and inpatient cancer settings, delirium is particularly prevalent in inpatient and palliative care settings. This symposium will provide non-psychiatrist psycho-oncologists, nurses and oncologists, with critical knowledge of assessment and management of these major psychiatric complications of cancer, with a special emphasis on psychopharmacologic issues. The Symposium presenters are recognized international experts in the topics of Delirium, Depression and Anxiety in Cancer. The Discussant will give the perspective of a Psychologist who integrates psychopharmacologic management issues into the multidisciplinary care of cancer patients.

#### **S1808-1**

##### **Psychopharmacologic Management of Delirium in the Cancer Patient**

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**OBJECTIVES:** Delirium is the most common neuropsychiatric complication in the patient with cancer, occurring in up to 85% of cancer patients in the last weeks of life. This lecture will teach

participants how to diagnose delirium accurately, undertake appropriate assessment of etiologies, and understand the benefits and the risks of psychopharmacologic interventions currently available for managing delirium in the cancer setting. **METHOD:** Delirium is characterized by an abrupt onset of disturbances of consciousness, attention, cognition, and perception. Delirium is associated with increased morbidity and mortality in cancer patients, causing distress in patients, family members, and staff. Delirium interferes with pain and symptom control. Delirium is a sign of physiologic disturbance, usually involving multiple medical etiologies. The management of delirium involves the concurrent search to identify and treat its medical causes while utilizing pharmacologic and non-pharmacologic interventions to control the symptoms of delirium. **RESULTS:** This lecture will review the literature on the use of neuroleptic and sedative agents in the management of the symptoms of delirium in cancer. Clinical trials of typical and atypical antipsychotics and sedative agents will be reviewed. Side Effects of typical and atypical antipsychotics will be reviewed including extrapyramidal syndromes, neuroleptic malignant syndrome, metabolic syndrome, and cardiovascular syndromes. **CONCLUSIONS:** Psycho-oncologists and clinicians who care for cancer patients must be able to diagnose delirium accurately, undertake appropriate assessment of etiologies, and understand the benefits and the risks of psychopharmacologic interventions currently available for managing delirium in the cancer setting. Typical and Atypical anti-psychotic medications play an important role in the effective management of the symptoms of delirium in the cancer patient.

#### **S1808-2**

##### **A Review of Depression for the Non-Psychiatrist**

Harvey Chochinov

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Canada*

**OBJECTIVES:** Depression is a common source of distress and suffering for patients facing life threatening and life limiting conditions. The purpose of this presentation is to provide non-psychiatrists, working within a cancer or palliative care setting, an overview of the area of depression. **METHOD:** This presentation will review some of the pertinent literature addressing depression, particularly focusing on empirical studies whose findings have helped inform the field. These studies include epidemiological data, screening data and data examining the interface between depression and various common sources of distress facing patients with poor prognoses. Finally, an overview of various treatment approaches, including psychopharmacological interventions, will be provided. **RESULTS:** Various studies affirm that clinical depression is an important source of distress amongst patients nearing end of life. Diagnostic acumen improves with an awareness of the clinical features of depression, as well as an ability to apply empirically validated screening approaches. Knowing how to treat depression can also improve clinical outcomes and enhance the quality of life for patients whose illness has been complicated by depression. **CONCLUSIONS:** Appreciating the intricacies of depression can provide non-psychiatric clinicians a better understanding of their cancer and palliative care patients. Knowing how to screen for, diagnose and treat depression is an important component of comprehensive psychosocial care. Such care can help improve the quality of life, and lessen the burden of suffering, for patients who are nearing end-of-life.

### S1808-3

#### **Psychopharmacologic Management of Anxiety in Cancer Patients**

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**OBJECTIVES:** Anxiety represents a common problem among cancer patients. In managing anxiety it is important to differentiate between anxiety due to abnormal physiological states from anxiety disorders meeting the DSM or the WHO-ICD criteria. Clinical anxiety can be a manifestation of variety of disorders including: Anxiety Disorders (e.g. Panic Attack disorder, Phobia and Social Phobia, Post-Traumatic Stress Disorder), Adjustment Disorders, Depressive Disorders, as well as mood, cognitive and other disorders where anxiety can be an important dimension (e.g. Somatoform Disorders). **METHOD:** In this presentation the most important literature regarding the treatment of anxiety in cancer patients will be

reviewed both in terms of RCTs and observational studies and clinical experience. **RESULTS:** Benzodiazepines (BDZ) by acting on the GABA system, have a sedative, anxiolytic, and anticonvulsant effect. BDZ should be used for short periods of time and can help patients in reducing anxiety before medical or surgical procedures, chemotherapy or other anxiety provoking situations. Selective Serotonin Re-uptake Inhibitors (SSRIs) and drugs acting on both noradrenaline and serotonin (NSRI's) have been used successfully. Other drugs (e.g. atypical antipsychotics) can also have a role in psychopharmacological treatment of anxiety. **CONCLUSIONS:** Several classes of drugs can be usefully employed in oncology setting to treat anxiety, according to the diagnosis and the phenomenology of the symptom spectrum (categorical and dimensional assessment). Psychopharmacological treatment, associated with psychological or rehabilitation intervention, should be considered as a part of integrated approaches to cancer in order to improve the patients' quality of life.

### S1808-4

#### **Psychopharmacology for non-Prescribing Providers**

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**OBJECTIVES:** The goal of this presentation is to illustrate how knowledge of psychopharmacology can be integrated into interdisciplinary care in psycho-oncology by nonmedical mental health professionals. Adequate care of patients with cancer includes assessment and treatment of psychiatric disorders that may pre-exist the cancer diagnosis, or may develop following the diagnosis. Depression, Anxiety Disorders and delirium are the most common disorders in these patients. Clinical psychologists are often directly involved in the diagnosis and management of these disorders. **METHOD:** In the United States, the majority of mental health services for patients with cancer are provided by clinical psychologists, social workers, and other nonmedical therapists, who may assume a major role in diagnosing disorders such as depression and anxiety in cancer patients and monitoring patients' response to psychotropic medications. These practitioners are frequent contact with patients and may be in the best position to observe symptomatic improvement, side effects problems, and issues involving medication compliance. **RESULTS:** It is increasingly important that all mental health professional working in psycho-oncology develop familiarity with psychiatric medication treatment. The ability of

nonmedical professionals to accurately communicate with medical providers to discuss diagnosis, target symptoms, presumed etiology, and treatment modalities is an important aspect of interdisciplinary care in psycho-oncology. Clinical psychologists and other mental health professionals can use knowledge of psychopharmacology to develop a successful collaboration with medical professionals involved in patient care. **CONCLUSIONS:** Nonmedical clinicians who integrate psychopharmacology management issues with their expertise in the diagnosis and treatment of psychiatric disorders can provide a higher level of care to patients with cancer.

### S1810

#### **Flourishing Or Flailing? The Impact Of Cancer On Survivors And Their Caregivers Across The Cancer Trajectory**

**SYMPOSIUM DESCRIPTION:** This symposium brings together three cutting-edge studies and provides a comprehensive description of the psychosocial issues encountered by cancer survivors and their caregivers by presenting data from patient cohorts at different time points along the illness trajectory and different sub-groups, including cancer caregivers and cancer survivors from culturally diverse backgrounds. The three presentations in this symposium will focus on: 1) the positive and negative impacts of cancer on survivors over the first 2 years post-diagnosis; 2) the financial and psychosocial impacts of cancer on the caregivers of cancer survivors 6 months post-diagnosis; and 3) the cancer-related challenges and concerns faced by cancer survivors from different cultural backgrounds (Arabic, Greek and Chinese). The first two studies reported in this symposium are from the two largest longitudinal population based studies of cancer survivors and their caregivers in Australia. These studies address an important gap in the literature by including a description and discussion of the patient and caregiver sub-groups who do well and sub-groups who do poorly, and examine the predictors of these outcomes. Particularly, this is one of the first analyses identifying the predictors of borderline/clinical anxiety or depression among cancer caregiver. The third presentation of the symposium reports on the most substantial study of psychosocial outcomes of migrants with cancer living in Australia. This study provides insight into the cancer experience of this sub-group of patients, which remains under-reported in the cancer literature, and identifies areas where additional psychosocial support is needed. Particular attention is given to discuss these research findings in the context of developing relevant and

innovative psychosocial interventions to optimise (or maintain) illness adjustment of patients and their caregivers throughout the cancer journey.

### S1810-1

#### **Predicting Borderline/Clinical Anxiety and Depression Among a Large, Population-Based Sample of Cancer Caregivers Six Months Post-Diagnosis**

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**OBJECTIVES:** A range of challenges faced by cancer caregivers is now documented, as well as the personal and contextual variables mediating their levels of anxiety and depression. However, most studies predict sub-clinical levels of anxiety or depression and little is known about what contributes to caregivers reaching borderline/clinical levels of anxiety or depression. This study addresses this knowledge gap and identifies the predictors of borderline/clinical anxiety or depression among caregivers of cancer survivors. **METHOD:** 547 cancer caregivers, participating in Australia's first longitudinal study of caregivers, were surveyed at 6-8 months post-diagnosis. Prevalence of anxiety and depression was assessed using the Hospital Anxiety and Depression Scale. Predictors measured included demographics, care giving roles and strains, psychosocial unmet needs, and caregivers' personal and contextual resources. Data were analysed using chi-square and forward stepwise logistic regression. **RESULTS:** Avoidant coping was the strongest predictor of anxiety and depression, followed by interference in regular activities due to care giving role and experiencing at least moderate/high unmet emotional/psychological need. Additional predictors of anxiety included interference in regular activities due to own health problems and seeking assistance from a health care professional. Depression was also predicted by not living with the cancer survivor, having out-of-pocket expenses, managing patient medication, and low physical quality of life. **CONCLUSIONS:** This analysis identified where partners/caregivers require additional assistance to overcome the challenges of their new responsibilities and maintain their well-being. An increased awareness of predictors of borderline/clinical anxiety and depression can contribute to optimising referral to support care services for those caregivers most at risk and tailoring

of interventions to enhance psychosocial adjustment.

#### S1810-2

##### *'It's Been A Journey, I Am A Survivor': Patterns of Adjustment Across the Cancer Trajectory*

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**OBJECTIVES:** Understanding the onset, duration, frequency and severity of the positive and negative effects of cancer is essential to knowing how to best support the growing population of cancer survivors to 'thrive'. This presentation will describe survivors' patterns of psychosocial wellbeing and service utilisation over the first 2 years since diagnosis, and the characteristics of those who sustain or develop high levels of psychosocial morbidity. **METHOD:** A cohort of 1,453 survivors diagnosed with one of the eight most incident cancers was recruited from two state-based cancer registries. Participants completed a self-report survey that assessed a range of outcomes including anxiety, depression, distress, perceived needs, quality of life, appraisal, post-traumatic growth, lifestyle behaviours as well as patient, disease and treatment characteristics. Survey data gathered at approximately six, 12 and 24 months post-diagnosis were examined and triangulated with information from in-depth interviews. **RESULTS:** About 20% of survivors either developed or continued to experience elevated levels of psychological morbidity over time. About one-third reported a clinically important decrease in QoL from baseline to 1-year post-diagnosis. Even at 6-months post-diagnosis, positive effects were reported such as enhanced appreciation for life (79%). A range of risk factors associated with sustained or emergent psychological morbidity were identified. **CONCLUSIONS:** Although most survivors have adjusted well to their cancer diagnosis and treatment by 12 months post-diagnosis, issues develop and/or persist for others. These findings emphasise the importance of periodic screening for distress and tailored intervention across the cancer trajectory, including the survivorship phase. Survivors' reports of positive effects of cancer as early as 6 months post-diagnosis suggest considerable resilience and adaptability in the face of adversity.

#### S1810-3

##### **Unmet Needs in Chinese (Mandarin and Cantonese), Greek, and Arabic-Speaking Cancer Survivors in Australia**

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**OBJECTIVES:** Although Australia is one of the most culturally diverse countries in the world, very little is known about the experiences of culturally and linguistically diverse (CALD) cancer patients. Our group is conducting a population-based study of Chinese (Mandarin and Cantonese), Greek and Arabic-speaking migrant cancer survivors and a matched control group of Australian-born English-speaking cancer survivors to assess levels of psychological distress, unmet need, and quality of life of these groups. **METHOD:** Participants were born in a country where Chinese, Greek or Arabic is spoken (or Australia) and diagnosed with cancer in 2004–2007. Questionnaires were completed in their preferred language and assessed anxiety and depression (HADS), quality of life (FACT-G), and unmet needs (items from the SCNS, CaSUN, and our own work addressing culturally specific issues). Preliminary data is available for CALD survivors ( $n = 150$  to date) recruited through cancer registries in New South Wales and Queensland. **RESULTS:** Over 35% of survivors experienced elevated anxiety and over 20% elevated depression, compared to 21% and 11% respectively in a population-based sample of Australian cancer survivors 5 years post-diagnosis. Quality of life scores were below Australian population norms on all domains. Highest unmet needs were for help with 'managing concerns about the cancer coming back', 'information about cancer and its treatment', 'written information in my language', and a 'specialist who speaks my language'. **CONCLUSIONS:** Results highlight that CALD cancer patients are potentially more at risk for

psychological morbidity than native Australians. In addition, results identified areas of unmet need which might be better addressed by the health system, particularly with regards to the provision of information and support. These results can be used to inform the design of relevant and targeted psychosocial interventions. Possible strategies for intervention will be discussed.

### S1813

#### **Adaptations of Meaning-Centered Psychotherapy for other populations and purposes in psycho-oncology and palliative care**

**SYMPOSIUM DESCRIPTION:** Meaning-Centered Psychotherapy (MCP) for ambulatory advanced cancer patients has been developed and tested in clinical trials in both Group and Individual formats by Breitbart and colleagues at Memorial Sloan-Kettering Cancer Center. This Symposium describes four novel interventions that represent adaptations of MCP for other populations and purposes in the cancer and palliative care settings. Presenter 1 will present Meaning-Centered Psychotherapy for Nurses in Palliative Care. Presenter 2 will present Meaning-Centered Bereavement Intervention for Parents who have lost a child to cancer. Presenter 3 will present Meaning-Centered Approaches Adapted to Inpatient and Home Hospice Patients. Finally, Presenter 4 will present a Cognitive Existential Intervention with meaning components. The Discussant will comment on the expansion of MCP in psycho-oncology and palliative care.

### S1813-1

#### **Meaning-Centered Grief Intervention for Parents Who Have Lost a Child to Cancer**

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**OBJECTIVES:** In addition to profound grief, parents who lose a child to cancer face unique challenges in making meaning of their loss. They may struggle with their sense of identity and purpose, the meaning of their child's life, and finding sense and significance in the loss. The purpose of this ongoing study is to aid in the adaptation of Meaning-Centered Psychotherapy, an intervention designed to enhance meaning and reduce distress, for parents bereaved by cancer. **METHOD:** Parents bereaved 6 months to 3 years ago are being recruited from 75 families. Participants will first complete quantitative assessments of 1) meaning and purpose, 2) prolonged grief disorder (PGD), 3) insecure attachment, 4) adjustment, and 5) intervention preferences and perceived barriers to psychosocial service use. We will

then conduct in-depth qualitative interviews with a subset of parents ( $n = 24$ ) about themes of meaning-making, comparing parents with high vs. low levels of PGD. **RESULTS:** This study will inform development of a meaning-centered grief intervention by a) characterizing the challenges in finding meaning that parents face in order to shape the content of a treatment manual, b) examining themes in parents with and without clinically significant levels of PGD, and c) identifying parents' intervention preferences, needs, and barriers to psychosocial service use to determine the best target population and intervention format. Preliminary findings will be presented. **CONCLUSIONS:** Parents bereaved by cancer may grapple with finding meaning in their loss and with shifting their identity from dedicated caregivers to bereaved parents. Information about the unique themes of meaning and intervention preferences among parents who lose a child to cancer are crucial to the development of a theory-driven, tailored intervention that is acceptable, effective at enhancing meaning and reducing suffering, and has the potential to be readily disseminated within pediatric cancer care facilities.

### S1813-2

#### **A Meaning-centered Intervention for Oncology and Palliative Care Nurses: Exploring Processes and Outcomes**

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**OBJECTIVES:** Nurses working in oncology and palliative care frequently encounter existential and spiritual challenges. To address this problem, we adapted a Meaning-centered Intervention (MCI), and tested its efficacy to enhance nurses' job satisfaction and quality of life using an RCT design. While nurses in the experimental group reported more perceived personal benefits, emotional and spiritual quality of life remained unaffected by the intervention. Two pilot studies were designed to explore factors contributing to these null findings. **METHOD:** The first goal was to pre-test the 5-week format. The second goal was to explore nurses' existential, and spiritual experiences of the MCI and to describe the qualitative effects of the MCI from the nurses' point of view. Two qualitative studies were conducted, with French ( $n = 11$ ), and English ( $n = 16$ ) samples. The first study focused on spirituality experiences, while the second emphasised the meaning of experiences. Interpretative phenomenological analysis was used. Quantitative outcomes were explored. **RESULTS:** Nurses' participation and attendance was excellent. Two themes emerged

from the first study. The MCI expanded nurses' spiritual and existential awareness. A group's containing function for nurses was revealed. For the second study, post-MCI findings revealed greater awareness for meaning of suffering, and importance of self-care. Self-care was defined as experiences of personal growth and emphasis on boundaries between their private and professional selves. How the MCI provided a safe space was also revealed. **CONCLUSIONS:** Both studies supported the relevance of the experiential content and the group format. Both studies associate MCI effects with personal growth and support. Exploration of outcomes is provided. Next steps are discussed.

### S1813-3

#### **A Cognitive-Existential Intervention to Improve Existential and Global Quality of Life in Non-Metastatic Cancer Patients**

Pierre Gagnon

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**OBJECTIVES:** While existential issues are often considered in advanced cancer, non-metastatic cancer patients are also concerned with existential distress. In addition, they are in a better physical and mental condition to get involved in more intensive interventions that are often necessary to properly address these issues. We developed an intervention, partially adapted from Meaning-Centered Psychotherapy to address the needs of this population. **METHOD:** A 12-session cognitive-existential intervention was designed to address existential and global Quality of Life (QoL) of French-Canadian non-metastatic cancer patients in group and individual formats. A pilot study evaluated the intervention, now in an efficacy trial, comparing group and individual formats to standard care. Existential QoL is measured by the FACIT-SP and the existential subscale of the McGill Quality of Life (MQoL) questionnaire; global Quality of Life is measured by the MQoL. **RESULTS:** The pilot phase confirmed the feasibility of the study with recruitment of 33 non-metastatic cancer patients. The attendance rate was 94% and the rate of completion of questionnaires was 96.7%. Quality control confirmed the standardization of the interventions. Several pilot data showed full or near statistical significance. We have now recruited 87 patients that were randomized in the efficacy trial. Preliminary data show high satisfaction rates and interest in the intervention. **CONCLUSIONS:** The feasibility of the study was confirmed by the pilot study. Preliminary data suggest high satisfaction rates and interest in non

metastatic cancer patients. The potential efficacy of the intervention on existential and global quality of life will have to be confirmed by the completion of the larger study.

### S1813-4

#### **Meaning-Centered Psychotherapy with Hospice Patients**

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**OBJECTIVES:** Loss of meaning, fear of dying, and demoralization are commonly experienced by hospice patients as they approach death. The delivery of psychotherapy to these patients is complicated by the limitations imposed by the setting, as well as by the sudden physical and cognitive changes. As a result, patients' emotional needs may be unmet. This presentation will discuss how meaning-centered psychotherapy can be effectively adapted to address emotional suffering in hospice patients and their caregivers. **METHOD:** Meaning-centered psychotherapy has the potential to effectively address loss of meaning, relieve emotional suffering, and ease the dying process hospice patients. However, both the therapy model and session structure need to be adapted to the hospice setting, the patient's condition, and caregivers' emotional functioning. Assessment skills, flexibility and sound clinical judgment are required. This case-based presentation will describe how clinicians can effectively use meaning-centered psychotherapy with hospice patients and their caregivers. **RESULTS:** Meaning-centered interventions can be successfully adapted to the inpatient and home hospice setting. However, frequency, length of session, and recipient may need to change from session to session. When patients are approaching death the quality of their distress, therapeutic goals, and ability to engage in the session may change rapidly. Awareness of these clinical issues will allow clinicians to work effectively with hospice patients until the moment of death. **CONCLUSIONS:** Hospice patients represents a vulnerable and potentially undeserved population due to the lack of psychotherapy models that specifically address their unique needs and challenge. Meaning-based and transpersonal interventions, appropriately adapted to the needs and circumstance of hospice patients and their caregivers, represent an important resource in psycho-social oncology. It is important that clinicians learn to apply these models to patients who are experiencing loss of meaning and emotional suffering at the end of life.

## S1816

**Support for the Supporters: Does It Matter More For Caregivers?**

**SYMPOSIUM DESCRIPTION:** The role of support in maintaining and improving well-being of cancer patients has been well acknowledged and studied. Much less attention has been given to the support needs and the effects of social and professional support for the family caregivers. This lack is surprising, in light of the well documented empirical evidence on the negative effects of caregiving burden on physical and psychological health of the caregivers. Many unanswered questions include what are the effects of different types of support or different sources of support, does the needs for support change over time, and how professional support should be extended. This symposium addresses some of these concerns from five different angles in examining the effects of social support and across different phases in caregivership trajectory. Yves Libert addresses communication issues, barriers and challenges of family caregivers. The presentation describes studies conducted in Belgium focusing on caregivers' experience, desire for formal psychological support, and on training programs aiming at improving physicians' communication skills in three-person interviews where caregivers accompany the patient. Youngmee Kim presents a national study in the United States (US) that examined the overall effect of social support perceived to be available for caregivers and the relative contribution of various sources of social support on caregivers' quality of life during long-term survivorship phase. David Wellisch focuses on a specific group of caregivers -- women who are at high risk for breast cancer due to breast cancer in family relatives and are obese/overweight in the US. In addition to the caregiving experience, these women experience an additional source of stress -- being in a high risk group for breast cancer. Wellisch presents results of a professional support program targeted for this population to improve their lifestyle behaviors. Miri Cohen illustrates the efficacy of an intervention program in Israel for caregivers that was used a cognitive-behavioral approach and included a bio-feedback to enhance well-being, and outcomes of the intervention comparing its efficacy for old and young caregivers. Talia Zaider focuses on the end-of-life (EOL) experiences reported by family caregivers in the US. Her presentation highlights the significance of relational characteristics, such as preparedness and sense of life completion, on the caregivers' EOL experience. Lea Baider, in her discussion, highlights directions for future research as well as support programs for caregivers of cancer patients, during the early and long-term phases of survivorship.

## S1816-1

**Whose Support Matters More to Caregivers' Quality of Life During Long-term Survivorship**

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**OBJECTIVES:** Although beneficial effects of social support (SS) provided by caregivers on survivors' quality of life (QOL) have been well documented, effects for caregivers' QOL remain unclear, particularly during long-term survivorship. This study examined the overall effect of SS perceived to be available for caregivers and the relative contribution of various SS sources on caregivers' QOL five years after the cancer diagnosis. Moderating effects of gender on the relations between SS and QOL were also explored. **METHOD:** A total of 261 spousal caregivers participating in the National Quality of Life Survey for Caregivers at both 2 (T1) and 5 (T2) years after the initial cancer diagnosis provided complete data for the study variables. Overall support and sources of SS were measured using MSPSS, and QOL (mental and physical health) was measured using MOS SF-36 at both T1 and T2. Age, SS at T1, and QOL at T1 were included as covariates. **RESULTS:** General linear modeling revealed that less overall SS available for caregivers at T2 were related to poorer mental QOL ( $p < 0.001$ ), after controlling for the effects of covariates. SS from spouse (survivor) at T2 that was relatively less than SS from other sources, was marginally related to caregivers' poorer mental QOL ( $ps < 0.08$ ). Among female caregivers, relatively less SS from family at T2 was related to poorer mental QOL ( $ps < 0.03$ ). No effects on physical QOL were significant. **CONCLUSIONS:** Results suggest that overall SS is beneficial for caregivers' mental health. Lack of SS from spouse (survivor) for all caregivers and lack of SS from family for female caregivers appear to be detrimental at the long-term survivorship phase. Educational programs for caregivers, particularly targeting female caregivers, designed to assist them improve ways to seek out support from various sources may help them find hope and meaning years after the initial cancer experience.

## S1816-2

**Cognitive-Behavior Group Intervention as a Model of Support for Older and Younger Caregivers**

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**OBJECTIVES:** One of the most important aims of supporting caregivers is to assist them improving their adjustment and coping and reducing distress. The study examined the efficacy of CBT group intervention designed to achieve this aim. Also, we aimed to compare its efficacy between younger and older caregivers in outcomes of CBT group intervention, including psychological aspects (distress and adjustment) and physical symptoms (sleep disturbance and fatigue). **METHOD:** Forty-nine older (65–80) and 41 younger (33–64) spouses of cancer patients receiving chemotherapy participated in CBT groups. All participants completed pre- and post-intervention, and a 4-month follow-up questionnaire consisting of the Brief Symptom Inventory (BSI), Psychological Adjustment to Illness scale (PAIS), Mini sleep questionnaire (MSQ), Fatigue Symptoms Inventory (FSI) and Multidimensional Scale of Perceived Social Support (MSPSS). Participants also reported adherence to home practice. **RESULTS:** Significant decreases in BSI and PAIS were found for both age groups at post-intervention and follow-up assessments. Improvement in PAIS was more prominent among the older participants, whereas decreases in sleep problems and fatigue were more prominent among the younger group. Improvement in psychological distress indexed by RCI was also significant for both groups. Furthermore, perceived social support and home practice at post-intervention and follow up predicted improvement in distress measures. **CONCLUSIONS:** The findings provide evidence that caregivers in all ages benefit from the supportive CBT in improving their psychological distress and reducing physical symptoms. This is especially important in light of the common professional view of older adults being less receptive to, and having lower benefits from, group and/or CBT. The results highlight that professional support should focus on reducing physical as well as psychological symptoms of distress.

### S1816-3

#### **A Pilot Study of a Lifestyle Group Intervention for Overweight Women at High Risk for Breast Cancer**

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**OBJECTIVES:** This was a pilot study to evaluate the feasibility of a lifestyle intervention for women who were obese/overweight and at high risk for breast cancer. Research questions include (a) Could an educational/supportive group be associated with improved psychological functioning, QOL factors, and health related behaviors?, (b)

Could high risk women be in such a group and complete the intervention?, (c) Could including internet (homework) component be successfully?, and (d) Would this lead to improvements in body composition? **METHOD:** This pilot group intervention was a pre/post design with a 12-week follow-up. The intervention was standardized and totaled twelve 2-hour interventions. Each session was partially based on an internet program (masterinfood.com) which addressed emotional eating. The three components of health education, focused psychological support, and homework (mastering food modules) were interwoven. Three standardized questionnaires (Brief Symptom Inventory, SF-36, and Health Promoting Lifestyle Profile- 2) were administered three times (pre/post/follow-up). **RESULTS:** Thirteen subjects completed baseline, twelve week questionnaires, and body composition testing. There was a 2.4 lb average weight loss during the intervention (ns). From baseline to week 12, all of the SF-36 variables were significantly different ( $p \leq 0.001$ ). For health promoting variables, five of six subscales and the total score were significantly different (total score =  $p < 0.001$ ). For the BSI, two of the clinical subscales (Depression and Interpersonal Sensitivity) were significantly different. **CONCLUSIONS:** This group intervention was feasible within limits. Several psychological indices were improved by this group experience. The combination of internet based modules and health education materials worked well in this group format. However, subjects with histories of addiction, mental illness, and significant psychopathology did not fit well with this model. The group experience was too brief to significantly affect weight loss and body composition.

### S1816-4

#### **Social Support for Caregivers of Cancer Patients: Communication Issues, Barriers and Challenges**

Yves Libert, Isabelle Merckaert, Daris Razavi  
*Université Libre de Bruxelles, Brussels, Belgium*

**OBJECTIVES:** Due to the evolution of medicine and the organization of care, partners, parents, children and other family members have become increasingly involved in cancer care. This talk will address communication issues, barriers and challenges arising from this involvement. **METHOD:** Studies were conducted in Belgium focusing on caregivers' distress, desire for formal psychological support, detection of difficulties experienced by their relatives and on training programs aiming at improving physicians' communication skills in three-person interviews where caregivers accompany the patient. **RESULTS:** Results from the Study 1 showed that one caregiver out of two experienced psychological distress and that one out

of five spontaneously desired formal psychological support. The second study showed that caregivers detected most of the physical and psychological difficulties experienced by cancer patients. How to better involve caregivers in patient care has also been examined. Two randomised controlled studies showed that, after a communication skills training, physicians were more patient- and caregiver-centred. **CONCLUSIONS:** Findings emphasize the need to improve caregivers' involvement in cancer care. They need to be helped, they desire to be helped and they are potential resources for physicians. Communication skills training programs focusing on communication skills in three-person interview could be a way to achieve this goal.

### S1816-5

#### **The Association Between Family Relationships and Caregivers' End of Life Experiences**

Talia Zaider, David Kissane

*Memorial Sloan-Kettering Cancer Center, New York, NY, United States*

**OBJECTIVES:** This study examined the end-of-life (EOL) experiences reported by family members of advanced cancer patients. Prior research has elicited patient and caregiver perspectives on what constitutes a 'good death' experience (Steinhauser *et al.*, 2000). In addition to symptom management, relational experiences were considered important. Our goal was to determine whether the quality of these EOL experiences is associated with relational characteristics of the caregiving family. **METHOD:** Family members ( $n = 64$ ) of advanced cancer patients were randomized to a controlled trial of Family Focused Grief Therapy. Two dimensions of EOL experiences were measured: (1) Preparation (e.g. 'I worry that my family is not prepared to cope with the future') and (2) Sense of Life Completion (e.g. I have been able to say important things to my relative'). Participants also completed measures of family functioning, coping and distress. **RESULTS:** Results indicated significant associations between aspects of family functioning and family members' EOL experiences and concerns. Specifically, caregivers who perceived poor communication and high levels of conflict in their family as a whole were more likely to be distressed, and to score low on preparation and sense of life completion. Interestingly, family cohesiveness was not related to caregivers' EOL experiences. **CONCLUSIONS:** Our results suggest that the quality of caregivers' EOL experiences, i.e. the degree to which they experience preparedness and closure, is associated with the quality of the relationships that surround them. Whereas much research has focused on caregivers' individual strengths and vulnerabilities, our findings underscore

the importance of attending to their relational life as a key component of their adaptation prior to the death of a loved one.

### S1820

#### **Realizing Excellence in a Psychosocial Oncology Program: Implementing a Strategic Framework Focused on Demonstrating Quality of Service through Performance Indicators**

**SYMPOSIUM DESCRIPTION:** Limited resources and a growing demand for services have contributed to the expectation of accountability in healthcare. Psychosocial oncology programs are increasingly challenged to demonstrate the efficiency and efficacy of their services. This symposium discusses the development framework, implementation, and evaluation of a recently funded Psychosocial Oncology Program at an Academic Health Sciences Centre. Dr. Caroline Gerin-Lajoie will present the strategic framework adopted by the program to provide the foundation for setting the organizational goals, direction for service provision, operational excellence, and the framework for the program evaluation process. Ms. Diane Manii will describe key elements that enabled the program to move from the theory of program excellence to the daily management of clinical service delivery. Dr. Cheryl Harris will present an overview of key program evaluation principles and their application in the ongoing evaluation of this new program. The presenters conclude that further work is needed to continue developing and implementing program evaluation models across PSOP's. This could eventually lead to a national consensus document outlining an agreed upon framework for psychosocial oncology programs.

### S1820-1

#### **A Strategic Framework for Quality of Service and Performance Indicators**

##### **Caroline Gerin-Lajoie**

*The Ottawa Hospital Cancer Centre & Ottawa Hospital Research Institute, Ottawa, Ontario, Canada*

**OBJECTIVES:** Hospitals and health care centers must build the culture, tools and processes to sustain high quality and safe patient care in a healthcare environment challenged by shortages of healthcare professionals, funding constraints, changing care practices and increasing expectations from patients, governments and community. **METHOD:** In order to achieve performance excellence in quality and patient safety, an Academic Health Sciences Centre decided to align its 3

year Quality Plan with a strategic framework based on 'Hardwiring Excellence' (Quint Studer). In this model, 6 Pillars including Service, Quality, People, Finance, Growth, and Community, provide the foundation for setting the organizational goals and direction for service and operational excellence, and provide the framework for an evaluation process. **RESULTS:** The Psychosocial Oncology Program within this Academic Health Sciences Centre applied the above framework to develop key indicators that measure Service, Quality, People, Finance, Growth, and Community. **CONCLUSIONS:** According to the Studer Group, to achieve excellence organizations must be able to objectively assess their current status and then track their progress to the goals they have set. The future challenge will be to reach a national consensus on a framework for psychosocial oncology programs nationwide with specific benchmark tools, performance indicators and other program evaluation guidelines.

#### S1820-2

##### **Program Infrastructure for Quality Patient Care, Accountability and Sustainability**

Diane Manii

*The Ottawa Hospital Cancer Centre & Ottawa Hospital Research Institute, Ottawa, Ontario, Canada*

**OBJECTIVES:** The delivery of psychosocial services appears to be reliant on local resources and advocacy, with limited guidelines on program structure, accountability and sustainability. This presentation will describe key elements that enable a program to move from the theory of program development to the daily management of clinical work load based on referral indicators, intake process, work load management, an interprofessional model of care and data collection method. **METHOD:** The program was founded on a literature review, hospital and provincial consultation and a financial sustainability analysis. This resulted in the development of an interprofessional program that combines both psychosocial and rehabilitation disciplines. Referral to the program follows a referral process that includes screening, an intake referral form and multidisciplinary rounds. A work load management strategy was developed to manage wait lists, provide guidance on program priorities and formalize work load expectations. **RESULTS:** The program receives 250–300 new referrals per month. Patients now receive services previously unavailable or with long wait lists from an interprofessional team. Over and above professional standards of care, accountability is monitored through a health human resource data management collection. The indicators of accessibility and safety are captured by this system.

To ensure sustainability, the following issues have been targeted for ongoing evaluation: reduced oncology visits to Emergency, admissions, and length of stay. **CONCLUSIONS:** If Psychosocial Oncology Programs are to remain an essential aspect of quality patient care, they must not only demonstrate a reduction in human suffering but also capture the level of work necessary to provide these services that is measured and accountable. These data can then be evaluated in terms of cost avoidance to the institution.

#### S1820-3

##### **Psychosocial Oncology Program Evaluation: Key Principles and Application**

Cheryl Harris

*The Ottawa Hospital Cancer Centre & Ottawa Hospital Research Institute, Ottawa, Ontario, Canada*

**OBJECTIVES:** Given limited resources in healthcare and a growing need for services, psychosocial oncology programs are increasingly challenged to demonstrate the efficiency and efficacy of their services. An overview of key program evaluation principles and their application in establishing the ongoing evaluation process of a recently funded Psychosocial Oncology Program will be presented. **METHOD:** The purpose of program evaluation, major types of evaluation, and common concerns about implementing evaluations will be discussed. The steps in planning and implementing a successful Psychosocial Oncology Program Evaluation that is consistent with the Studer Model 6 Pillar strategic framework will be presented including the development of a logic model with particular focus on outcome evaluation (e.g. selection of measures, research design and methodological challenges, methods of data analysis). **RESULTS:** Preliminary data consistent with the Studer Model 6 Pillar evaluation framework including indicators of Service, Quality, People, Finance, Growth, and Community will be presented. Particular emphasis will be on descriptive data (e.g. trends in referrals, patient demographics, frequency and type of professional contact) and patient self-report data (e.g. distress, interpersonal functioning, quality of life, satisfaction with services). **CONCLUSIONS:** With the growing expectation of accountability in healthcare, psychosocial oncology programs must evaluate, enhance, and document the high-quality services they provide. The development and implementation of a program evaluation model is therefore crucial. By informing ongoing program development, the measurement of key indicators propels the evolution of the program. A consensus document outlining an agreed upon framework for psychosocial oncology program evaluation could facilitate this essential process.

## S1822

**Cancer Navigation in Canada: Models, Framework, Competencies and Tools**

**SYMPOSIUM DESCRIPTION:** Canada has embarked on implementing the Canadian Strategy on Cancer Control under the auspices of the Canadian Partnership Against Cancer. One of the eight action groups, the Cancer Journey Action Group, has the mandate of providing leadership to achieve a person-centered cancer system - changing the system so that patient, survivor and family members are better served. Navigation, one of the driving forces for this change, will be described during this symposium, with illustrations from the provinces of Nova Scotia and Québec regarding their experiences in the implementation and evaluation of their programs.

## S1822-1

**Navigation Models in Canada**

Margaret I Fitch

*Odette Cancer Centre, Toronto, Ontario, Canada*

**OBJECTIVES:** Individuals diagnosed with cancer experience more than a physical impact - social, emotional, psychological, spiritual and practical consequences emerge also. Some individuals mobilize their own networks finding resources they require. However, many patients experience unmet needs and frustration about not knowing where to turn for information and assistance. In Canada, patient navigation has emerged as a system intervention to assist patients and families meet their supportive care needs during and after cancer treatment. **METHOD:** Across Canada, various models of patient navigation have emerged - professional, peer, virtual - in an effort to find ways to support patients and better serve their needs throughout the cancer journey. Building on input from cross country stakeholder workshops, and input from patients and survivors, programmatic approaches have been developed and are in the process of being implemented in various jurisdictions. **RESULTS:** The experience in implementing patient navigation has resulted in a growing clarity regarding the conceptualization of patient navigation and description of how the programs can be organized. Roles for navigators and navigation tools (aids) are gaining in specificity and definition. Descriptions of program approaches, roles and responsibilities, and expected outcomes are now available to share based on the implementation experiences. **CONCLUSIONS:** Clearly it is important to implement a patient navigation program model that is appropriate for the identified gaps in service delivery. The outcomes that can be achieved by implementing a

patient navigation program will vary with each program model. Each jurisdiction needs to assess gaps in service carefully and select the approaches that best fulfill the specific gaps.

## S1822-2

**Canadian Professional Navigation Framework**Lise Fillion<sup>1</sup>, Sandra Cook<sup>2</sup>, Anne-Marie Viellette<sup>3</sup>, Marie de Serres<sup>4</sup>, Richard Doll<sup>5</sup>, Arminee Kazanjian<sup>6</sup>

*Laval University, Québec City, Québec, Canada<sup>1</sup>, Cancer Care Nova Scotia, Halifax, Nova Scotia, Canada<sup>2</sup>, Hôtel-Dieu de Québec, Québec City, Québec, Canada<sup>3</sup>, Maison Michel-Sarrazin, Québec City, Québec, Canada<sup>4</sup>, BC Cancer Agency, Vancouver, British Columbia, Canada<sup>5</sup>, University of British Columbia, Vancouver, British Columbia, Canada<sup>6</sup>*

**OBJECTIVES:** For many cancer control programs the implementation of cancer navigation is a crucial component of improving continuity of care. However, literature has failed to describe cancer navigation consistently. A theoretical framework was defined from literature. This study aimed at contributing to a better understanding of professional navigation in validating and refining the framework content in testing its comprehensiveness. **METHOD:** Two well-implemented Canadian models of professional navigation, the Oncology Pivot Nurse (OPN) in Québec Province and, the Cancer Patient Navigator (CPN) in Nova Scotia were selected. A two-case qualitative evaluative design, involving three units was used (2 in Québec: supraregional and local oncology team; 1 in Nova Scotia: local team). Qualitative interviews were conducted with professional navigators, patients and family members, front line staff, family physicians, health administrators (interviews:  $n = 49$ ; focus groups:  $n = 10$ ). **RESULTS:** Data collection and analyses were conducted following our initial definition of navigation, which included two dimensions. Results contribute to validate the 2-dimension model. The first dimension, health-system-oriented, refers to continuity of care, including informational, management, and relational continuity. The second dimension, patient-centered, corresponds to empowerment, including active coping, cancer self-management and supportive care. Data validation included systematic literature review, and meetings with OPNs, CPNs, clinical experts, managers, decision makers and researchers from Canada. **CONCLUSIONS:** The theoretical definition was challenged and refined by integrating our qualitative findings and iterative validation process. This framework brings clarity about the role and functions of professional navigators and suggests relevant outcomes for program evaluations.

## S1822-3

**Scope of Practice and Associated Competency Requirements for Professional Cancer Patient Navigators**

Sandra Cook<sup>1</sup>, Lise Fillion<sup>2</sup>, Anne-Marie Veillette<sup>3</sup>, Marie de Serres<sup>4</sup>, Richard Doll<sup>5</sup>, Arminee Kazanjian<sup>6</sup>

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**OBJECTIVES:** The Canadian professional navigation framework identified a number of key functions that could improve continuity of care and contribute to the patient's experience of a coordinated patient focused system of care. This study aims to further define the scope of practice and competency standards required for professional cancer navigators to successfully fulfill their role effectively, to understand their relationship with other members of the cancer team and to minimize role confusion. **METHOD:** A literature review of relevant professional standards including those for specialized oncology nurses was completed. Functions identified in the professional navigation framework were mapped to the 7 practice domains identified in the CANO Practice Standards and Competencies for the Specialized Oncology Nurses 2006 document. The CANO self assessment tool was completed by a number of Oncology Pivot Nurse (OPN) in Québec and, the Cancer Patient Navigator (CPN) in Nova Scotia to validate the competencies. **RESULTS:** Synthesis of multiple sources of evidence identified a set of competency standards for validation by professional cancer patient navigators. These standards are based on the current practice standards for specialized oncology nurses and reflect consensus of the individuals practicing as professional navigators in Québec and Nova Scotia. Five practice domains, reflecting the knowledge and skills of professional navigators, have been identified (supportive care, collaborative care, coordinated care, information provision, teaching, coaching, and clinical expertise). **CONCLUSIONS:** Data validation included systematic literature review, and consultation with professional cancer patient navigators, clinical experts and managers. The standards developed are intended for those who work within a model of care that reflects ongoing support either directly or indirectly across the entire cancer journey. A core feature of navigation practice is continuity of care and collaborative practice and is highly dependent on effective relationships with other health professionals.

## S1822-4

**Professional Navigators' Role in Screening for Distress**

Anne-Marie Veillette<sup>1</sup>, Lise Fillion<sup>2</sup>, Sandra Cook<sup>3</sup>, Marie de Serres<sup>4</sup>, Richard Doll<sup>5</sup>, Arminee Kazanjian<sup>6</sup>

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**OBJECTIVES:** Cancer patients experience different levels of distress. Outside medical treatment, better access to supportive and coordinated care is expected. For professional navigators, facilitating medical and biopsychosocial care coordination appears as a crucial function. As a process to facilitate coordination, screening for distress is suggested as a first stage, prior to assessing physical, practical and, psychosocial needs. This study aimed at describing the professional navigator's role in implementing processes of a screening for distress tool. **METHOD:** This qualitative evaluative design included 2 cases: Pivot Nurses in Oncology (PNOs) and Cancer Patient Navigators (CPNs). Qualitative interviews were conducted with PNOs, CPNs, psychosocial/spiritual oncology staff and key health administrators (interviews:  $n = 4$ ; focus groups:  $n = 7$ ). The implementation process assessment study employs an operational framework based on a theory of emergent action including seven dimensions: inputs, activities, participation, reactions, effects on patient/family empowerment, effects on continuity of care, overall impact. **RESULTS:** Professional navigators described the tools as useful for continuity of care and patient and family empowerment. The tool completion contributes to a comprehensive assessment of patients' unmet needs, facilitates intervention planning, referrals, and interprofessional collaboration. Results indicate, however, that professional navigators have similar challenges regarding the integration of the tool in their practice (need to address distressing components revealed by the tool, subsequent evaluation and interpretation of distress scores, workload and time management issues). **CONCLUSIONS:** This study contributes to describe the relevance of the implementation of screening for distress tools by professional navigators. It emphasizes how systematic screening could facilitate professional navigators' role of improving access to supportive care for cancer patients when needed (targeted intervention, efficient referrals). Impact of this change of practice on oncology team functioning is discussed (organizational and clinical issues).

Preparation of the field prior to implementation and support throughout the implementation process is discussed.

#### S1824

##### **Difficult Cases and Taboo Topics in Pediatric Psycho-Oncology**

**SYMPOSIUM DESCRIPTION:** Pediatric psycho-oncology has grown and prospered as a field for the past 20 years, providing supportive care and psychological services to children with cancer, their parents and siblings and to survivors of pediatric cancer. Physicians and nurses have become increasingly aware of the broad psychosocial impact of cancer and cancer treatment and of the importance of attending to emotional distress throughout the continuum of cancer treatment. While most children and families go through cancer treatment without suffering from clinically significant psychological distress or treatment refusal, there are cases where the patient or parent does present with psychiatric illness during the child's treatment or where psychological issues threaten the potential success of treatment. Such cases present a challenge for the mental health provider who must treat the psychological problem in the context of the constraints and changing exigencies of the child's disease. The trajectory of the cancer may exacerbate psychological problems, as when the child's terminal illness intensifies the suicidal ideation of a parent. This symposium will focus on these rare, but difficult cases where the experienced mental health clinician must work closely with the pediatric oncology team in treating severe psychiatric distress in a parent or child or refusal of treatment by the child with cancer. The speakers will elucidate discrete elements contributing to such extreme conditions and will focus attention on preventive strategies. Dr. Daniel Oppenheim will discuss a case of an adolescent's refusal of treatment where the issues concerned identity, immigration, and low self-esteem and threatened the well-being of an entire family. Dr. Lori Wiener will discuss a case of selective mutism in a 10-year-old, newly-diagnosed child with a brain tumor and the differential diagnoses and complications with consent and treatment which this challenging symptom engendered. Dr. Joanna Breyer will report on the response of the mental health and medical treatment teams to suicidal ideation in two parents of terminally ill children and will discuss the teams' response when one of the parents did later commit suicide immediately following the death of his child. She will suggest factors a team should consider and actions they can take to lessen the likelihood of such a devastating outcome. Dr. Andrea Farkas Patenaude will discuss these clinically demanding cases of extreme symptomatology in the context of pediatric psycho-oncology treatment and

training as they reflect our understanding of the role of the mental health practitioner in this setting.

#### S1824-1

##### **An Adolescent's Refusal of Treatment: How to Deal with Its Multiple Causes**

Daniel Oppenheim, D Valteau-Couanet, S Dauchy  
*Departments of Paediatrics and Supportive Care and Psycho-oncology unit, Institut Gustave Roussy, Villejuif, France*

**OBJECTIVES:** To show how complex is an adolescent's refusal of treatment and how to deal with its various causes, we present a case of treatment refusal. In France, there is an increasing number of complex family histories and individuals with a complex sense of identity. These individuals are especially vulnerable when confronted with an ordeal such as cancer. **METHOD:** Interviews with B (15 year-old) with osteosarcoma and his parents are described. He accepted conventional chemotherapy but refused high dose chemotherapy. His doctor's explanations and warnings proved ineffective. He accused his mother of being responsible for his illness. His father conceded that he had no authority over him and was worried about his aging parents in his country. If B. dies, he will bury him in his country and remain there with B.'s younger brother. **RESULTS:** B. accepted some psychotherapeutic interviews, and expressed a main point: he said he had no identity (B. was born in France, his parents in two different countries), no religion either (his father is a Muslim and his mother a Catholic) and no value. At last, he accepted a weaker treatment. B's mother was afraid she could lose her two sons and her husband, and commit suicide. She regained confidence in her parental role. **CONCLUSIONS:** Several psycho-oncological objectives were linked: that B. accepts his treatment - and if not, that his refusal did not cause him distress-, accepts his family history and acquires a sufficient sense of identity and value; that his father takes parental and marital responsibility seriously; that his mother understands B's aggressiveness, and imagines her future if he were to die; that his brother positions himself in this situation; that the medical staff acts appropriately.

#### S1824-2

##### **Selective Mutism and Treatment Refusal in a 10 Year-Old Girl with a Newly Diagnosed High Risk Brain Tumor**

Lori Wiener  
*National Cancer Institute, Bethesda, Maryland, United States*

**OBJECTIVES:** The diagnosis of cancer is a highly stressful event for a child and family. Selective

mutism is a rare response to the anxiety associated with the diagnosis or invasive medical procedures. While behavior therapy is commonly used to reduce anxiety, this may not be possible when life saving treatment must be given immediately. This talk will address the challenges inherent in working with children who present with selective mutism in a medical setting. **METHOD:** The case of a 10 year-old girl with a newly diagnosed brain tumor, selective mutism and treatment refusal will be presented. Reflections one year later, from the patient, family, and staff point of view will be discussed. The author will review how selective mutism can be confused with oppositional and manipulating behavior and the potential relationship between selective mutism and post-traumatic stress disorder. **RESULTS:** Significant psychological distress was characterized by unwillingness to leave the family car for radiation therapy, refusal to look at or talk to medical personnel, and aggressive verbal and physical behavior within the medical center. Interventions tried as well as short-term and long-term consequences will be reviewed. Discussion will cover enrolling children who are not consenting to treatment in research, working with resistance, and supporting the staff and families of highly resistant children. **CONCLUSIONS:** New insights can be gained through the discussion of difficult cases. Selective mutism is an extreme response to significant anxiety. Pitfalls that can occur without excellent interdisciplinary and family communication will be addressed. Conference participants will gain insight into the perspective of a child and family one-year post treatment and how hope, meaning, resiliency, and positive psychological growth experiences can be obtained even when significant distress is present.

### S1824-3

#### **Making Meaning of Expressed Suicidal Ideation in Parents of Terminally Ill Children with Cancer - Therapeutic Considerations and Recommendations**

Joanna Breyer

*Dana Farber Cancer Institute and Childrens Hospital, Boston, Massachusetts, United States*

**OBJECTIVES:** The death of a child is the hardest loss for a parent to bear. Over two thousand children in the United States and many thousands of children worldwide die of cancer each year. Many parents make statements containing suicidal ideation as they learn of their child's terminal prognosis. Caregivers must assess the seriousness of a parent's potential suicidality while providing support for the child, siblings and parents as the child nears death. **METHOD:** Examples of various suicidal statements will be given. Two cases where fathers made suicidal statements to family mem-

bers or caregivers during their child's treatment course will be presented. The role of the psychosocial clinicians and the medical caregivers in each case will be described. **RESULTS:** Most parental statements expressing suicidal ideation are not associated with suicidal gestures after the child's death. Key questions for clinicians to ask will be described. However, in one of the two cases above, the father did commit suicide the day his child died. Contributing factors to the different outcome in the two cases will be outlined. Actions taken in the two cases by caregivers will be compared. Staff reactions will be described. **CONCLUSIONS:** The meaning behind a parent's expression of suicidal ideation is crucial - often these statements reflect deep sadness and helplessness rather than suicidal intent. However, such statements need further assessment by the psychosocial clinician and sometimes require therapeutic actions and safety plans. Specific suggestions for caregivers are given. These include the role of an individual therapist, the importance of ongoing suicide evaluation, a shared safety plan and planning the appropriate setting for child's death.

### S1829

#### **Psychooncological perspectives on pain**

**SYMPOSIUM DESCRIPTION:** The proposed 90 minute symposium aims to cover the experience of pain in cancer patients, psychiatric Aspects of cancer pain, psychological and psychopharmacological aspects of pain management and burnout in pain patients will be discussed. Chair: Prof. Dr. Sedat Ozkan. The speakers are: Prof. Dr. Sedat Özkan-Psychiatric Aspects of cancer pain, Prof. Dr. Luigi Grassi: Depression and pain, Prof. Dr. Mine Özkan-Psychological and psychopharmacological aspects of pain management, Zeynep Armay-Cancer in the Terminal Phase: Effects on the treatment team and family.

### S1829-1

#### **Cancer in the Terminal Phase: Effects on the Treatment Team and Family**

Zeynep Armay

*Istanbul University, NA, Turkey*

**OBJECTIVES:** With a demanding workload and emotional burden the psycho-oncology team and family members is under the treat of various emotional problems. Pain is the most frequently encountered problem in terminal stage cancer patients and can be very difficult to manage. This presentation aims to summarize the effects of working with endstage cancer patients on the treatment team and the burden experienced by

family members. **METHOD:** This presentation will involve discussion of the results of two ongoing studies carried out with treatment team members working with endstage cancer patients and family members. **RESULTS:** This presentation will involve discussion of the results of two ongoing studies carried out with treatment team members working with endstage cancer patients and family members. **CONCLUSIONS:** Results will be discussed with specific cultural differences. Conclusions will be made by highlighting specific recommendations on program development in cancer hospitals. Psychooncological approaches will be discussed.

### S1829-2

#### **Psychological and Psychopharmacological Aspects of Pain Management**

Mine Özkan

*Istanbul University, Istanbul, Turkey*

**OBJECTIVES:** Psychiatric treatment of pain in cancer patients requires a multidisciplinary approach. Psychiatric medications are important contributors of various problems in cancer patients who experience pain. **METHOD:** Depression is among the most frequently encountered psychiatric problems in this group of patients. Depression and pain are comorbid conditions in cancer patients with pain and they have a triggering effect on each other. **RESULTS:** Especially antidepressants are indicated in cancer patients with pain in controlling both pain and depression. Sleep disorders are also frequent in cancer patients who experience pain and are effectively treated with antidepressants. **CONCLUSIONS:** In addition, antipsychotic medications and antiepileptics are also important in the management of cancer pain. In this speech the details of psychotropic and psychiatric treatment of pain patients will be presented.

### S1829-3

#### **Depression and Pain: A Multifaceted Relationship**

Luigi Grassi

*University of Ferrara, Ferrara, Italy*

**OBJECTIVES:** Pain has been defined by the International Association for the Study of Pain as 'An unpleasant sensory and emotional experience arising from actual or potential tissue damage or described in terms of such damage'. In cancer patients pain is a debilitating symptom due to several factors, including neurophysiological, cognitive, environmental and personological factors. **METHOD:** The relationship between pain and

depression, as a specific neurobiological, cognitive, environmental and personological event, has been studied both in non-cancer and in cancer settings for a long time. We present a review of the most important studies examining this association and some data of our own research in non-cancer and cancer settings. **RESULTS:** The prevalence of chronic painful physical symptoms is increased in patients with depression in the Factors Influencing Depression Endpoints Research Study involving 513 Italian patients with a clinically diagnosed episode of depression. A significant relationship between pain and depression was also found in a study of 1,108 Italian cancer patients, but the results indicate differences between these two situations. **CONCLUSIONS:** In cancer patients, more than non-cancer patients with non malignant pain, the association with depression is confirmed in some circumstances but not in others. An advanced stage of illness, age, and sex seem to be associated to pain irrespective of the presence/absence of depression. Further longitudinal studies are necessary to understand the possible interdependence of pain and depression in cancer.

### S1832

#### **Fear of Cancer Recurrence**

**SYMPOSIUM DESCRIPTION:** Improved methods of cancer detection and treatment have led to rising numbers of patients surviving and living with the disease for prolonged periods of time. As the numbers of cancer survivors continue to grow, increasing attention is being given to factors that impact quality-of-life. Fear of cancer recurrence (FCR) is among the most commonly reported problems and yet one of the most prevalent areas of unmet needs amongst cancer survivors. Some degree of FCR is almost universal in cancer survivors. Partly because of the complexity and the heterogeneity of the phenomenon, few studies have addressed this issue. Indeed, there is no consensus definition or conceptualization of FCR, nor is there currently a standardized assessment method to adequately distinguish between normal and clinical (i.e. 'pathological') levels of FCR. Finally, current knowledge regarding the predictors and impact of FCR in cancer survivors is limited. The goal of this symposium is to highlight some avenues and strategies in the pursuit of a better understanding of FCR, including its assessment, prevalence, correlates, and impact on functioning. The first presentation will provide a brief, critical overview of existing measures of FCR and describe initial steps in the development of an English version of the Fear of Cancer Recurrence Inventory (FCRI). The second presentation will focus on a multidimensional conceptualization of FCR and will present the results of a confirmatory

factor analysis of the FCRI-French version. The third presentation will demonstrate the research application of the FCRI by documenting the prevalence of FCR in early-stage breast cancer survivors and describing the clinical, demographic and behavioural factors associated with FCR in this patient population. The fourth presentation will address the prevalence, persistence, and correlates of FCR in a large-scale, national population-based study of 1, 3, 6, or 11-year survivors of six different cancer types. The final presentation will include a discussion of recommendations for both future research and clinical management of FCR in cancer patients and survivors. Attendees at this symposium can anticipate gaining a greater understanding of the complexity of FCR, learning about emerging tools and sophistication in the assessment of FCR, and about the predictors and impact of this common problem amongst those affected by cancer.

#### S1832-1

##### **A Confirmatory Factor Analysis of the Fear of Cancer Recurrence Inventory (FCRI) - French Version**

Sébastien Simard<sup>1</sup>, Josée Savard<sup>2</sup>

*Institut universitaire de cardiologie et de pneumologie de Québec, École de psychologie, Université Laval, Québec City, Québec, Canada<sup>1</sup>, Centre de recherche en cancérologie de l'Université Laval, École de psychologie, Université Laval, Québec City, Québec, Canada<sup>2</sup>*

**OBJECTIVES:** Recently, we developed the Fear of Cancer Recurrence Inventory (FCRI), a questionnaire evaluating seven multidimensional aspects of FCR. Although our previous work supported the reliability and validity of the questionnaire, the factor structure was only evaluated using exploratory factor analysis. The purpose of this study was to confirm the original structure factors of the FCRI-French version and to support the multidimensional conceptualization of FCR. **METHOD:** A provincial medical databank (RAMQ) was used to randomly select a large pool of 5,000 French-Canadian patients who had been treated for breast, prostate, lung and colon cancer within the past ten years. Of these, 1,986 patients completed by mail a battery of self-report questionnaires including the FCRI. Confirmatory factor analysis (CFA) was used to test the original factor structure. **RESULTS:** The final CFA model for the total sample indicated a reasonably good fitting with the original seven factor structure ( $X^2(812) = 3126$ ,  $p = 0.001$ ; RMSEA = 0.56; CFI = 0.91; PNFI = 0.84). Five additional paths were added between items correlated in the same factor in order to obtain the best model fit. In

addition, CFA were performed separately for breast ( $n = 977$ , RMSEA = 0.56; CFI = 0.90; PNFI = 0.82) and prostate ( $n = 727$ ; RMSEA = 0.56; CFI = 0.91; PNFI = 0.83) cancer groups and supported the stability of the original model. **CONCLUSIONS:** The findings confirmed the original seven multidimensional factor structure of the FCRI in cancer patients and its validity. In according to Lee-Jones's initial formulation (1997), this study supported the importance of viewing FCR multidimensionally. Further research is needed to empirically validate the FCRI-English version and to assess the predictive and evaluative validity of this scale. The presentation will be conclude with a discussion of future developmentthe multidimensional conceptualization of the FCR.

#### S1832-2

##### **Fear of Cancer Recurrence in Younger Breast Cancer Survivors**

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**OBJECTIVES:** Fear of cancer recurrence (FCR) is one of the greatest areas of unmet need for help amongst cancer survivors. Younger patients are particularly vulnerable to experiencing FCR. This study aimed to report the prevalence of FCR in early-stage breast cancer survivors, aged 45 years or less at diagnosis, and describes the clinical, demographic and behavioural factors associated with FCR in this sub-group of breast cancer survivors. **METHOD:** Data were collected in a cross-sectional web-based survey of 200 women diagnosed with Stage 0–2 breast cancer at least one year ago. All participants were aged 45 years or less at diagnosis and were recruited through oncology clinics and breast cancer consumer groups. FCR was assessed using the Fear of Cancer Recurrence Inventory (FCRI). **RESULTS:** Based on a preliminary analysis of the first 81 patients, 69% of younger breast cancer survivors reported clinical levels of FCR. High levels of FCR in participants was associated with younger age at diagnosis ( $r = -0.48$ ,  $p < 0.001$ ), having locally advanced disease ( $t = -2.5$ ,  $p = 0.01$ ), over estimating one's risk of recurrence ( $F = 6.65$ ,  $p < 0.01$ ), frequency of breast self examination ( $F = 7.81$ ;  $p = 0.001$ ),

frequency of unplanned medical appointments ( $t = -2.07, p < 0.05$ ;  $t = -2.8, p < 0.01$ ), and level of depression and anxiety ( $r = 0.56, p < 0.001$ ). Data from the final sample will be reported in this presentation. **CONCLUSIONS:** FCR is common in younger breast cancer survivors and is associated with psychological morbidity. The results of the present study will be used to guide the development of psychological and educational interventions for cancer patients who experience high levels of FCR.

### S1832-3

#### Prevalence and Correlates of Fear of Cancer Recurrence among Cancer Survivors: Results of the American Cancer Society's Studies of Cancer Survivors (SCS)

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**OBJECTIVES:** Fear of cancer recurrence (FCR) is a common, and often distressing, problem for cancer survivors. Little is known, however, about how FCR varies across survivors of different cancers or different time points along the survivorship continuum. Thus, the present study sought to evaluate the prevalence, persistence, and correlates of FCR in a national, large-scale, population-based study of cancer survivors. **METHOD:** Participants were 9,653 survivors from a national study of 1, 3, 6, and 11-year survivors of 6 cancers (breast, prostate, colon, bladder, uterine, and skin melanoma). FCR was measured via a 4-item empirically-derived factor from the Cancer Problems in Living Scale, a 28-item checklist of problems cancer survivors may experience. Mean FCR factor scores were analyzed using univariate correlations and a general linear model (GLM). **RESULTS:** Nearly half (46.5%) of the survivors reported moderate-to-severe FCR, with 1-yr survivors reporting higher FCR than the other time-since-diagnosis cohorts ( $p < 0.001$ ). Univariate analyses indicated higher FCR was associated with being female, younger, Hispanic, and a breast cancer survivor as well as later stage and more co-morbidities ( $p < 0.001$ ). A GLM controlling for medical and demographic characteristics indicated those with higher FCR had poorer mental and physical health, lower spirituality, and more depression and anxiety ( $p < 0.001$ ). **CONCLUSIONS:** These findings indicate that a large percentage of cancer survivors experience fear that their cancer will return. While FCR is most prevalent in short-term survivors, it appears to remain problematic for some long-term survivors, even up to 11-years after the initial diagnosis. Variability across disease site is present, but may be explained by gender differences and psychosocial issues. Results can inform

interventions and future research on FCR with cancer survivors.

### S1832-4

#### Empirical Validation of the English Version of the Fear of Cancer Recurrence Inventory

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**OBJECTIVES:** Cancer survivors report that help in managing fear of cancer recurrence is their greatest unmet need. This paper will provide a brief overview of existing measures of FCR, most of which have unknown psychometric adequacy. One instrument with strong evidence to support its validity is a 42-item French instrument entitled The Fear of Cancer Recurrence Inventory (FCRI; Simard & Savard, 2009). The present paper describes initial efforts to validate an English version of the FCRI. **METHOD:** The FCRI was translated into English using a forward-backward translation procedure. The translated FCRI was pilot-tested with 18 English-speaking cancer patients. We established cross-cultural equivalency of the French and English versions by administering both forms to 40 bilingual cancer patients. In a final stage yet to be completed, 420 English-speaking breast, colon, prostate, and lung cancer survivors will complete the FCRI. Participants will be randomly selected from the Cancer Care Ontario provincial survivor registry. **RESULTS:** Initial pilot-testing ( $n = 8$ ) of the FCRI led to a few semantic changes. Additional testing ( $n = 10$ ) indicated that all items were clear and easy to answer. Administration of the French and English versions to bilingual respondents indicated few differences in the way respondents answered both versions. Both versions had Cronbach's alphas  $> 0.90$ . **CONCLUSIONS:** We have completed 3 of the 4 steps needed to validate the English version of the FCRI. Initial results are encouraging: The English translation appears adequate and acceptable to patients. Results support the cultural equivalence of the English FCRI to its original French version. Research in progress will evaluate the psychometric properties of the English version of FCRI. The presentation will conclude with a discussion of clinical and research relevance.

## S1836

**The Science of the Personal: Exploring Hope, Meaning, Prayer, and Spiritual Wellbeing**

**SYMPOSIUM DESCRIPTION:** This 90-minute symposium covers the science of the personal in an exploration of hope, meaning, prayer, and spiritual wellbeing in the cancer-affected. The first paper explores what dying cancer patients and their families can do with hope following a qualitative investigation of 40 palliative patients and 21 family members, specifically utilising discourse-analytic techniques. The second paper explores the unique contribution of peace, meaning, and faith to the estimation of 999 newly-diagnosed cancer patients' quality of life, and further assesses how these existential concepts are related to other wellbeing and cancer coping styles. The third paper investigates the impact of Christian intercessory prayer on cancer patients' spiritual wellbeing and other quality of life factors, in a double-blinded randomised controlled trial, and asks whether this kind of intervention is meaningful and what future endpoints should and could be targeted. Finally, the fourth paper explores 40 narrative reflections written on the experience of being a spouse of an advanced cancer patient in an exploration of hope, meaning, and spiritual wellbeing. This final paper brings together all four papers in a discussion of how practice and research inform each other with specific emphasis on the personal.

## S1836-1

**Hope, Life, and Death: What Can Dying Cancer Patients and Their Families do with Hope?**

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**OBJECTIVES:** Cancer patients and their families are expected to have hope but this can be problematic for people facing death, who are sometimes labelled without hope. However, patients (and their families) often continue to express hope, sometimes of cure, which can cause discomfort to healthcare professionals concerned about denial, or unrealistic hope. We present empirical data to argue that such concern is misplaced, as this hope can be understood, not as death-denying, but as life-affirming. **METHOD:** Semi-structured interviews with patients with cancer and family members were conducted, audio-recorded, transcribed, and examined for the presence of hope. Statements containing or referencing hope from 40 patients and 21 family members (28 patients within weeks of death) were

analysed using discourse-analytic techniques. Analysis was augmented by thematic analysis of media texts referencing cancer and hope, and constructs of hope found within the medical and psychological literature. **RESULTS:** Patients' and families' hopes of cure are sustained by normative beliefs about the power of medical technology promulgated within media. Cancer patients and their families resist and negatively evaluate implications that hope is gone, even when facing imminent death, as the absence of hope ('no hope') characterised the patient as merely a biological entity. Many saw hope as changing, positioning them in relation to intimate others, with hopes reflecting and constituting different stages in life. **CONCLUSIONS:** Requiring that patients and families relinquish hopes of cure challenges the accumulative weight and legitimacy of dominant beliefs about hope and medical science. The significance of their hopes for more life rests on how this values parties and relationships involved, not on the attainability of the hope. When confronted with death, the challenge is to identify those hopes that maintain engagement in life, but are appropriate and relevant for this final stage of life.

## S1836-2

**Peace, Meaning, and Faith: Isolating Which Dimensions of Spiritual Wellbeing are Most Integral to Improving Quality of Life and Coping in Patients with New Cancer Diagnoses**

Hayley Whitford, Ian Olver

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**OBJECTIVES:** This study explored the unique associations between the newly proposed three-factor structure of the 12-item FACIT-Sp Spiritual Wellbeing scale (Peace, Meaning, and Faith) and quality of life (QoL) in an Australian oncology population. Correlations between the three-factors, QoL (Total QoL and the subscales of Physical, Social, Emotional, and Functional Wellbeing), and cancer coping styles were also investigated. **METHOD:** A total of 999 consecutive cancer patients (53.2% male; age range 21–93,  $M = 60.8$  years,  $SD = 12.9$ ) with new, mixed diagnoses contemporaneously completed the Functional Assessment of Chronic Illness Therapy - Spiritual Well-Being (FACIT-Sp; a measure of QoL) and the Mental Adjustment to Cancer (MAC) scale (a measure of cancer coping styles) as part of a larger study on QoL and spiritual wellbeing. **RESULTS:** Hierarchical multiple regressions revealed Peace predicted 15.8% ( $R^2$  Change) of the variance on QoL controlling for Meaning and Faith, and Meaning predicted 5.8% of the variance on QoL controlling

for Peace and Faith ( $p < 0.001$ ). Peace showed large-to-moderate associations with improved Functional and Emotional Wellbeing, and Fighting Spirit, and decreased Helplessness/Hopelessness, and Anxious Preoccupation. Meaning showed large-to-moderate correlations with improved Functional Wellbeing, Fighting Spirit, and decreased Helplessness/Hopelessness, but also improved Social Wellbeing. **CONCLUSIONS:** The three-factor structure of FACIT-Sp Spiritual Wellbeing scale appears psychometrically superior to the previous two-factor solution as it further discriminates between which dimensions of spirituality are most highly associated with improved QoL facets and coping styles. These findings suggest this new distinction will aid in fine tuning our understanding of how to calculate the true burden of cancer. This study further provides more normative data on patients with new cancer diagnoses.

### S1836-3

#### **Investigating Spiritual Wellbeing as a Meaningful Endpoint in a Study of Prayer in Cancer Patients**

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**OBJECTIVES:** Anecdotes and a few randomised clinical trials suggest a positive impact of intercessory prayer on health outcomes but the evidence is equivocal. Many endpoints have been used; we chose a change in spiritual wellbeing as measured by The Functional Assessment of Chronic Illness Therapy - Spiritual Well-being (FACIT-Sp) as the most likely endpoint to demonstrate change in a randomised trial of intercessory prayer. **METHOD:** A total of 999 new patients at an Australian cancer centre were randomised to receive remote intercessory prayer ( $n = 509$ ) or no prayer ( $n = 490$ ). With ethics committee approval, patients remained blind to the intervention but consented to measuring quality of life and completing the FACIT-Sp and repeating it 6 months later. An established Christian prayer chain was provided with sufficient but unidentifiable information about each intervention patient to pray for them. **RESULTS:** Randomisation yielded comparable groups. The prayer group showed a small, statistically significant improvement over time in Spiritual Wellbeing compared to the control group ( $p = 0.02$ , partial  $\eta^2 = 0.01$ ) but only due to the Peace and Faith domains while the Meaning domain of FACIT-Sp worsened. Only Emotional wellbeing improved ( $p = 0.04$ , partial  $\eta^2 = 0.01$ ) on the quality of life scales. There were no significant differences between groups on other wellbeing subscales. **CONCLUSIONS:** The study demon-

strated a measurable impact of prayer on 2 of the 3 domains of spiritual wellbeing and emotional wellbeing. The study was not designed to define mechanisms of action, and it is unclear why only certain aspects of spiritual wellbeing improved. Questions remain: How can we judge whether prayer has had a meaningful impact? What should further studies use as endpoints? What degree of difference should they be powered to detect?

### S1836-4

#### **Hope, Meaning, and Spiritual Wellbeing: Heuristic Reflections from the Other Side**

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**OBJECTIVES:** Being a researcher or a practitioner addressing quality of life issues such as hope, meaning, and spiritual wellness is a different journey than living the uncertainty faced by cancer patients and family members. The challenge as scientists and practitioners is to honor both the tenants of our disciplines' understandings of research *and* the human experience we more fully, and with good intention, strive to understand. Any imbalance has substantive consequences to all involved. **METHOD:** Using a heuristic framework, more than forty narrative reflections written on the experience of being a spouse of an advanced cancer patient are explored to address the question, 'What is the experience of hope, meaning, and spiritual wellbeing as lived by the spouse of an advanced cancer patient during a five-month period of life-threatening illness?' A secondary question, 'What are the enhancers and inhibitors of hope and meaning?' will be addressed. **RESULTS:** The development of a 'creative synthesis' forms the outcome of a heuristic study. As such, the researcher as scientist-artist develops an aesthetic rendition of the themes and essential meanings of the phenomena. In the case of this study the theme 'Obedience to the moment' is central to the experience. Sub-themes of suffering, impermanence, and peace that relate to enhancers and inhibitors of hope, meaning, and spiritual wellness will be described. **CONCLUSIONS:** Results of this study and the three others will be used to generate questions for dialogue. How do practice and research inform each other? On what can diverse disciplines agree about what constitutes research? Can there be, as Denzin and Lincoln suggest, 'a sacred science' that would link all its practitioners and participants in bonds that are respectful of humanity? How can we further let those who experience suffering teach us about its realities?

## S1837

**The Cultural Context of Screening for Early Detection of Breast Cancer**

**SYMPOSIUM DESCRIPTION:** While early breast cancer detection is critical to survival, efforts to educate and convince women to attend breast cancer screening programs are only partially successful. The many studies examining barriers to and promoters of screening have been mainly based on models of health behaviors, assessing cognitive, behavioral or emotional factors that are assumed to be universal. However, evidence is accumulating that cultural perceptions and beliefs, social norms and historical/contextual processes among specific ethnic groups play a major role in shaping screening behaviors. Of major concern is that women from ethnic minority groups are often under-screened, with breast cancer detected in more advanced stages. Accordingly, this symposium will concentrate on the understudied area of the cultural factors affecting screening behaviors in specific ethnic groups, to better understand how culture affects screening and hence the survival of women. The presentations will focus on Jewish and other high risk ethnic minority women in Europe, Arab women in Israel, Palestinian women in the Palestinian Authority, and Hispanic women in various settings. In their systematic review Karen Belkic' group found that European surveillance programs for woman with high breast cancer risk did not adequately cover high-risk ethnic minority groups. Mariam Awad and colleagues assessed screening behaviors and barriers to screening in 397 randomly sampled Palestinian women in the West Bank. They found a unique combination of personal, cultural and environmental barriers, related to very low rate of screenings. Lourdes Baezconde-Garbanati will present a study on U.S. women born in Latin America, a study now being extended to immigrants in Sweden. High familism and low fatalism were significant, independent predictors of on-time mammography. A major barrier for Latinas not receiving recent mammograms was lack of attention to their own health due to placing family as top priority. Faisal Azaiza and Miri Cohen will present cultural, religious and social barriers to and promoters of screening in three distinct groups of Arab women in Israel: Muslims, Christians and Druze. They will also present a theoretical model and a tool for assessment of cultural barriers to and promoters of screening and its possible application with different cultural groups. In the last part of the symposium, Prof. Lea Baider, in her discussion, will highlight directions for future research as well as translating the studies into cultural-sensitive interventions to increase attendance to screening programs among women from minority groups worldwide.

## S1837-1

**Screening of High-Risk Groups for Breast and Ovarian Cancer in Europe: A Focus on the Jewish Population**

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**OBJECTIVES:** Lower breast cancer screening rates are often found among ethnic minority groups and those born outside the host country. This is of particular concern for high-risk groups. We aim to: 1) systematically review the literature concerning breast cancer early detection practices (BCEDP): among Jewish women, a prototypic high-risk group; 2) examine European surveillance studies of high-risk for breast and/or ovarian cancer in order to assess the likelihood of adequately detecting women from minority ethnic groups. **METHOD:** We identified empirical studies on Jewish women concerning: a) adherence to breast cancer screening guidelines and its relation to socio-demographic characteristics, b) barriers and promoters for breast cancer screening or c) social-psychological aspects of genetic testing/risk assessment for breast and ovarian cancer. We then searched for European-based studies that targeted women at high risk for breast and/or ovarian cancer and that had imaging as part of the surveillance protocol. **RESULTS:** We found no studies about BCEDP among Jewish women in Europe. Some Jewish women in the U.S. and Israel, including recent immigrants, are under-screened. The European surveillance studies showed a clear benefit of magnetic resonance imaging and/or more intensive screening for women with increased breast cancer risk. Some European-based surveillance studies considered high-risk ethnic minority groups, including Jewish women, but none provided adequate outreach to ensure that these groups were included in their programs. **CONCLUSIONS:** The special screening needs of the Jewish population in Europe have not been met regarding breast and ovarian cancer. This may also be the case for other ethnic minority groups. Since these groups are often dispersed

among many European countries, a European-wide, population-based approach is suggested to address their specific screening needs. For the Jewish population of Europe as well as other ethnic minority groups, cultural sensitivity is vital for these efforts.

### S1837-2

#### **Breast Cancer Screening among Latinas: Our Research in the U.S. and Initial Findings for Scandinavia**

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**OBJECTIVES:** Sweden has a well-developed population-based mammography screening program with high overall participation rates. Related in substantial measure to early-stage detection, Swedish breast cancer survival rates are among the world's highest. However, not all segments of the Swedish population benefit equally from that screening program. Latin-American-born women born are significantly less likely than Swedish-born women to attend invitational mammography. We seek to know why this is so, informed by our research among Latinas in the U.S. **METHOD:** We tested an expanded model incorporating the Theory of Planned Behavior (TPB), cultural factors, potential facilitators and barriers among seventy-two Latinas with low-incomes in Southern California who had contacted an Early-Detection Program and received a mammogram 3–4 years earlier. We also performed a systematic review concerning the reasons for non-attendance in mammography programs in Sweden or elsewhere in Scandinavia among women born in Latin America. **RESULTS:** Cultural factors: high familism and low fatalism were significant, independent predictors of on-time mammography in Southern California Latinas. However, a major barrier for not receiving recent mammograms was lack of attention to own health due to placing family as top

priority. We found no published studies examining the reasons for Latina non-attendance in mammography programs in Sweden or elsewhere in Scandinavia. We are now pilot-testing a questionnaire among Latinas in Sweden regarding mammography and health. **CONCLUSIONS:** Interventions geared at increasing breast cancer screening among Latinas should emphasize the benefits to them and simultaneously to their families. Incorporation of 'personalismo' and our knowledge about social norms by approaching women on a neighborhood or other community-based group represent promising strategies. Outreach on breast cancer screening should be integrated into on-going European and U.S. surveillance programs among women at high risk for breast cancer.

### S1837-3

#### **A Theoretical Model for the Conceptualization of Cultural Barriers to and Promoters of Breast Cancer Screening: Implications for Research and Intervention**

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**OBJECTIVES:** To propose a theoretical model of culture-related barriers to and promoters of screening for the early detection of breast cancer, and its implementation for research and intervention. The model was developed based on studies with Israeli Arab women. The model's development, based on a series of studies including validation of a culture-related beliefs questionnaire and testing an intervention to increase screening attendance, is detailed. **METHOD:** Starting with five focus groups ( $N = 51$ ) with Arab Israeli women, to learn about cognitions, beliefs and attitudes to breast cancer and early detection screening, a theoretical model and a questionnaire were developed and tested in a random sample of 300 Arab women. Based on the results, a tailored intervention aimed to lower barriers and increase screening attendance was developed and tested with 42 women and 24 matched controls. **RESULTS:** A model with five factors emerged that explained 54.6% of the cumulative variance: social barriers, exposure barriers, environmental barriers, uneasiness with own body, and traditional beliefs about cancer. Post-intervention, a significant decrease in barriers to screening was found in the intervention group but not in the control group. While at pre-intervention similar rates of attending screening were found, at post-intervention 48% of the study group but only 12.5% of the controls attended or scheduled mammography. **CONCLUSIONS:** Culture-sensitive interventions are a prerequisite to create change in screening attendance by women from different ethnic backgrounds. The

interventions should be constructed based on a deep understanding of the specific culture-related barriers of particular ethnic groups. The proposed model can serve as a basis for understanding culture-based barriers and promoters, but should be adapted to different ethnic groups.

#### S1837-4

##### **Factors Associated with Low Screening for Breast Cancer in the Palestinian Authority: Relations of Environmental Barriers and Cancer-Related Fatalism**

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**OBJECTIVES:** Screening for breast cancer is often inhibited by cultural perceptions and social norms, factors which often interact with living in low-income countries. Palestinian women residing in the West Bank belong to a traditional and religious society in a low-income country. We examined their screening behaviors and knowledge in relation to these inhibitory cultural and environmental factors. **METHOD:** Participants were 397 Palestinian women, aged 30–65, residing in the West Bank part of the Palestinian Authority. The sample was stratified to proportionally represent Muslim and Christian women from cities, villages and refugee camps of each West Bank district. Participation rate was 98.3%. The participants completed questionnaires on breast examination (mammography, clinical breast examination (CBE) and self breast examination (SBE), knowledge and behaviors, perceived cancer fatalism, health beliefs, and environmental barriers. **RESULTS:** Most of the women did not know the recommended frequencies for any of the breast examinations. Over 70% had never undergone mammography or CBE, while 62% had performed SBE; a tendency to over-perform SBE was found. Women were more likely to undergo breast examinations if they were less religious and more educated, expressed lower personal barriers and lower fatalism, and perceived higher effectiveness of the examinations. **CONCLUSIONS:** Palestinian women tend to perform more SBE, probably due to low access to mammography and CBE and unawareness of the recently proven inefficiency of SBE. This and the very low rate of mammography and CBE attendance and knowledge are major health concerns. The women reported personal, cultural and environmental barriers, which should be addressed by educational programs. Resources for early detection and treatment of breast cancer should then be allocated.

#### S1841

##### **Developmental Differences, Changes after Death of a Brother or Sister in Bereaved Siblings and Advice to Health Professionals**

**SYMPOSIUM DESCRIPTION:** The death of a child with cancer has a life changing impact on family members, including siblings. Little is known regarding the bereavement experiences of siblings after the death of a brother or sister. Research also suggests many bereaved parents are dissatisfied with their child's end-of-life (EOL) care. In this symposium we will present developmental differences and changes in siblings' bereavement experiences after the death, as well as advice to healthcare professionals from bereaved siblings and parents. The first report is part of a large longitudinal study of family bereavement in one institution; the other two reports are part of a large, multisite study from three children's hospitals in the United States and Canada. These studies enrolled large samples (31 parents, 24 siblings; 65 parents, 39 siblings, respectively), and used qualitative interviews with grounded theory analysis in one study and content analysis of specific questions in the other two studies. The first report will present developmental differences in expression of grief, siblings coping, sibling-parent relationship, bonds with disease sibling and post-traumatic growth. The second report will present changes experienced by bereaved siblings in their relationships, life perspective, personal life and school. Finally, the third report will present advice for professionals in three major areas, improving medical communication, providing families with support and resources, and providing continuity of care throughout the illness, EOL and bereavement. These studies contribute to the state of science on sibling bereavement and bereavement care in general. Understanding bereaved siblings' developmental differences and the changes that siblings undergo following the death of a brother or sister will guide the development of services for bereaved siblings and their families. Integrating the advice provided by bereaved family members into active and EOL pediatric care will improve bereavement outcome for families. Clinical and research implications will be discussed.

#### S1841-1

##### **Parental Report of Developmental Differences in Siblings' Grieving and Coping Experiences after Childhood Cancer Death**

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**OBJECTIVES:** The death of a child with cancer has a life changing impact on family members, including siblings. Little is known regarding the bereavement experiences of siblings. The purpose of this study was to investigate longitudinally the bereavement experiences of parents and siblings after a childhood cancer death. Developmental differences in sibling bereavement are the focus of this report. **METHOD:** Thirty-one parents (19 mothers and 12 fathers) of 24 surviving siblings were interviewed separately about their and their surviving children's bereavement and coping experiences 6 months post-death (T1); eighteen (13 mothers and 5 fathers) parents were interviewed 12 months (T2) later. Interviews were analyzed following grounded theory methodology, aided by NVivo software. To describe emerging themes about siblings overtime, their age was dichotomized as younger (<9 years) and older aged (>9 years). **RESULTS:** Several themes emerged: 1) expression of grief (older siblings: intense grief; younger siblings: delayed grief); 2) siblings coping (resuming daily routine for both groups, talking with friends and counselling for older siblings); 3) siblings-parents relationship (older siblings: conflictual but improved overtime; younger siblings attention seeking); 4) bond with deceased sibling (younger siblings: pretend-play, using their belongings; older siblings: building legacy); 5) post-traumatic growth (older siblings: caring for others; younger siblings: comprehending death overtime). **CONCLUSIONS:** The results illustrate unique parental perceptions of grieving and coping by pre-school and school-aged siblings, given the developmental needs of bereaved siblings. Future research should include in-depth interviews with siblings, which will enrich and complement parental perspectives of these developmental differences. Combined, these findings will guide the design of bereavement support services for bereaved siblings and their families.

#### S1841-2

##### **Changes In Siblings After The Death Of A Brother Or Sister To Cancer**

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**OBJECTIVES:** Based on perceptions of bereaved parents and siblings, this study examined changes experienced by siblings after the death of a brother or sister to cancer. **METHOD:** Mothers ( $n = 36$ ), fathers ( $n = 24$ ), and siblings ( $n = 39$ ) were recruited from 39 families 3–12 months post-loss ( $M = 10.7$ ,  $SD = 3.5$ ). Researchers conducted semi-structured home interviews, asking open-ended questions with each parent and sibling separately. Content analysis is currently in progress and has identified emerging themes. **RESULTS:** Parents and siblings identified four major categories of change experienced by bereaved brothers and sisters. Siblings experienced changes in their relationships (e.g. peers, family), life perspective (e.g. priorities), personal life (e.g. behaviors, emotions), and school (e.g. grades). Some sibling changes were positive while others were seen as negative. Differences and similarities between parent and sibling reports will be discussed. **CONCLUSIONS:** This study contributes to the state of science on bereavement care. Practice implications will be developed after analysis is complete and will offer guidance to improve aftercare for bereaved siblings and their families. Additional research is needed to further describe needs of bereaved siblings and to develop strategies to promote helpful aspects of change experienced by bereaved siblings.

#### S1841-3

##### **A Qualitative Study of Advice to Healthcare Professionals from Bereaved Parents and Siblings**

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**OBJECTIVES:** Research suggests that many bereaved parents are dissatisfied with their child's care at end-of- life, particularly symptom management, communication, and continuity of care. Physicians' perspectives may rely more on medical aspects of care, while parents may emphasize

interpersonal factors, such as relationship quality and support. Our aim was to better understand the perspectives of bereaved mothers, fathers, and siblings by soliciting their advice to healthcare professionals who work with families of seriously ill children. **METHOD:** Families were recruited from three children's hospitals in the United States and Canada 3–12 months ( $M = 10.7$ ,  $SD = 3.5$ ) after their child died of cancer. Participants from 40 families (65 parents, 39 siblings) were interviewed separately at home. Data were derived from the question, 'What advice, if any, do you have for us as healthcare providers and researchers, who work with children and families?' Emerging themes were identified through content analysis of transcripts. **RESULTS:** Three major themes emerged regarding the need for improved medical communication, family support, and continuity of care. Parents emphasized the need for empathic and honest communication about the child's health, as well as information about supportive services throughout the experience. Lesser themes involved continuing research and education for the public good, providing financial help, and accommodating the needs of siblings. Siblings had fewer suggestions overall, and many participants offered praise and expressed satisfaction with care. **CONCLUSIONS:** Results from this study are unique. Unlike previous work, they are based on separate interviews with parents and siblings, conducted less than a year after the child's death. Contrary to research relying on physician report, symptom management was not a primary complaint of families. Many were pleased with their care, but medical communication, support, and continuity were major areas in need of improvement. Addressing these domains of clinical care is important for future research.

#### S1842

##### **Common, Avoidable Errors in Psychosocial Oncology Research: Strategies To Strengthen the Knowledge Base**

**SYMPOSIUM DESCRIPTION:** Recurring theoretical, methodological and analytical oversights and errors compromise the information value of research and, thus, undermine contributions to new knowledge. Experience indicates that this is just as true in psychosocial oncology as in other fields. In this symposium, we identify four types of errors that frequently arise in psychosocial oncology research and suggest concrete ways they can be avoided. Three presenters will, in turn, address the following topics: (1) overreliance on ad-hoc research questions as opposed to theoretically-derived hypotheses; (2) measurement redundancy;

(3) reliance on distal/global as opposed to more proximal/specific outcomes; and (4) too few studies that directly assess the role of gender influences. Each presenter illustrates one of these issues with examples from the psychosocial oncology literature and suggests how it can best be addressed to enhance the quality of our knowledge base and support scientifically-sound decisions. This symposium is timely as researchers are now exposed to a variety of research orientations and strategies that bode well for a rich and informative knowledge base in psychosocial oncology. An explicit discussion of potential pitfalls will help ensure that the evidence being produced is of the highest quality and relevance.

#### S1842-1

##### **Advances in Psychosocial Oncology Research: Is Theory Really Guiding the Way?**

Carmen G. Loiselle

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**OBJECTIVES:** Recently, there has been a call for greater reliance on theoretically-driven propositions by psychosocial oncology researchers to provide more rigorous and structured explanations of relevant phenomena. This call has resulted in research agendas that more explicitly incorporate theory into clinical research. However, new challenges emerge from this trend and they are discussed herein. **METHOD:** Required readings for the Psychosocial Oncology Research Training (PORT) program graduate seminar were reviewed to identify issues regarding the integration of theory into empirical work. Recurring issues were noted. **RESULTS:** The most common issue pertains to reliance on ad-hoc research questions as opposed to theoretically-derived propositions which undermines cumulative knowledge generation. In addition, along the cancer continuum, strong theory-driven work is mostly prominent in cancer prevention and survivorship/end-of-life research and less so in research considering early disease and clinical treatment phases. Of note, operationalization of concepts is not always congruent with theoretical underpinnings thereby threatening both internal and external validity. Concrete examples of issues are presented. **CONCLUSIONS:** Greater reliance on theory-driven research across the various phases of the cancer control continuum is important. We are cognizant, however, that the relative importance of theory in quantitative as opposed to qualitative research remains a topic of debate. The explicit discussion of pitfalls and potential contributions of theory provides a foundation to continue to address optimal knowledge generation in the field.

## S1842-2

**Effective Measurement in Psychosocial Oncology Research**

Gerald Devins

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**OBJECTIVES:** Effective measurement is crucial in research. Two measurement pitfalls often undermine psychosocial oncology research: (a) 'Measurement redundancy' occurs when instruments intended to tap independent concepts that are hypothesized to be causally related include common item content; and (b) an emphasis on outcome variables that are distal to the process under investigation makes it difficult to detect hypothesized relations. **METHOD:** Examples from the psychosocial oncology research literature were identified to illustrate the two measurement pitfalls highlighted. Examples of effective, alternative methods were also identified to help audience members enhance measurement in their own research. **RESULTS:** The paper demonstrates how both measurement redundancy and selecting 'distal' rather than 'proximal' outcome measures threaten the validity of psychosocial oncology research findings. This is particularly likely when instruments tap global (i.e. general) concepts. Examples of more effective methods (e.g. selecting instruments proximal and directly related to the phenomenon of interest) illustrate how to achieve more effective, scientifically sound measurements, yielding more informative findings. **CONCLUSIONS:** Ensuring that instruments selected to tap distinct concepts do not overlap at the measurement level will reduce ambiguity in interpreting findings. Selection of specific outcomes proximal to the processes under investigation will enable more compelling tests of hypotheses. Addressing both issues will enhance confidence in the validity of study findings and the overall quality of psychosocial oncology research.

## S1842-3

**Gender Matters in Psychosocial Oncology Research**

Joan Bottorff

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**OBJECTIVES:** Gender, defined as socially prescribed and experienced dimensions of 'femaleness' and 'maleness' in society, is evident in the diverse ways individuals engage in behaviours. Despite growing evidence about the importance of gender in understanding health behaviour and health outcomes, the influence of gender, as well as the interplay within and between genders in people's lives, is not systematically examined in psychosocial oncology research. **METHOD:** Conceptualizations of gender and implications for psychosocial oncology research will be discussed. Challenges in moving beyond the binaries of sex and gender will

be explored. **RESULTS:** Selected examples of psychosocial oncology research will be presented to demonstrate the importance of disaggregating data to examine gender differences (without presuming that any such differences exist), and the use of frameworks of masculinities and femininities in planning and conducting research. Implications for study design and recommendations for future research will be presented. **CONCLUSIONS:** Accounting for gender and sex in psychosocial oncology research has the potential to make health research more just, more rigorous and more useful.

## S1843

**What makes cancer stressful? Treatment, illness intrusiveness, and culturally based determinants**

**SYMPOSIUM DESCRIPTION:** Cancer imposes significant psychosocial stress, attributable to a wide range of factors. This symposium includes three papers that address complementary determinants of cancer-related stressors. The first paper presents a prospective, longitudinal examination of the stress imposed by treatment (bone marrow transplantation) and investigates hypothesized determinants (common cancer symptoms and treatment side effects, and illness intrusiveness). The second paper examines how illness intrusiveness (i.e. cancer-induced lifestyle disruptions that compromise quality of life) is shaped jointly by exposure to cancer-related stressors and symptom distress. The third paper examines the ways in which cultural syndromes (i.e. complex vectors of culturally based values, attitudes, and beliefs) influence the appraisal of common cancer-related stressors.

## S1843-1

**Course of Psychosocial Adjustment in Allogeneic Bone Marrow Transplantation: From Pre-treatment to Long-term Survivorship**Kenneth Mah<sup>1</sup>, Jeffrey H. Lipton<sup>2</sup>, Hans A. Messner<sup>2</sup>, Anargyros Xenocostas<sup>3</sup>, Ada Y.M. Wong<sup>4</sup>, Gerald M. Devins<sup>5</sup>

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**OBJECTIVES:** Allogeneic bone marrow transplantation (alloBMT) imposes adaptive challenges. Most studies focus on post-treatment psychosocial outcomes; few address adjustment across treatment stages. We (a) present initial results from an ongoing, prospective, longitudinal investigation of psychosocial adjustment at pretreatment (PreTx), treatment (Tx), and 3-month posttreatment periods

(3mo-PostTx); and (b) compare the results to parallel measurements gathered from long-term alloBMT survivors 1-10+ years posttreatment (Lt-PostTx) from our earlier alloBMT studies. **METHOD:** Hematologic cancer patients undergoing alloBMT completed self-report measures of depressive symptoms (Centre for Epidemiologic Studies-Depression Scale [CESD]) and psychological well-being (Affect Balance Scale [ABS]) at PreTx ( $n = 31$ ), Tx ( $n = 31$ ), 3mo-PostTx ( $n = 31$ ), and Lt-PostTx stages ( $n = 168$ ). Repeated-measures ANCOVAs examined treatment-stage effects and between-subjects ANCOVAs compared 3mo-PostTx and Lt-PostTx survivors (three subgroups: 1-yr, 2–5 yr, >5-yr). Covariates included cancer symptoms and illness intrusiveness (Illness Intrusiveness Ratings Scale). **RESULTS:** Depressive symptoms were significantly higher during Tx (CESD  $M = 21.8$ ) than at PreTx ( $M = 11.0$ ) or 3mo-PostTx ( $M = 11.3$ ), but not after controlling for covariates. Psychological well-being did not differ significantly (ABS  $M = 3.1–4.0$ ). Depressive symptoms did not differ significantly across short- and long-term survivors, but psychological well-being did: 3mo-PostTx (ABS  $M = 3.1$ ) vs. Lt-PostTx ( $M_s = 6.2–7.1$ ), even after controlling for covariates. **CONCLUSIONS:** Distress and well-being show different trajectories during alloBMT and survivorship. Symptoms and lifestyle disruptions (illness intrusiveness) may cause acute distress during the alloBMT procedure, but for many it appears to subside after they return home. Well-being, on the other hand, appears to be low during alloBMT and in the first months thereafter, but it appears to increase by 1-year posttreatment and remains stable thereafter, likely because people feel more confident about long-term survivorship.

#### S1843-2

##### **Cancer-related Stressors Moderate Effects of Symptom Burden on Illness Intrusiveness in Head and Neck Cancer**

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**OBJECTIVES:** Cancer symptoms and treatment side effects introduce lifestyle disruptions (i.e. illness intrusiveness) that compromise quality of life. The illness intrusiveness theoretical framework posits that these effects are moderated by the context in

which disease and treatment occur. This study tests the hypothesis that the magnitude of illness intrusiveness due to symptoms and side effects is moderated by exposure to other cancer-related stressors. We test this in people affected by head and neck cancer (HNCa). **METHOD:** 418 HNCa outpatients participated in structured interviews to complete self-report measures of cancer-related stressors (Cancer-Related Stressor Checklist, tapping seven distinct domains), Symptom Burden (Modified Symptom Assessment Scale), Illness Intrusiveness Ratings Scale (total and three subscales), and a checklist of independent stressful life events (SLEs) as part of a much larger battery concerning illness intrusiveness and quality of life in HNCa. Statistical methods involved hierarchical multiple regression analysis, controlling for SLEs. **RESULTS:** Symptom burden correlated significantly and uniquely with illness intrusiveness (partial  $r = 0.34$ ), but cancer-related stressors did not. As hypothesized, statistically significant Symptom Burden x Cancer-Related Stressors interactions were evident for total illness intrusiveness (and its subscales) for five of seven cancer-related stressor domains. Illness intrusiveness increased more dramatically in association with increasing symptom burden when respondents were exposed to many cancer-related stressors ( $M+1 SD$ ) than when they were exposed to few ( $M-1 SD$ ). **CONCLUSIONS:** These results are consistent with the illness intrusiveness theoretical framework premises that HNCa symptoms and side effects (a) contribute to illness intrusiveness and (b) their effects are moderated by the context in which disease and treatment occur. Results were consistent across many, but not all, stressor domains. In addition to the direct effects of disease and treatment, the context of related stressors to which one is exposed also shapes the psychosocial impact of life-threatening disease.

#### S1843-3

##### **Congruence Between Cultural Syndromes and Appraisals of Common Cancer-Related Stressors**

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**OBJECTIVES:** Culturally rooted social values, attitudes, and beliefs (i.e. cultural syndromes) are believed to influence the appraisal of subjective experience. People with strong individualist values (emphasizing independence and autonomy)

may attribute cancer-related distress to stressors that threaten individualist values, whereas those with strong collectivist values (emphasizing independence and social harmony) may be more sensitive to stressors that threaten collectivist values. This paper tests whether the appraisal of cancer-related stressors are congruent with cultural values. **METHOD:** In structured qualitative interviews, head and neck cancer outpatients ( $N = 240$ ) described the factors ('stressor facets') causing distress when directly exposed to eight cancer-related stressors. Those who had not experienced a given stressor were asked to speculate on their response if they were to experience it ('hypothetical exposure'). The Individualism-Collectivism Scale tapped cultural syndromes. Transcript content analysis determined the frequency with which respondents identified stressor facets reflecting individualism, collectivism, both cultural syndromes, or neither. **RESULTS:** Higher individualism scores were associated with more individualism-related stressor facets ( $r = 0.209$ ), but fewer non-individualism-related facets ( $r = -0.141$ ),  $p = 0.048$ , for those who experienced illness intrusiveness. Higher collectivism scores were associated with fewer collectivism-related stressor facets ( $r = -0.138$ ) but more non-collectivism-related facets ( $r = 0.143$ ),  $p = 0.036$ , in overall responses to existential stressors. This difference became nonsignificant when analyses were limited to those who actually experienced existential stressors. Low numbers of reported facets may have limited power to detect other findings. **CONCLUSIONS:** Adherence to individualist values was associated with individualism-related appraisals of cancer-related stressors, but only when respondents were exposed to 'illness intrusiveness' stressors. Attention to culture helps explain why people report different stress appraisals and levels of perceived stress in response to common cancer-related circumstances. It may be advisable to limit assessments of stress-related psychological responses to circumstances with which people have had direct experience, rather than including circumstances to which they have not been exposed.

#### S1844

##### **Existential-Spiritual Suffering at the End of Life: A Multidisciplinary Approach to Identifying and Treating End of Life Suffering in Cancer Care**

**SYMPOSIUM DESCRIPTION:** The American Medical Association (2008) defines existential suffering 'as the experience of agony and distress that results from living in an unbearable state of existence.' The medical and palliative care literature offers various, yet often vague, descriptions of existential pain and suffering at the end of life, but has yet to come to a shared consensus on this

powerful concept. There are myriad, ostensibly interchangeable, terms that connote existential-spiritual suffering in palliative care literature: 'psycho-existential suffering' (Murata & Morita, 2006), 'existential distress' (Schuman-Olivier, 2008), 'existential pain' (Strang *et al*, 2004), and 'spiritual pain' (Mako *et al*, 2006). To date, there is no widely held operational definition for this particular kind of suffering that triggers deep sadness, anxiety and despair at the end of life. When symptoms are medically managed and physiological pain is effectively controlled—how do we then contend with this seemingly ominous entity called 'existential suffering' at the end of life with no commonly shared language or direction? This symposium will offer a multidisciplinary approach to how existential-spiritual suffering in end of life cancer care is understood from medical, spiritual and psychological perspectives. Does personal suffering lie in the hands of palliative care doctors, spiritual care providers or the psycho-social care team? To answer these questions—a Pain & Palliative Care doctor, a Clinical Psychologist, and a Director of Chaplaincy, from nationally recognized NCI designated comprehensive cancer centers, will each present how they identify existential-spiritual pain in their work with the terminally ill, and how they specifically treat this suffering in the framework of their given disciplines. The medical doctor, with expertise in pain management and palliative care, will present how existential suffering (e.g. EoL despair, desire for hastened death, demoralization) is medically managed on a palliative care unit, and offer potential ways it may feasibly be addressed in a medical milieu. The clinical psychologist, with expertise in Existential Psychology and EoL care, will offer an overview of existential suffering as an umbrella concept encompassing ways human beings are afflicted (via: angst, dread, despair) by facing their mortality. Meaning-Centered and Dignity-Conserving therapy case vignettes will be utilized to identify EoL existential suffering and ways to treat it via psycho-social therapeutic support. Finally a chaplain, with expertise in spiritual and religious practices, will present ways of interpreting spiritual pain from religious, as well as secular, perspectives, and offer ways to assuage this suffering and effectively minister to the dying.

#### S1844-1

##### **Existential-Spiritual Suffering at the End of Life: A Chaplaincy Perspective**

Jane Mather

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**OBJECTIVES:** Dying is as much a spiritual as a biological process. Separation from the world and

all that has defined meaning/purpose to a human life can be as devastating as the loss of mobility or incontinence, even for those who do or do not espouse religious beliefs. Identifying themes of spiritual pain, existential suffering and religious distress is predominantly the role of the professional chaplain, but is most effectively treated by a team of collaborative caregivers. **METHOD:** As Director of Chaplaincy at a national cancer center, the presenter will offer an overview of how existential-spiritual suffering is identified and assuaged by spiritual care providers. Specifically, the chaplain's role is to: 1) assess/support transitions from cure through dying to death, 2) ease suffering based on patients' spiritual beliefs and values, 3) help the multidisciplinary care team to develop care plans that respect patient/family beliefs and values as resources for EoL comfort and healing. **RESULTS:** Embedded screens, assessments and protocols, early identification and consistent team collaboration are essential means to improve quality EOL care. A team approach to care across In-patient and Out-patient units has improved referrals to palliative and hospice care, and decreased the number of bounce-backs. Earlier intervention has made the aforementioned transitions less abrupt and gentler. The team takes regular time to acknowledge the losses, identify the names and grieve for the patients who have died. **CONCLUSIONS:** Exploring spiritual suffering, developing patient/family resources and identifying barriers to their effectiveness are the standard of care in responding to EoL concerns. As this team approach improves quality of care for patients and families, it also helps build resilience and prevent compassion fatigue among staff. Spiritual care providers are essential in this EoL team approach, as they help inform palliative practitioners of ways to effectively identify and assuage spiritual/religious pain while ministering to the dying.

#### S1844-2

##### **Existential-Spiritual Suffering at the End of Life: A Pain and Palliative Medicine Approach to Identifying and Palliating Existential-Spiritual Pain in Patients with Terminal Illness**

Dana Tarcatu

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**OBJECTIVES:** Many palliative care physicians are often faced with the challenge of treating physical symptoms that are unexplainable and do not respond to standard effective interventions. Symptoms like refractory pain, intractable nausea, extreme fatigue or anorexia cannot be controlled even when multiple mechanism-based interventions are rigorously applied. This is often a signal that

patients' suffering is not related to the primary symptoms being treated by the physician, but may be a direct consequence of existential-spiritual distress. **METHOD:** A Pain & Palliative Care physician will present a medical approach to identifying 'existential pain' and barriers to alleviating the non-physical dimensions of suffering in patients with life-limiting illnesses. A series of case vignettes will be presented to exemplify the most common 'faces' of existential suffering at the end of life. The audience will be taught practical strategies to identify and treat end of life existential suffering from a medical perspective. **RESULTS:** Most palliative care specialists do not receive formal training in identifying existential pain and suffering in terminally ill patients. Therefore, they have limited knowledge and skills for appropriately recognizing and palliating existential-spiritual pain when it occurs. Practical methods of assessment and specific strategies used to help physicians relieve existential pain and suffering will be presented by way of didactic and interactive exercises. **CONCLUSIONS:** Physical pain may be a major component of suffering, but in the context of an advanced illness suffering encompasses much more than physical distress and often occurs in the absence of physical pain. Distinguishing between physical and psychological symptoms is clinically important, as effective management often requires fundamentally different interventions. The skills and resources of an interdisciplinary palliative care team are required to assess the various components of total pain and intervene to alleviate these symptoms.

#### S1844-3

##### **The Shadow Side of Meaning and Hope: A Psycho-Social Approach to Existential-Spiritual Suffering at the End of Life**

Shannon Poppito

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**OBJECTIVES:** End of Life existential distress cannot be easily pigeonholed into clean-cut diagnosable DSM-IV categories as depression and anxiety. Renown existentialists as Kierkegaard, Heidegger and Sartre have characterized existential distress (i.e. angst, despair, annihilation) as a powerfully embodied 'dread' of mortality, seeded within each human being, which calls one's very Being into question. Existential suffering at the end of life is authentically lived as a more fundamentally urgent and foreboding state-of-Being for the individual facing death. **METHOD:** A clinical psychologist, with expertise in Existential Psychology and End of Life Care, will first delineate the philosophical underpinnings of 'existential

suffering' as an umbrella concept encompassing the myriad ways individuals experience existential absence (i.e. separation from Life) via existential angst, despair, isolation, and guilt. Therapeutic case vignettes from the psychologist's Meaning-Centered and Dignity-Conserving interventions with terminally ill cancer patients will identify these different forms of existential distress as they arise in EoL psychosocial care. **RESULTS:** Case vignettes from terminally ill patients experiencing existential distress, such as unremitting angst or profound guilt and despair, will be presented to show how EoL practitioners may utilize a meaning-oriented dialogue to explore 'existential absence' and help buffer existential suffering. Therapeutic meaning-navigated life-review allows patients to revisit positive and negative moments in life, and reflect upon feelings and memories; giving patients the opportunity to rescript and restore certain moments that bring meaningful closure to life. **CONCLUSIONS:** End of Life literature examining terminal patients' will to live and desire for hastened death all point to existential ruptures, insults or losses in Life-meaning/purpose, autonomy/control, and overall sense of dignity/integrity in one's state-of-Being at the end of life. By tracking the shadows of meaning and hope before death, palliative care practitioners have a rich opportunity to unearth purposeful ways of bringing meaningful presence to this existential absence through meaning-directed life-review within the life-completion process.

#### S1845

##### **Meaning & Legacy Across the Life Span: Existential-Developmental Dimensions of End-of-Life Cancer Care**

**SYMPOSIUM DESCRIPTION:** 'What matters, therefore, is not the meaning of life in general, but rather the specific meaning of a person's life at a given moment.' (Viktor Frankl, 1969). The diagnosis of cancer at any age of life and stage of disease inaugurates both existential and developmental crises—of Being (existence) and becoming (development). Cancer becomes a veritable wake up call for patients and loved ones to seek meaning in their existence, in order to buffer the ominous threat of mortality. Therapeutic exploration of meaning and legacy across the life-span allows for the emergence of uniquely individual, as well as universally shared, ways of understanding how terminally-ill patients of all ages find meaning and a reason to live in the face of advanced cancer and death. This symposium will offer a multi-disciplinary approach to exploring meaning and legacy across the life span of terminally cancer patients—from Pediatrics to Geriatrics. A Clinical Psycho-

Oncologist, with expertise in Existential Psychology and Palliative Care, will first lay the ground work for interpreting existential issues from a developmental perspective across the life span in cancer care. Existential-developmental dimensions of terminally-ill cancer patients are delineated across domains of: 1. Chronological Age, 2. Developmental Milestones, 3. Life Events/Crisis Points (past & present), 4. Cancer Events/Crisis Points (past & present), and 5. Voice & Choice (patient & parent/loved one). Patient case vignettes will be presented from the psychologist's Meaning-Centered Therapy (Breitbart *et al*) and Dignity-Conserving Therapy (Chochinov *et al*) with terminally ill cancer patients, in order to highlight Existential-Developmental themes across the adult life span. A Pediatric Psycho-Oncologist, with primary expertise in Child Psychology and Psycho-Oncology, will define ways children of differing developmental ages and stages take up meaning and engage in 'legacy play' at the end of life. Patient/Parent case vignettes will be offered to highlight the terminally ill child's voice and choice in taking up meaning and legacy at the end of life, and the impact of parents' respective voice and choice in the process. Finally, a Psychiatrist, with expertise in Psycho-Oncology & Palliative Care, will offer a medical perspective on how meaning and legacy are utilized to prepare terminally-ill geriatric patients for the death and dying process. Case vignettes from Dignity Conserving Therapy (Chochinov *et al*) will show how the exploration of meaning and legacy help assuage existential suffering and contribute to essential preparatory grief work for patients and families at the end of life.

#### S1845-1

##### **Meaning and Legacy in the Terminally-Ill Elderly: Dignity Therapy and Its Impact on Patients and Health Professionals**

G.R. Tait, A. McDougall, C. Schryer, L. Lingard  
*University of Toronto, Toronto, Canada*

**OBJECTIVES:** More work must be done to address the existential needs of elderly dying patients, and how best to educate physicians to meet these needs. Dignity Therapy (Chochinov *et al.*) helps terminally-ill patients narrate their life-story; thereby making meaning of their existence and legacy. This presentation will explore the nature of stories told by elderly terminally ill patients via the dignity interview, to track how meaning-making and legacy work engage elderly in the life completion process. **METHOD:** Medical residents were taught to utilize Dignity Therapy as a way to open dialogue with terminally ill elderly patients about life-meaning and living-legacy in the

face of death. Dignity interviews were administered to twelve elderly patients by residents. Qualitative interviews of physicians were analyzed to understand their experience of administering the interview. The patient dignity transcripts were analyzed using a linguistic discourse analysis, to examine the nature of narratives elicited by the dignity interview. **RESULTS:** This presentation will offer qualitative data to illustrate a) the transformative impact of Dignity Therapy on elderly patients and their physicians, and b) the resources and constraints afforded by the dignity protocol and the narrative turns elicited. From a developmental perspective, a dying elderly patient's meaning and legacy making, often in the form of imparting wisdom, may solidify navigation through Erikson's final and socially contextualized stage of Ego-Integrity vs. Despair in a preparatory life-completion process. **CONCLUSIONS:** Dignity therapy is an example of a single one-hour session intervention that provides patients an opportunity to make meaning out of life and impending death, and to solidify a sense of integrity by using one's individual agency to create a legacy that bears one's addressees in mind, both family and health professionals. Future research must continue to examine the specific needs of dying elderly patients, with their unique developmental position in mind.

#### S1845-2

##### **Giving Voice and Choice to Children at the End of Life: An Exploration of Meaning and Legacy in Pediatric Palliative Care**

Regina Melchor-Beaupré

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**OBJECTIVES:** Findings from the American Psychological Association's task force on end-of-life issues indicate that meaning-making and legacy-play may be important coping strategies for dying children and adolescents. The purpose of this presentation is to explore, via Pediatric Oncology case studies/vignettes, the kaleidoscope of a-static developmental transitions within which children and adolescents journey. As with adults, these findings reflect that the need for meaning and legacy evolves both in uniquely and universally-shared ways across the lifespan. **METHOD:** This presentation will examine the continuum of meaning and legacy across child development at the end of life, utilizing an existential-developmental conceptual model. This framework will show how children struggling with cancer actually experience ever-changing perceptions of the same illness throughout their development and disease trajectory. It also reflects children's and adolescents' ever-transitioning voice and choice throughout the

end of life process, in light of cognitive-developmental processes as object permanence, magical thinking and omnipotent fantasy. **RESULTS:** Salient existential-developmental issues emerge in the lives of terminally ill children via: 1) illness progression, 2) family life events and dynamics, 3) the impact of the parental voice and choice, and 4) the unheard voices of children and adolescents confronting their last stage of life. This then provides clinical relevance for the exploration of meaning-making and legacy-play for terminally ill children-not only as creative coping strategies, but also for preparatory grief and life-completion work. **CONCLUSIONS:** By exploring existential-developmental issues across Pediatric Psycho-Oncology, we hope to promote standardized practices that will ultimately give voice to terminally-ill children and adolescents across their life-span and disease trajectory. Such expression will shed light on such essential existential-developmental needs as: 1) meaning-making, 2) authentic EoL voice and choice, 3) EoL continuity of self, autonomy and agency, and finally 4) the ability to create and leave behind a legacy that will ultimately live on beyond them.

#### S1845-3

##### **The Middle-Way: Traversing the Existential-Developmental Terrain of Adult Terminal Cancer via the Cultivation of Meaning & Legacy at the End of Life**

Shannon Poppito

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**OBJECTIVES:** The middle way between childhood and old-age traverses the vast terrain of adult life; carrying rich developmental potential and promise. For Erik Erikson, Early Adulthood holds the relational possibility for 'Intimacy' with its defining virtue of 'Love.' Middle Adulthood holds the creative potential for 'Generativity' with its authentic virtue of 'Care.' When adult cancer patients face the ominous threat of terminal illness and death, these developmental possibilities are called into question by ever-looming existential boundaries. **METHOD:** A clinical psychologist, with expertise in Existential Psychology and End of Life care, will lay the groundwork for interpreting existential issues from an adult developmental perspective in cancer care. Therapeutic case vignettes are presented from the psychologist's Meaning-Centered (Breitbart *et al.*) and Dignity-Conserving (Chochinov *et al.*) interventions with adult terminally ill cancer patients, highlighting specific Existential-Developmental themes across the adult lifespan. Exploration of meaning and legacy via life-review is shown to promote the life-completion

process. **RESULTS:** Existential-developmental dimensions of terminally-ill cancer patients are delineated across five domains: 1. Chronological Age, 2. Adult Developmental Milestones, 3. Life Events/Crisis Points (past & present), 4. Cancer Events/Crisis Points (past & present), and 5. Voice & Choice (patient & loved ones). Meaning-Centered and Dignity-Conserving therapy case vignettes highlight dimensions of existential absence (e.g. angst, isolation, guilt) and existential presence (e.g. existential care, joy, equanimity) by tracking meaning and legacy themes across these developmental domains. **CONCLUSIONS:** As adult terminally ill patients face the end of life, therapeutic care should purposefully reflect the appropriate age and developmental stage of the dying patient. Early adult developmental milestones differ in breadth and scope from middle to late adulthood. Meaning and legacy work must reflect the existential and developmental dimensions of each respective stage; allowing unmet dreams and possibilities (e.g. marriage, children, travel, career, grand-parenting) to be processed and mourned in a therapeutically preparatory life-completion fashion.

#### S1846

##### **Psychodynamic Approach of Different Stages of Cancer: From Diagnostic Disclosure to End of Life Acceptation**

**SYMPOSIUM DESCRIPTION:** France has now a longer experience in cancer breaking bad news. Special cancer disclosure protocol have been experimented and we'll present some principal results. What are the psychological factors that allow active decision making in patients ? On 50 patients interviews, we'll present why 18% refused the adjuvant chemotherapy after breast cancer surgery. As a counter-intuitive result, the patients with highest anxiety level accepted the chemotherapy when the refusal was coming from secured people. More the doctors were confident in treatment and more patients accepted it. We'll confront these results to international literature. The psychodynamic approach of death is based upon understanding unconscious caregivers desires for the patients. Nevertheless death is still a social taboo and even if it's seldom talked, patients accept to speak from death. But death can be talked only if subjectivity of patients is recognized. It is only in that case of fantasies acceptance that patients dynamic mental functioning may start again. We are studying now new types of blogs that are written after their illness by women with cancer. Although blogs written during illness were essentially centered on recovering from narcissism wounds, those blogs are aimed to the group, the

« clan ». As a new socialization way to cope with the paradoxical abandonnic feelings of recovery, women seem invested with a mission. They write that they need to share their experiences as a vital treatment of their misfortune community. Our approach is based on psychodynamic ethic, i.e. respect of subjectivity, acceptance of unconscious feelings behind obvious aspects of language, use of transference as a tool of psychotherapy. Our methods are essentially qualitative but are based on longitudinal studies. With this frame, we can generate new type of results especially those based upon unconscious representations and consequences of fantasmatic relations. This epistemology is specially adapted in archaic phenomenons as regression, death anxiety, fusionnal relations as they are typical in hospital wards with cancer threats.

#### S1846-1

##### **Adjuvant Chemotherapy in Breast Cancer. Do You Agree or Not? Patients Decision Making Factors**

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*Centre Oscar Lambret, Lille, France<sup>1</sup>, University of Strasbourg, Strasbourg, France<sup>2</sup>*

**OBJECTIVES:** To define the psychological factors involved in the active participation of the patient to its therapeutic protocol. To bring to light the variables allowing to know the level of patients participation about their therapeutic protocol. To adjust the patients medical information. To organize by communicational marks for physicians the psychological impact of the medical information. **METHOD:** A descriptive, longitudinal study. 50 breast cancer patients. After a curative surgical intervention adjuvant chemotherapy has been proposed to all patients. Two research times defined by stages of therapeutic protocol: the therapeutic protocol's announcement by oncologist and before the 1st cure of chemotherapy. Each of both groups is assessed in co-factors of decision-making: Patient's psychopathology (SCL-90R and HADS) and psychological strategies adopted by patients (DSQ-88). Non-verbal modalities of communication are studied in three physicians. **RESULTS:** 82% patients accepted the adjuvant chemotherapy 18% refused it. Assent to therapeutic protocol is determined by hostility, sensitivity, anxiety and depression psychopathological levels. More the anxiety level of announcement is high more patients have accepted treatment. Physician's confidence and treatment's obligation feeling carried weight on the patient agreement. Non-directive physician and chemotherapy's bad effects influenced on patient's refusal. No influence of non-verbal communication adopted by physician on patients decision-making. **CONCLUSIONS:** About 1/5 patients have refused adjuvant

chemotherapy. Personality, expectations and psychological strategies of the patient take part in the progress of the consultation and even her decision-making. Oncologist's communication is necessary to explain purpose of adjuvant treatment. This relation defined by real exchange can destabilize decision-making of patient. Stressful aspect of consultation has an impact on the physician-patient relationship and not the opposite. This may strengthen or inhibit implication of patient decision-making.

#### S1846-2

##### **Death: Psychodynamic Approach. Hope, Meaning and Revelation**

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**OBJECTIVES:** In psycho-oncology, death has a place at the first meetings. Nevertheless, the speech of caregivers states diagnosis, prognosis and support. They project their desires on the patient. Medicine, undefined third party, tries to interact for the patient and prevents him from autonomy. This quest to be human before being a patient requests an appropriation of the disease. The lack underlined by cancer requires a self-empowerment. **METHOD:** Psycho-oncologist in a medical oncology and palliative care wards, we postulate the hypothesis that the presence of death in the speech is not the main factor of distress and mental suffering. For this, we followed 90 patients for 5 sessions minimum. These interviews were first practice support and guidance. Our presentation is the process of action-research whose data were the subject of a discourse analysis on the basis of Freudian psycho-dynamic nosography. **RESULTS:** Death is little or seldom discussed during interviews. However without being explicitly named, we find a persistent infection in the speech of patients in both curative and palliative situation. The fear of death, so imaginative with its defence mechanisms, highlights its potential for psychological development and changes in internal position. The results show that death is not considered as dangerous in patient's-psycho-oncologist psychological interspace. **CONCLUSIONS:** Death remains a taboo as a social fact. Cancer remains a psychological fact inside illness trajectory. Talking about death is hard, but patients want to be able to say something about it. Representations of death are involved in perpetuating a subjectivity that avoids the inherent rational fears of death. Death takes place as a function to a psychological dynamism attending for life. A life that combines meaning, hope and often revelation.

#### S1846-3

##### **Announcement Plan in Oncology. Thoughts, Parallels and Questions about Diagnosis Consultations and Oncogenetic Consultations**

Eliane Marx  
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**OBJECTIVES:** The measure 40 of the Cancer Plan in France has, among others things, taken into account psychological consequences of several announcements for patient and family: first diagnosis, recurrence, change in treatment, transition from curative to palliative care. The setting up and the organization took in consideration different aspects. The experience of the oncogenetic consultation gave us opportunity to coordinate this recent project. **METHOD:** These considerations are proceeding on one hand from the analysis of the medical organization arising from health ministry law texts, and on the other hand from clinical approach based on psychodynamic interviews with patients and their family. **RESULTS:** In spite of institutional and organization difficulties, the assessment shows that patients and family appreciate time given by professionals engaged in the announcement of cancer and treatment, and during oncogenetic consultation about genetic predisposition risk. Patients estimate first explanations of the medical situation then answers to all their questions. **CONCLUSIONS:** We have to take into account the gap existing sometimes between the needs of patients and the requests of both the policies and the medical institution. These factors are determinant for the good resolution of this project.

#### S1846-4

##### **Blog Writing By Breast Cancer Patients. Group Psychotherapeutic Effects in Blog Writing/Reading**

Gilbert Gsell-Herold, Marie-Frédérique Bacqué  
*Université de Strasbourg, Strasbourg, France*

**OBJECTIVES:** Previous communications showed that specific way of women communication can be found in blogs. The temporality of these women described-within the illness- allows us to consider this way of writing as a barometer of their psychological state. Recently we discovered that some blogs were created in the 'after illness' (10%), spreading a testimony of hope and faith in healing. We confirm the hypothesis that it reinforces the narcissism and generates a 'group' effect. **METHOD:** We explored over Internet thirty blogs held by women suffering of breast cancer. We've made a thematic analysis with these blog contents. The recurring themes are those of femininity, seduction, issues of sexuality, fertility, problems affecting the

body, self-representation, trauma. It shows a search for meaning, faith, group effect (the clan) and hope. **RESULTS:** The essential new data of these blogs is temporality. They are written after the illness and not during it. There is a shift from individual to group, more space left to others. It is no more a matter of 'I' but of 'US', the clan. There is room for testimony of other patients, doctors, or summaries of books. There is obviously a switch-over from pure introspective narration to a sharing socializing experience. **CONCLUSIONS:** 'Doucediva' said at time of illness announcement that 'she was nothing anymore, neither male nor female'. After the disease and the removal of a breast she said she felt 'more feminine' through reconstruction surgery. For such women, sharing an experience is vital. They let their blog read on forums. Unlike the women who testified during the disease, they seek to make themselves known. The narcissistic enhancement goes through recognition by other readers.

#### S1847

##### **Improving the Quality of Psychosocial Care: Translating Knowledge into Practice to Transform Patient Experience of Cancer**

**SYMPOSIUM DESCRIPTION:** The focus of this symposium is to describe an integrated pan-Canadian approach to improving the quality of psychosocial care through translating knowledge into practice using a systematic and rigorous methodology and step wise approach. Specifically, we will demonstrate the application of adaptation methodology in the development of recommendations for psychosocial assessment and in the synthesis of knowledge embedded across national and international guidelines into user friendly evidence-based algorithms to facilitate effective action and consistency in point-of-care practice. We will challenge current assumptions that screening alone will improve patient outcomes and discuss the need for a theory-based approach in designing interventions/health system innovations to improve care processes and the need to specify causal links to patient outcomes. An emphasis on standardized assessment and a tiered approach to interventions at point-of-care will be discussed. A pan-Canadian partnership facilitated our approach and fostered initial uptake of this work. The symposium will present the findings of the synthesis work, guideline development processes including recommendations and the critical next steps needed to translate our guideline products into changed practice that could transform patient experience of cancer.

#### S1847-1

##### **Screening Is Not Enough: Theory-Based Practice Change Is Needed to Improve Patient Outcomes**

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**OBJECTIVES:** Screening for distress and the use of standardized patient-reported outcomes (PRO) as part of routine clinical practice are proposed as a means to identify unmet needs, facilitate patient-centered communication, and monitor response to treatment. This assumption was examined in a recent systematic review as part of a psychosocial assessment guideline development initiative. We conducted a systematic review to examine the effectiveness of routine psychosocial assessment on psychosocial and supportive care outcomes. **METHOD:** A search of databases: CINAHL, EMBASE, HealthSTAR, MEDLINE, PsycINFO, Cochrane Database of Systematic Reviews, DARE, HTA (Health Technology Assessments), and CCTR (Cochrane Central Register of Controlled Trials) was conducted. Search terms: cancer, neoplasm, psychosocial aspects of illness, psychosocial factors, psychosocial support, psychological stress, symptom distress, psychosocial care, distress syndrome, psychosocial readjustment, assessment and screening. Eligible studies reviewed independently were: adult, cancer, English, systematic reviews, randomized trials, and cohort comparison studies. **RESULTS:** The search yielded 421 references: eight studies met inclusion criteria. A descriptive synthesis was completed since study heterogeneity precluded meta-analysis. Our findings were consistent with the IOM that there is little high quality evidence of the impact of routine PRO screening on patient outcomes. However, computerized screening is highly acceptable to patients. **CONCLUSIONS:** Screening alone does

not automatically lead to improved outcomes unless followed by assessment and targeted interventions to address multi-causal determinants of distress. A theory-driven approach to practice change interventions is needed with explicit causal relationships specified between assessment, care processes and outcomes.

#### S1847-2

##### **Moving Beyond Screening to Evidence-Based Psychosocial Clinical Practice**

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**OBJECTIVES:** Studies report that the cancer system is falling short in addressing distress and supportive care needs. This failure contributes to physical and psychological morbidity, poor quality of life, and disability. Screening for distress is proposed as a solution but in itself will unlikely translate directly into improved quality of psychosocial care or patient outcomes without equal attention to the use of evidence-based psychosocial assessment and interventions in routine clinical practice. **METHOD:** The selection of appropriate interventions can be leveraged through uptake of evidence-based guidelines. Unfortunately, guidelines are viewed as complex to implement and rarely used to guide clinical practice and require adaptation to be relevant to the local health care environment. We used an Adaptation methodology (ADAPTE Collaboration, 2007) to synthesize guidelines into assessment and intervention algo-

gorithms and care pathways to ensure that multi-causal determinants of distress are addressed in routine clinical practice. **RESULTS:** As part of cancer control, we are working across provincial and territorial boundaries in a national pan-Canadian partnership to foster uptake of evidence-based psychosocial care by translating knowledge embedded in guidelines into actionable pan-Canadian guides to practice for local uptake. These knowledge products have the potential to improve the quality of psychosocial care as part of national implementation of distress screening as the 6th vital sign. **CONCLUSIONS:** A comprehensive understanding of patient-specific psychosocial health care needs is an essential precursor to appropriate interventions and for facilitating access to relevant psychosocial services.

#### S1847-3

##### **Clinical Practice Guidelines for Psychosocial Oncology: How Did We Do It?**

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**OBJECTIVES:** This presentation will provide a brief history of key developmental elements leading to the successful formation of the Canadian Partnership Against Cancer (the Partnership)-Canadian Association of Psychosocial Oncology (CAPO) clinical practice guideline expert panel. **METHOD:** Based on primary documents from the time period, the presentation provides a brief history of key developmental elements leading to the formation of the Partnership-CAPO expert panel, focusing on the collaborative process initiated by CAPO and BC Cancer Agency in 2002. Major partnering organizations contributions will be highlighted and the 12 recommendations for

psychosocial health care needs assessment for adults, will be introduced. The emerging role of the CAPO as the guideline 'custodian' is described. **RESULTS:** The partnering organizations were able to join together in a common purpose and collaborative effort to produce the first pan-Canadian clinical practice guideline for psychosocial care of adults. The role of CAPO as the 'custodian' of the guideline is beginning to emerge, along with opportunities for knowledge translation research and clinician involvement in dissemination and implementation. **CONCLUSIONS:** The development of clinical practice guidelines is a complex and resource-intensive endeavour. The development of clinical practice guidelines for psychosocial care poses some unique challenges. Despite these challenges, a national, interdisciplinary, multi-stakeholder expert panel was successfully formed, and completed its mandate to produce the first pan-Canadian clinical practice guideline for psychosocial care of adults. This work has generated national and international interest in both the process and end result of the endeavor.

#### S1847-4

##### **Use of Adaptation Methodology to Develop a Psychosocial Assessment Guideline**

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**OBJECTIVES:** The purpose of this abstract is to provide an overview of the use of Adaptation methodology in the development of a clinical practice guideline for psychosocial assessment in adult cancer patients. As noted in the Institute of Medicine (2008) report on improving the care of the 'whole person' experiencing cancer, careful assessment and ongoing re-assessment of needs is considered central to the whole process of care provision and appropriate service allocation.

**METHOD:** We combined Adaptation methodology used to develop clinical practice guidelines contextualized to the local environment combined with traditional de novo guideline development processes and expert panel consensus to develop substantive recommendations for 'whole person' psychosocial needs assessment. Thus, we also searched traditional databases to identify empirical evidence to support development of the recommendations and tools that could support the assessment. **RESULTS:** Following an extensive search for evidence-based guidelines and empirical evidence in traditional data bases, twelve substantive recommendations were endorsed by the inter-professional expert panel for psychosocial health care needs assessment. These recommendations built on an a priori endorsed supportive care conceptual framework and assessment categories including screening, comprehensive and focused approaches. **CONCLUSIONS:** The implementation and uptake of evidence-based practice can be facilitated through the use of clinical practice guidelines that have been contextualized to the local health care setting. Use of this developed guideline has the potential to improve clinical decision making in the selection of effective interventions, appropriate referral to psychosocial resources and overall quality of life.

#### S1861

##### **Addressing Nurses' Knowledge And Skill Needs In Providing Emotional Care To Patients: Experiences Through An Innovative Provincial-Based Program**

**SYMPOSIUM DESCRIPTION:** Cancer and its treatment has significant impacts on the quality of life of patients and their families. A significant portion of patients experience distress and most patients will benefit through the integration of emotional care throughout their care experience. Nurses play an important role in providing this care and in facilitating appropriate referrals where further expertise or assessment is needed. However, evidence suggests despite a strong desire to integrate this aspect of care into their practice, nurses lack confidence and skill in assessing and managing the complex communication and adjustment issues experienced by patients and their families. Furthermore, although there is some awareness of assessment tools or methods, most nurses do not utilize them or feel uncertain as to how to make referrals with the exception of cases of extreme distress. **Purpose:** This symposium will provide an overview of a publically funded provincial approach to provide continuing educational courses and as well as at graduate level to nurses at any point along the cancer continuum to assist them to feel more confident and skilled in assessment and provision of emotional care to patients and their families. Learning models

include train the trainer programs, elearning modes as well as clinical mentorship. Qualitative and quantitative findings from train the trainer programs and elearning approaches will be presented with a discussion on the implications of the program.

#### S1861-1

##### **Addressing Psychosocial Needs In Cancer Care - A Train The Trainer Workshop For Oncology Nurses**

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**OBJECTIVES:** Being diagnosed with cancer can have significant emotional impacts for the individual and his/her family. As direct health care providers, many oncology nurses reported that they lack the training and tools to manage psychosocial issues. To address this service gap, Our Institute offered an annual province wide psychosocial train the trainer workshop for nurses. Participants learn fundamental psychosocial assessment and management skills and bring back the knowledge to staff in their own organization. **METHOD:** A one-day workshop was offered in 2009 and a second one was scheduled for March 2010 for front-line nurses across one province in Canada. The workshop covers impact of cancer on psychosocial, spiritual and quality of life; assessment tools to determine how to intervene and when a referral is required; methods to address psychosocial issues in oncology and palliative care and the nurse's role in managing the emotional aspects of cancer care. **RESULTS:** Seventy nurses participated in the 2009 training and another 70 are expected in 2010. Demographics from both cohorts will be presented and changes in their perceived knowledge and competencies in psychosocial aspects of cancer care will be reported. A six month follow up was carried out with the first cohort on their knowledge translation activities. Some participants benefited tremendously from such training and delivered a variety of local tailored teaching while others reported implementation barriers. **CONCLUSIONS:** This evaluation will explore train the trainer workshop as an effective teaching method to build capacity over a short period across a large geographic area. Workshop recipients received ongoing coaching from experts at our Institute and had access to all tools and materials in psychosocial care best practices. Factors impacting success or failure in knowledge translation activities, the role of nurse champions and creative local tailored programs will be shared at the conference.

#### S1861-2

##### **Interprofessional Psychosocial Oncology Education for Nurses: Outcomes from the IPODE Project**

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**OBJECTIVES:** Satisfaction surveys of people affected by cancer have consistently shown low levels of satisfaction with how psychosocial distress is addressed by health professionals. One factor that appears to contribute to this finding is a lack of readily accessible psychosocial oncology education for nurses and other health professionals. In response to this need, the Canadian Association of Psychosocial Oncology launched the Interprofessional Psychosocial Oncology Distance Education (IPODE) project to address this gap. **METHOD:** The IPODE project is in its third year of course offerings with close to 250 learners to date. Uptake has been excellent, with high levels of satisfaction with the course reported. About 60% of the participants are nurses. Evaluation of the course includes a T1 (pre-course) & T2 (post-course) survey designed to assess knowledge and attitudes about interprofessional psychosocial oncology practice, and a T3 questionnaire designed to assess changes in practice. **RESULTS:** Findings from nurse participants suggest that they find the courses particularly helpful in enhancing knowledge of psychosocial concerns and interprofessional skill. A variety of specific changes in practice are reported as a result of the course, including shifts in communication with other disciplines, increased skill in assessing such concerns as depression and anxiety and enhanced reflective practice. **CONCLUSIONS:** Provision of distance education using a web-based format is an effective approach for the delivery of interprofessional psychosocial oncology education. Nurses identify significant benefits from the inclusion of other disciplines such as social workers, spiritual care providers and psychologists in the learner groups.

#### S1861-3

##### **Providing Psychosocial Training for Inpatient Head and Neck Cancer Surgery Nurses - A Knowledge Translation Initiative**

Ashleigh Pugh, Susan Clarke, Jiahui Wong, Mary Jane Esplen

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**OBJECTIVES:** Following a provincial Psychosocial Train the Trainer Workshop, a two-day training session was offered for nurses in a surgical oncology unit. Patients in this unit often go through disfiguring head and neck surgical procedures which significantly

alter their body image and often affect and their ability to communicate with others. Surgical oncology nurses identified urgent needs for psychosocial training, to provide them knowledge and tools to better support their patients in hospital and post discharge. **METHOD:** Day 1 of the two-day training session covered psychosocial distress in cancer, commonly used psychosocial assessment tools and the application of the tools tailored to the head and neck cancer patient population. In day 2, standardized patient was used to provide nurses with a scenario of how psychosocial distress can manifest in 'real life situation'. Nurses were encouraged to apply their learned knowledge and skills and consolidate their learning through hands on experiences. **RESULTS:** Twenty two nurses participated in the January training session and another twenty nurses will receive training in February. Demographics included educational background, years of nursing, oncology experience, and the perceived confidence in identifying and addressing psychosocial distress. Initial response from the first 22 nurses indicated a low perceived confidence in psychosocial aspects of cancer care. They had an average of 9 years of nursing experience. Changes in confidence post intervention will be reported. **CONCLUSIONS:** This evaluation will demonstrate the needs and clinical utility of the psychosocial training to build essential clinical skills in assessment and intervention for inpatient surgical oncology nurses. By identifying psychosocial distress early on, nurses can support patients physically and emotionally through the difficult cancer journeys. It also helps to empower nurses as they strive to provide high quality and patient centered care in one of the most challenging fields of medical care - Oncology.

## S1910

### **International Models of Collaboration: Research, Training and Practice in Professionally-led Online support groups**

**SYMPOSIUM DESCRIPTION:** note: co-chair is Dr Mitch Golant, Cancer Support Community, Los Angeles, California, United States. The U.S. based Cancer Support Community (CSC) began conducting and researching professionally-facilitated, real-time (ie. chat) online support groups for cancer patients and family caregivers in 1998. Early evaluation indicated that the modality was efficacious and yielded similar benefits as face-to-face support groups. A training model was developed, and CSC clinical staff described developing 'work arounds' that enabled them to facilitate high quality emotional support in text-only groups. Online support groups were identified in Canada as a promising approach to increase access of psychosocial care to hard-to-reach populations. In 2006, following workshops and discussion with CSC, a pan-Canadian group of Psychosocial Oncology

program leaders and clinician-researchers decided to pilot the CSC approach in Canada, and to assess the feasibility and potential of the model within the Canadian context. Over the next few years, 14 Canadian clinicians associated with a Cancer Journey Action Group/ Canadian Partnership Against Cancer initiative were trained with the Cancer Support Community. Technology, ethical, jurisdictional and organizational challenges to hosting professionally-led online groups were resolved. Two randomized pilot studies with young and rural breast cancer survivors were successfully initiated. A host of pilot groups with diverse cancer populations (including prostate, advanced and metastatic, and head and neck cancers, and family caregivers) and models of support (supportive expressive and psychoeducation) were conducted in Provinces across Canada. This symposium brings together members of this international collaboration, who share their knowledge in the education, clinical practice and research of OSG's. The collaboration has to date served hundreds of cancer patients and their family members in the U.S and Canada. It has yielded a robust International Training model and community of practice and quantitative and qualitative research findings addressing questions of feasibility, and therapeutic process and outcomes. A Facilitators Training Manual that details the essential skills for facilitating synchronous online support groups has been developed, and is described in the symposium. The experience of becoming competent and leading online support groups is detailed by Canadian facilitators trained in the CSC model. Key research findings extracted from over 24 OSG's are presented, which illuminate processes and benefits experienced by participants, and challenges that remain. The conclusion of this collaborative effort is that professionally-led OSG's are an unexpectedly dynamic, emotionally rich and powerful modality. This symposium is essential for program leaders, clinicians and researchers who are interested in expanding the reach of psychosocial oncology by harnessing the internet for group support.

## S1910-1

### **Professionally-led Online Support Groups for Cancer Patients and Caregivers: Emerging Results from A Pan-Canadian Research Initiative**

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**OBJECTIVES:** Online support groups (OSG's) were identified as a promising option for national program delivery by a Pan-Canadian initiative (Rebalance

Focus/Cancer Journey Action Group). A subgroup of program leaders and clinician-researchers located at large cancer centers across Canada identified 3 key questions to direct a program of research: Are national, professionally-led OSG's feasible? Are OSG's acceptable and satisfying to participants? Do therapeutically-meaningful processes and outcomes occur in, and result from, OSG's? **METHOD:** A mixed methods approach was identified. Two randomized pilot studies (for young and rural breast cancer survivors), and individual demonstration groups (for diverse cancer sites and caregivers) were held across Canada in 2008–2010. Psychometric assessments were conducted at pre, post and 3 month follow up with web-based tools in the 2 trials. Semi-structured telephone interviews were conducted among a convenience sample across all OSG's to understand participant experience. Descriptive quantitative and qualitative analyses were performed. **RESULTS:** 179 patients enrolled in 24 online support groups. Attendance and drop out rates are comparable to conventional groups. Fifty interviews were held. Qualitative analyses suggest that 1) technology-enhanced emotional expression; 2) professional facilitation, and 3) group cohesion were associated with high satisfaction and positive outcomes including distress reduction, reduced sense of aloneness, and improved self-care. Preliminary quantitative analyses suggested that emotional processing and expression mediated reduced illness intrusiveness among young breast cancer survivors. **CONCLUSIONS:** OSG's are not uniformly helpful, and there are remaining questions related to feasibility and suitability that remain to be answered. Overall however, professionally-led online support groups are acceptable and satisfying for large numbers of cancer patients, survivors and family caregivers. Anonymity and privacy related to technology are more helpful than hindering. Therapeutically meaningful processes can be engaged in professionally-led OSG's, and yield outcomes that are comparable to those found in high quality f2f support groups.

#### S1910-2

##### **Facilitating Online Support Groups: A Training Manual**

Joanne Buzaglo<sup>1</sup>, Mitch Golant<sup>1</sup>, Mort Leiberman<sup>5</sup>, Jason Owen<sup>2</sup>, Joanne Stephen<sup>3</sup>, Anne Gessert<sup>1</sup>, Stephen Lepore<sup>4</sup>, Erica Weiss<sup>1</sup>  
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**OBJECTIVES:** While online support groups (OSGs) for cancer patients and families have been

in existence for over 10 years, the lack of published guidelines has inhibited the growth and quality of facilitated OSGs. OSG facilitators, typically trained in face-to-face models, report role uncertainty and confusion when leading groups online. Based on pioneering research and on going work in OSGs, the Cancer Support Community developed an evidence-based manual to train professionals and enhance quality of OSG facilitation. **METHOD:** In March 2009, the Cancer Support Community (CSC) hosted a 2-day retreat with OSG facilitators from CSC and a Canadian Partnership Against Cancer (CPAC) initiative to identify challenges and highlight best practices based on 11 years of OSG facilitation and 27 years in the CSC Patient-Active model. Researchers presented theory and evidence on the mechanisms of successful professionally led OSGs. CSC generated a training manual with input and feedback from the Retreat participants. **RESULTS:** The OSG Facilitation Training Manual is a comprehensive document designed to complement professional training in OSG facilitation. It is divided into 7 sections including CSC's Patient Active framework, Background and Benefits of OSGs, the Facilitator's Role, Practical Guidance and Supervision, Helpful Phrases and Transitions. Featured in the Appendices is the example of the Canadian application of CSC OSG facilitation training. Tips on best practices are embedded with examples from transcripts to illustrate key points. **CONCLUSIONS:** The creation of this evidence-based OSG Facilitation Manual represents a significant contribution to psycho-oncology by providing guidelines for the practice of OSGs that otherwise do not exist. The manual reflects the international collaboration between CSC and CPAC, and speaks to the opportunity for wide spread dissemination. The ultimate goal is to provide accessible, high quality professional psychosocial support for cancer patients and families through state-of-the-art training in OSG facilitation.

#### S1910-3

##### **Making the Virtual a Reality: The Clinician's Experience in Facilitating Online Support Groups**

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**OBJECTIVES:** As use of internet technologies become more common, so may the demand for professionally-facilitated online support groups (OSGs). To offer effective online support

psychosocial-oncology professionals need to become skilled in, and comfortable with, using this medium to communicate therapeutically and facilitate healthy group dynamics. Knowledge of training in this medium and ongoing supervision recommended, types of online services for varying client needs, and understanding of therapeutic group processes possible, are required. **METHOD:** This presentation is based on the lived experience of clinicians facilitating OSGs (Canada, UK) and providing supervision (US, Canada). Groups consist of patients or caregivers, and are ongoing, focusing on support; or psycho-educational and time-limited. During real time text-based sessions, facilitators use counselling skills to enhance group experience. Facilitators receive training by clinicians who work extensively online, remaining engaged in ongoing consultation and supervision to nurture and reinforce facilitation skill development and discuss online issues. **RESULTS:** Observations on 'goodness of fit' between this medium, types of OSGs, and population are explored. Clinical and group facilitation skills, supervision experience, and therapeutic factors possible online are highlighted. Special emphasis will be placed on how facilitators can use the online medium to address sensitive issues with both caregiver and patient populations, and demonstrate how meaningful, deeply supportive exchanges can happen online. Group participant feedback will also be highlighted. **CONCLUSIONS:** Perceptions from learning the technology and gaining competence through training, supervision and consultation, and experience are reviewed. Information is shared with clinicians and researchers interested in the use of internet technologies for providing psychosocial support to a range of cancer patient and caregiver populations.

### S1916

#### **A Presidential Symposium on Psycho-oncology and Palliative Care as a Human Rights Issue**

**SYMPOSIUM DESCRIPTION:** In 2008, the International Psycho-oncology Society (IPOS) joined major international palliative care and cancer care organizations to support a Joint Declaration and Statement of Commitment calling for the recognition of Palliative Care and Pain Treatment as Human Rights. IPOS has been at the forefront of expanding this declaration to specifically include psycho-oncology (i.e. psychosocial, existential and spiritual care of cancer patients) as a Human Right. IPOS has created a 'Human Rights Task Force', and the First Presidential Symposium on Palliative Care and Psycho-oncology was presented at the 11th World Congress in Vienna in 2009. As President of IPOS, I am now proposing

the second such Presidential Symposium on Psycho-oncology and Palliative Care as a Human Rights Issue. This symposium is supported in part by the Soros Foundation's Open Society Institute which has been a major advocate in promoting pain and palliative care as a Human Rights issue. This symposium brings together a group of international experts in the Human Rights aspects of Psycho-oncology and Palliative Care. The speakers and the topics they will cover include: 1) Luigi Grassi MD, President of the IPOS Federation of Psycho-Oncology Societies and Chair, Department of Psychiatry, University of Ferrara, Italy, will give a presentation entitled: Psycho-Oncology and Palliative Care as a Human Right: an International Perspective.; 2) Luzia Travado PhD, IPOS Board of Directors, Advisor to the National Coordinator of Oncological Diseases for the President of the European Union Parliament for the areas of psycho-oncology, palliative care and international relations, and contributor to the EU Parliament report on Palliative Care, Lisbon, Portugal, will give a presentation entitled: Palliative Care in the European Union: Psycho-oncology and Palliative Care as Human Rights.; 3) Lea Baider, PhD, Former President of IPOS and Director, Psycho-Oncology Unit, Hadassah University Hospital, Jerusalem, Israel, will give a presentation entitled: Psycho-oncology and Palliative care in the Middle East: a Human Rights Issue; 4) David Morrison, PhD, FRSA, Prince Edward Island Cancer Treatment Center, Member of CAPO and IPOS, Former Senior Advisor to the Canadian Government External Affairs Department, Human Rights Division, will give a presentation entitled: Protection and Promotion of Human Rights and Dignity: an IPOS Responsibility; 5) Diederik Lohman MA, Senior Researcher, Human Rights Watch, Health and Human Rights Program, New York, USA. Will give a presentation entitled What IPOS and Psycho-oncology can do next: Lessons learned from the Pain and Palliative Care Experience.

### S1916-1

#### **What IPOS and Psycho-oncology Can Do Next: Lessons Learned from the Pain and Palliative Care Experience**

Diederik Lohman

*Human Rights Watch, New York, New York, United States*

**OBJECTIVES:** The campaign by pain, palliative care and human rights advocates to frame access to pain treatment and palliative care as an issue of patient rights and government obligations holds important lessons for IPOS and Psycho-oncology. The campaign has helped articulate more clearly the responsibilities of governments in ensuring that

patients have access to appropriate health services, which has enabled patients, providers and others to advocate more effectively for much-needed government action. **METHOD:** In recent years, pain, palliative care and human rights advocates have joined forces to develop a human rights approach to pain treatment and palliative care. After identifying specific obligations of governments in improving availability of these health services and mapping common barriers, they have begun advocacy campaigns in international forums, like the Commission on Narcotic Drugs, with the UN human rights agencies, as well as in individual countries, pressing for steps to overcome barriers. **RESULTS:** This advocacy has resulted in, among others, the Commission on Narcotic Drugs recognizing that ensuring adequate availability of medical opioids is a key challenge, and the UN Special Rapporteur on Torture recognizing that denial of pain treatment when pain is severe can constitute cruel, inhuman and degrading treatment. In country settings, advocates are using the human rights framework to encourage their governments to address specific barriers, like unnecessarily strict drug regulations. **CONCLUSIONS:** The human rights framework provides opportunities to IPOS and advocates for psycho-oncology to encourage the international community and individual governments to take steps to overcome various barriers that exist to better availability of psycho-oncology, including failings in government policy and inadequate training for healthcare workers. In particular, joint advocacy at the World Health Assembly with pain, palliative care and human rights advocates promoting a full range of palliative care services, including psycho-oncology, holds promise.

#### S1916-2

##### **Psycho-oncology and Palliative Care in the Middle East: A Human Rights Issue**

Lea Baider

*Hadassah University Hospital, Jerusalem, Israel*

**OBJECTIVES:** To appraise the attitude towards health and illness within the basic cultural and religious norms of the Muslim society, and highlight this as a Human Rights issue. In particular, spiritual care will be examined as an integral component of comprehensive cancer care for prevention, education and treatment of Muslim women in the Middle East. **METHOD:** It is estimated that there are 1.5 to 1.7 billion Muslims worldwide, with 15 million (3% of the population) Muslims living in Europe and 0.08% living in the United States. Muslim men and women are thrust into different social positions and family roles reconciled with their religious and cultural norms. **RESULTS:** Muslim women, in particular, are at a

disadvantage socially, economically and educationally due to restrictions placed on them by the practices and laws of Islam. The highest value for women is the role they play as wife and mother, with clear expectations to put family responsibility before any other external demand or personal desire/goal. Muslim women suffer from poorer health than the general population in Europe, and this disparity is an important Human Rights issue. **CONCLUSIONS:** It should be understood that, within Muslim social and familial contexts, women are considered inferior family members. This mindset contributes to their low self-image and negative emotional perception of healthcare and illness. It should also be understood that the degree to which Muslim beliefs and norms restrict women, affects their decisions regarding compliance with Western healthcare practices, recommendations for cancer screening and cancer prevention. This constitutes a Human Rights crisis.

#### S1916-3

##### **The Protection and Promotion of Human Rights and Dignity for Cancer Patients: An IPOS Responsibility**

David Morrison

*Prince Edward Island Cancer Treatment Center, Prince Edward Island, Canada*

**OBJECTIVES:** Healthcare is a fundamental issue of human rights. Psychosocial oncology's stated aim is that cancer patients and families receive optimal psychosocial care at all stages of disease and survivorship. Cancer care is now moving toward greater protection and promotion of human rights and dignity. Following the initiative of IPOS, we consider how to protect and promote the rights and dignity of patients and families in all aspects of cancer support, treatment and planning. **METHOD:** In this new initiative, international palliative care leads the way; psychosocial associations and cancer societies become partners; the World Cancer Declaration can be framed in human rights terms; collaboration ensures the recognition of our own evidenced based practice. **RESULTS:** In this new initiative, international palliative care leads the way; psychosocial associations and cancer societies become partners; the World Cancer Declaration can be framed in human rights terms; collaboration ensures the recognition of our own evidenced based practice. **CONCLUSIONS:** Psychosocial treatment should no longer be left to the whim of cancer program managers. We can never forget that supportive care, palliative care and appropriate pain control are not offered as extras in treatment, but are a patient's right. Reframing what we do, in terms of dignity and rights, deepens our scope of practice, and presents psychosocial oncology practice as more than an 'option,' but as a necessity.

**S1916-4****Psycho-Oncology and Palliative Care as a Human Right: An International Perspective**

Luigi Grassi

*University of Ferrara, Ferrara, Italy*

**OBJECTIVES:** The history of human rights dates back to centuries. Seneca said that We are the parts of one great body. Nature bids us extend our hands to all in need of help. The United Nations Universal Declaration of Human Rights (Article 1, 1948) states that All human beings are born free and equal in dignity and rights. They are endowed with reason and conscience and should act towards one another in a spirit of brotherhood. **METHOD:** The UICC promoted a declaration centered on health policy, prevention, early detection, and the right to proper cancer treatment, however the psychosocial burden of cancer is not stressed. Data have repeatedly demonstrated negative psychosocial consequences of cancer, leading organizations, such as IPOS, to stress that all cancer patients and their families worldwide should receive psychosocial care at all stages of disease and survivorship. **RESULTS:** Thus, emotional pain, spiritual pain, hopelessness, distress and demoralization, just to cite only some, should be the target of a general and global approach to cancer patients. On these premises, it is necessary to change the partial view of cancer and to affirm the right to mental health which extends not only to timely and appropriate health care but to the underlying determinants of health, including availability, accessibility, acceptability and quality. **CONCLUSIONS:** Therefore, 1) psychosocial care and psychosocial treatment are components that contribute to the full exercise of the right to health; 2) access to psychosocial care includes access to appropriate treatment and services needed for the relief of suffering; 3) national cancer plans should require a focus on education for physicians, nurses and other related disciplines about the basic principles of psychosocial care.

**S1916-5****Palliative Care in the European Union: Psycho-oncology and Palliative Care as Human Rights**

Luzia Travado

*Central Lisbon Hospital Centre - Hospital S. José, Lisbon, Portugal*

**OBJECTIVES:** In February 2000, more than 100 international leaders of government, patient advocacy leaders, cancer research organizations and corporations met in Paris at the first World Summit Against Cancer. Participants reaffirmed their commitment to global eradication of cancer by signing The Charter of Paris. In 2005 the

European Cancer Patients Coalition lobbying with Members of European Parliament Against Cancer signed the Warsaw Declaration to call on policy makers to promote cancer as an EU priority. **METHOD:** In 2007 the Portuguese EU Presidency followed by efforts in 2008 brought cancer into the EU health agenda. A set of recommendations to improve cancer control and care in the EU were signed by 27 Member-States (MS). This document recognizes the important role of psychosocial and palliative care: 'cancer treatment and care is multidisciplinary, involving the cooperation of oncological surgery,(...)as well as psychosocial support and rehabilitation and when cancer is not treatable, palliative care'. **RESULTS:** These recommendations will improve these areas in EU. In 2009 the European Commission launched the European Partnership for Action Against Cancer to support MS and stakeholders in their efforts to tackle cancer more efficiently by providing a framework for identifying and sharing information, capacity and expertise in cancer prevention and control. A Joint Action (JA) was submitted to EC targeting four areas. Psychosocial and palliative care are included in promotion of good practice in cancer care. **CONCLUSIONS:** JA will start late 2010. IPOS is leading the action: Integrated and holistic models of care (psychosocial dimension, rehabilitation and long term support for people living with cancer). The objective is to assess and provide training in communications skills and psychosocial care in under-served countries or regions. We expect this action will contribute to improve better cancer care and reduce inequalities in accessing psychosocial care for European citizens, therefore recognizing psycho-oncology as a human right.

**S1918****Screening for Distress, the 6th Vital Sign: Results of 2 Longitudinal Studies**

**SYMPOSIUM DESCRIPTION:** It is well established that 35–45% of cancer patients experience high levels of distress throughout the disease trajectory. In response to this, Screening for Distress has emerged as a way to identify and address patients' needs at the earliest point in time. As a clinical practice Screening for Distress is becoming more common; however, much of the data that exists is cross-sectional. This symposium will discuss the results of two large longitudinal studies on screening for distress. The first study assessed usual care and screened patients at 4 time points over the course of a year without any intervention offered specific to identified distress. The second study also followed patients over a year but examined 2 triage models: personalized triage

with an individual phone call and computerized triage which provided referral information based on identified needs. Patterns of distress and concerns over time, the impact of triage on longitudinal distress, and the role of ethnicity in distress will be discussed in each of the three talks. **ACKNOWLEDGEMENT OF FUNDING:** The Alberta Cancer Board Research Initiative Program & The Alberta Heritage Foundation for Medical Research.

#### S1918-1

##### **Evaluation of Distress and Common Problems in a General Population of Cancer Patients at Diagnosis, 3, 6, and 12 Months: Does Distress Change Over Time Without Triage?**

Dr. Janine Giese-Davis<sup>1</sup>, Linda Carlson<sup>1</sup>, Shannon Groff<sup>2</sup>, Barry Bultz<sup>1</sup>

*Tom Baker Cancer Centre and the University of Calgary, Calgary, Alberta, Canada<sup>1</sup>, Tom Baker Cancer Centre, Calgary, Alberta, Canada<sup>2</sup>*

**OBJECTIVES:** This Screening for Distress study examined the typical trajectory of distress over time in a general sample of cancer patients. Patients were approached at the time of first-time cancer visits and asked to fill out paper screening instruments. Compared with other randomized screening studies in our group, this study was meant to examine what happens without active triage or provision of information on available resources. **METHOD:** A general group of patients were screened with the DT, Fatigue and Pain Thermometers, Common Problems Checklist and PSSCAN Part-C for anxiety and depression at baseline, 3, 6 and 12 months follow-up using paper-and-pencil surveys with telephone follow-up. Out of 1839 patients approached, 1328 consented to screening. The most common type of cancer was GI (23.3%) followed by prostate (17.8%) and gynecologic (10.1%). 53.9% of patients screened were male and average age was 59.65 years. **RESULTS:** The most common problems identified at baseline were worry about friends and family (41.5%), sleep difficulties (33.2%) and burden to others (29.0%). Mean DT levels were 3.90, fatigue was 3.49 and pain 2.11 (of 10). 48.0% of all patients were positive for DT caseness ( $\geq 4$ ) but 15.1% were above the cut point for depression. Slopes analyses found that depression, anxiety, and total psychosocial and practical problems (but not fatigue or pain) decreased significantly over time. **CONCLUSIONS:** In this general cancer group where males outnumbered females, similar levels of distress, fatigue, and pain were reported as other samples where females outnumbered males. Similar percentages of com-

mon problems were also reported. Distress, but not fatigue or pain, decreased significantly over time. This suggests that time alone will not resolve these two common symptoms in a general cancer population.

#### S1918-2

##### **Effect of Online Screening for Distress in Newly Diagnosed Cancer Patients Followed by Computerized versus Personalized Triage at 3, 6 and 12 Month Follow-up: A Randomized Controlled Trial**

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*Tom Baker Cancer Centre and the University of Calgary, Calgary, Alberta, Canada<sup>1</sup>, Tom Baker Cancer Centre, Calgary, Alberta, Canada<sup>2</sup>*

**OBJECTIVES:** Screening for distress has been recommended for all newly diagnosed cancer patients; however this rarely happens and when it does evaluation of the long-term efficacy of screening has not been conducted. This study used a randomized controlled design to compare routine online screening for distress and common problems on subsequent distress and resource utilization in two conditions: screening followed by personalized phone triage and screening followed by personalized computerized triage. **METHOD:** Patients were screened with the DT, Fatigue and Pain Thermometers, Common Problems Checklist and PSSCAN Part-C for anxiety and depression at baseline, 3, 6 and 12 months follow-up using computerized touch screens. 1150 patients were assigned to computerized triage and 1244 to personalized triage. The most common type of cancer was breast (32.6%) followed by GI (13.2%) and lung (11.8%). Sixty-one percent of patients screened were female and average age was 58 years. **RESULTS:** The most common problems identified at baseline were worry about friends and family (44.9%), sleep difficulties (43.9%) and burden to others (31.9%). Mean DT levels were 4.23, fatigue was 3.75 and pain 2.34 (of 10). 64.3% of all patients were positive for DT caseness ( $\geq 4$ ). Slopes analyses found that compared to computerized triage, those who received personalized triage improved more over 12 months on measures of pain, fatigue and total psychological problems. **CONCLUSIONS:** Although distress decreased over time for both groups, personalized triage seemed to have more benefit than computerized triage for decreasing pain, fatigue and total psychological problems such as coping and worry about friends and family. However, both groups saw similar decreases over time in overall distress, anxiety and depression. Further analyses will investigate the role of referral to and uptake of resources between groups.

## S1918-3

**Asking the Right Questions: Identifying Diversity and Disparity of Outcomes by Patient Ethnicity within a Randomized Controlled Trial of Screening for Distress**

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**OBJECTIVES:** In the 2006 Canadian census, four in 10 (42.9%) residents reported their origin as 'Canadian' in combination with other origins. Yet unlike the United States, Canadian cancer registries do not record patient ethnicity; therefore, ethnic disparities in cancer care cannot currently be determined. Classifying patient ethnicity in Canada's mosaic is also complex and hence categorization for meaningful comparison is difficult. However, not asking the question does not imply an absence of the problem. **METHOD:** A stratified random sample of patients in the Screening for Distress computerized vs. personalized triage RCT was collated for this study. Cancer patients were classified into 4 groups based on physical appearance (looks White/looks Non-White) cross tabulated by Language (English Only/English Not First Language). The sample was further interviewed on their ethno-cultural heritage. This data was analyzed with the Screening for Distress RCT data - baseline, 3, 6 and 12 months follow-up. **RESULTS:** 683 patients from the Screening study were assigned by stratified-random selection to the study - 1. White English-only speakers <40%; 2. Non-White English-only speakers <16%; 3. White non-native English speakers <27%; 4. non-White non-native English speakers <18%. On the symptom burden scores, patients from Group 1 fared better compared to the three other groups. Patients from Groups 2 and 3 improved with time. However, visible minorities irrespective of English skills (Group 4), fared poorly over time. **CONCLUSIONS:** Although longitudinally distress decreased in 3 of 4 groups, the classic minority patients in group 4 (irrespective of English proficiency) indicated growing distress. This implies that the pathways multicultural patients take in their cancer journey are dissimilar, and the services/resources offered to them may need to be sensitive, targeted, adapted and adjusted to these groups. Further analyses will investigate the role of patient ethnicity on cancer-related concerns, adherence to referrals and uptake of existing resources.

## S1919

**Screening for Distress, the 6th Vital Sign: The Implementation Experience of 4 Canadian Jurisdictions**

**SYMPOSIUM DESCRIPTION:** Canada has embarked on implementing a national strategy

for cancer control and funding has been made available for 5 years to implement the Canadian Strategy on Cancer Control (CSCC) through the auspices of the Canadian Partnership Against Cancer (CPAC). One of the eight action groups charged with specific mandates is the Cancer Journey Action Group (CJAG). Its mandate is to provide leadership to change the focus of the cancer system so that patient, survivor and family member needs are better served. CPAC/CJAG has endorsed Screening for Distress, the 6th Vital Sign, as a priority direction and one of its drivers to move 'person centered care' forward. This symposium will focus on the implementation experience of 4 jurisdictions who are currently implementing Screening for Distress: British Columbia, North-eastern Ontario, Nova Scotia, and Québec City,. This work presents an excellent opportunity to discuss the implementation of Screening for Distress and the associated strategies and lessons learned. **ACKNOWLEDGEMENT OF FUNDING:** Canadian Partnership Against Cancer.

## S1919-1

**Screening for Distress and Symptom Management: The British Columbia Experience**

Ann Syme, Jeff Barnett, Kathleen Yue, Judy Oliver, Elena Serrano, Natalie Ferguson, Karen Levy

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**OBJECTIVES:** The purpose of this project is to implement provincial Screening for Distress for cancer patients in order to promote person-centered care. Planning is well underway in five British Columbia Regional Cancer Centers. A second project - Symptom Management Guidelines (SMG) for nursing was recently completed. Integration of these two projects referred to as Screening Assessment and Management of Symptoms (SAMS) provides a standardized approach to address the results from patients self assessment. **METHOD:** This is an 18 month implementation project involving BCCA and the Regional Health Authority partners. Methods inherent within the project include: 1) SAMS Project charter 2) Team development within each centre consists of a steering committee, a clinical design team, front line staff, volunteers and IT support 3) Communication plan 4) SAMS education plan to support nurses during implementation phase 5) Evaluation plan designed to target patients, staff and system metrics 6) Sustainability plan **RESULTS:** The implementation of SAMS at two of five regional centers will be 'live' by May 2010 with all five sites 'live' by March 2011. Processes related to the planning, implementation and evaluation phases will be described. Lessons learned including

successes and barriers discovered in the implementation of SAMS will also be discussed. Progress regarding the initial planning with Regional Health Authorities will be described. **CONCLUSIONS:** This innovative approach to the implementation of Screening for Distress in tandem with nursing focused evidence based symptom management guidelines (SMG) will identify patient distress and provoke a focused nursing assessment with evidence based interventions at point of care. This is an ambitious change to established practice and organizational processes and therefore requires risk management. Learning's taken from each site implementation will be invaluable to the continued success of the project.

### S1919-2

#### **Expanding Screening for Distress in Rural Health: A Focus on Patient-Centered Cancer Care**

Ms. Carole Mayer, Sheila Damore-Petingola, Mike Conlon, Katherine Mackenzie

*Regional Cancer Program of the Hôpital régional de Sudbury Regional Hospital, Sudbury, Ontario, Canada*

**OBJECTIVES:** Cancer patients living in rural communities often travel several hours to a tertiary cancer centre for treatment. Community Oncology Clinic Network (COCN) sites were established, permitting patients to receive chemotherapy closer to home. Despite the success of this strategy, patients report not always having their psychosocial needs met. This presentation focuses on a two year quality improvement project to implement screening for distress at 14 COCN sites, improving patient-centered cancer care closer to home. **METHOD:** The project plan includes: (1) Strategic planning to engage support of stakeholders; (2) Develop and implement processes to screen for distress while respecting cultural diversity; (3) Implement Screening for Distress tools-Edmonton Symptom Assessment Scale (ESAS) and the Canadian Problem Checklist (CPC); (4) Apply concepts of Participatory Action Research as part of knowledge translation; (5) Anticipate and plan the delivery of psychosocial oncology services in rural communities and; (6) Develop and implement an evaluation plan. **RESULTS:** Patients attending a COCN site are now screened for three critical domains: (1) physical (nutrition [nausea, vomiting, appetite, weight change], pain, fatigue, dyspnea and sleep); (2) practical (transportation, finances, drug coverage and accommodation); and (3) psychosocial (anxiety, depression, worry, social support, communication). Successes and challenges to implement this model of care will be shared and preliminary results presented, based on data accrued during the first year of the project.

**CONCLUSIONS:** Screening for Distress as the 6<sup>th</sup> vital sign has meant a shift in practice for health care professionals working at a COCN site. The feedback received thus far from health care professionals and patients participating in the screening process, is critical to improving our processes. We are confident this approach will result in patients having improved access to psychosocial care, reflecting a true practice of patient-centered care.

### S1919-3

#### **Screening for Distress: The Nova Scotia Experience**

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**OBJECTIVES:** The purpose of the Nova Scotia Screening for Distress Implementation project is to improve person-centred care for cancer patients. By providing front-line staff with a systematic method of identifying the supportive care needs and concerns of cancer patients, we enable them to respond effectively to the physical, psychosocial, and practical concerns of patients. In Nova Scotia, the implementation of Screening for Distress involves three key components: direct clinical service, education, and evaluation. **METHOD:** This 18-month action-focused implementation project began in June, 2009. Screening for Distress is being implemented in four phases, beginning with four first adopter Cancer Patient Navigators throughout the province. Preliminary data from the Navigators, as well as two cancer site teams of Capital Health will be presented. This will be supplemented by the Nova Scotia project team's experience of the implementation process. **RESULTS:** The key strengths and challenges of the implementation of Screening for Distress in Nova Scotia will be discussed. Key strengths include: patients screened and concerns managed, stakeholder support, and positive feedback from front-line staff. Challenges include: charting and communication issues, time and resource concerns, as well as education and training of front-line staff to handle distress issues identified through screening. **CONCLUSIONS:** Preliminary data will be discussed in regards to person-centred care for cancer patients. Recommendations for continued implementation of Screening for Distress throughout Nova Scotia as well as in other jurisdictions will be discussed. Work is needed to develop education and training opportunities for front-line cancer care staff, taking into account variations in local contexts.

## S1919-4

**Implementation of Distress Screening in Québec City: Process, Challenges, and Preliminary Outcomes**

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**OBJECTIVES:** Since March 2009, our team is actively working at the implementation of systematic Screening for Distress at the Hôtel-Dieu de Québec, a hospital treating cancer patients from the East of the Québec Province. The purpose of this presentation is to describe our approach, the challenges encountered and lessons learned throughout this endeavour involving the development of close bridges between clinical, organisational and research components. **METHOD:** Following the development of a screening toolkit and training material in collaboration with CPAC/CJAG, steps were undertaken for field preparation and frontline staff buy-in. We opted for a step-by-step approach to training staff and implementing screening: pivot oncology nurses were firstly involved, followed by front line staff from the radiation, haematology, and palliative care clinics. Screening for Distress is under way for patients from all cancer sites at several times points over the cancer journey. **RESULTS:** We firstly present qualitative data on the implementation process enlightening the challenges encountered and practical strategies introduced to facilitating this important practice change. Typical myths about Screening for Distress regularly expressed by front line staff are also discussed. Quantitative data collected among four cancer sites will provide a preliminary portrait of distress over the cancer journey, allowing for a discussion of the former myths validity as well as the quality of the implementation process. **CONCLUSIONS:** Screening for Distress offers a formidable occasion of dialogue with patients essential to a patient-centered care vision. Throughout this practice change, front line staff was dedicated to quality improvement while being in need for support and feedback. This process shed light on organisational challenges, particularly at the moment of survivorship transition. Pragmatic and careful steps need to be undertaken in order to successfully implement Screening for Distress and ensure its sustainability within busy oncology clinics.

## S1921

**Dyadic Coping and Meaning Making in Couples with Unique Needs: Challenges and Opportunities for Psychosocial Oncology Practice**

**SYMPOSIUM DESCRIPTION:** Research evidence highlights the significant psychological im-

pact of cancer not only on the individual, but also on the couple relationship. Much of this research focuses on effects such as distress, including anxiety, depression & post-traumatic stress. Less is known about opportunities for shared growth, such as post-traumatic growth (PTG) and meaning-making in couples coping with cancer. There is evidence to suggest that partners' who share a unified coping philosophy and effectively support each other demonstrate better psychosocial adjustment including PTG, and relationship satisfaction. While dyadic coping has been identified as a protective variable for couples, interventions designed specifically to help couples to enhance coping are limited. This is particularly true for couples in underserved populations and those with specialized needs. In this symposium, we examine couples and cancer in two underserved populations: couples dealing with hematological cancers and hematopoietic stem cell transplants (HSCT), and couples where a woman was diagnosed with breast cancer at a relatively young age, at or before the age of 40. The symposium papers discuss the unique needs of these populations and the associated adaptational challenges in the context of intimate relationships. In the first two papers, we present both the descriptive, quantitative data from a feasibility study of 11 couples dealing with HSCT and the qualitative data from in-depth interviews over the 18 months of the study. Next we present findings from a pilot study of a novel online intervention designed to support and instill dyadic coping in young couples dealing with breast cancer. The final paper discusses the challenges and opportunities associated with providing online facilitation to couples in general and young couples in particular.

## S1921-1

**Traumatic Stress, Depression and Caregiver Quality of Life among Spouses of Hematopoietic Stem Cell Transplant Recipients: A Feasibility Study**

Brenda Sabo<sup>1</sup>, Deborah McLeod<sup>2</sup>, Stephen Couban<sup>1</sup>, Jean Hughes<sup>1</sup>

*Dalhousie Universities, Halifax, Nova Scotia, Canada<sup>1</sup>, QEII Health Sciences Centre, Halifax, Nova Scotia, Canada<sup>2</sup>*

**OBJECTIVES:** Few studies have explored the psychosocial health of spouses caring for patients undergoing hematopoietic stem cell transplantation (HSCT). This study was undertaken to: i) identify adverse effects such as depression, traumatic stress and decreased quality of life associated with the caregiver role; and ii) identify at what points along the treatment continuum spouses are most vulnerable (pre-HSCT; 6 weeks post HSCT; 6 months post-HSCT and 1-year post HSCT). **METHOD:** A multi-method feasibility study

explored the experience of spousal care-giving at 4 time points across the HSCT treatment continuum. Three questionnaires were used to screen for depression, caregiver burden and traumatic stress respectively. The questionnaires included: CES-D (Radloff, 1977), CQOLC (Weitner *et al*, 1997) and ProQOL-R-IV (Stamm, 2009). Descriptive analysis were conducted including frequencies, means and correlations. **RESULTS:** Findings from the quantitative component of the study suggest that the time immediately prior to, and 6 weeks following HSCT are periods of high distress for the spouse, with 50% of spouses at increased risk for experiencing traumatic stress and 38% experiencing depression. While the 6-month mark saw an overall improvement in psychological well being, the level of distress and care giver burden began to rise again at 1-year. **CONCLUSIONS:** The levels of depression and traumatic stress were very high across all 4 time points and, as might be expected, correlated with quality of life. Given the potential risk for depression, traumatic stress and poor quality of life, spousal care givers should be regularly assessed for psychological distress across the treatment continuum as part of routine care delivery. More understanding is needed about the experience of care giving in order to design relevant interventions for this population.

#### S1921-2

##### **Dyadic Coping and Breast Cancer: From Theory to Application**

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 QEII Health Sciences Centre, Halifax, Nova Scotia,  
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 Toronto, Ontario, Canada<sup>3</sup>*

**OBJECTIVES:** The purpose of this presentation is twofold: (1) to provide an overview of the shift in the psychosocial oncology and health psychology literatures from individualistic to interactional models of coping with illness - with an emphasis on dyadic and communal coping processes, and (2) to demonstrate the application of these principles to the creation of an innovative online intervention for young couples facing breast cancer. **METHOD:** Couplelinks.ca is a custom-designed website offering a professionally facilitated, couple-centred intervention entailing informational and experiential components. The program consists of six learning modules undertaken weekly by the couple. Approximately 15 couples were enrolled in the program in order to test its feasibility and benefit. Participant feedback on one of the learning modules, a creative exercise designed to enhance the couple's capacity to adopt a 'we' orientation in relation to cancer, was analyzed. **RESULTS:** Couples indicated a range of reactions to the

exercise. Preliminary analysis of benefit revealed the following themes: Fun and laughter; enjoyment of shared participation in creative form of expression; enhanced communication around difficult topic; recognition of similarity of experience; reinforcement of feelings of togetherness; and reinforcement that cancer is a shared experience. Feedback from the minority of couples who did not find the exercise enjoyable or useful will also be presented. **CONCLUSIONS:** Preliminary analysis of responses to the 'Facing Cancer as a Unified Front' exercise suggests that the creative co-construction of a shared metaphor is conducive to dyadic coping and to the couple's experience of assuming a 'we' orientation in relation to breast cancer. Despite encouraging preliminary findings, study of longer-term benefits (e.g. whether and how the metaphor or image evolves or changes over time for couples, and/or becomes incorporated into their ongoing discourse) is warranted.

#### S1921-3

##### **Spousal Care-giving in Hematopoietic Stem Cell Transplantation: Hope and Meaning Across Time**

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**OBJECTIVES:** Hematopoietic stem cell transplantation (HSCT) is a difficult procedure associated with high levels of distress for recipients and family members. Care-giving demands for family members, particularly the spouse, are also high. There is very little evidence in the literature, however, regarding care-giving in this population. An exploratory study was undertaken in order to better understand the experience and meaning of spousal care-giving and in this paper we report the qualitative findings. **METHOD:** A multi-method study design was used to understand the experience of spousal care-giving. Semi-structured interviews were conducted across four points in time: pre-HSCT, 6 weeks post-HSCT, 6 months post-HSCT, and 1-year post-HSCT. The qualitative component was informed by interpretative phenomenology. Thematic analysis was used to identify the core themes regarding the experience and meaning of HSCT spousal care-giving. **RESULTS:** Findings suggest professionals and families place unrealistic expectations on the spouse. To meet expectations, some spouse's suppress their emotions and needs, while others struggled to separate their role as caregiver from that of spouse. Maintaining hope was important for many as they navigated the uncertain path through treatment. Some found hope challenged by the incongruent messages given within the acute care setting. Overall burden was

extreme and sources of support for the spouses were sparse. **CONCLUSIONS:** These exploratory findings highlight the need for psychosocial oncology care to address spousal distress across the HSCT trajectory, though what interventions would be most effective and when are unknown. The spousal relationship and hope were variables that the spouses identified as influencing their well-being. More understanding of dyadic variables such as coping and adjustment, as well as how hope is negotiated in relationships between spouses and with health professionals is needed.

#### S1921-4

##### **Online Facilitation of a Couple-focused Intervention**

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**OBJECTIVES:** An online-intervention was designed to extend the application of online support programs to include couples, and specifically young couples affected by breast cancer. The objectives of this presentation are to: 1) describe the role of the facilitator for a novel online couple intervention and, 2) outline the benefits, challenges, and special considerations for this population as they have unique psychosocial needs including extensive loss, and struggle to make meaning of their experiences. **METHOD:** Couplelinks.ca is a unique 6-week online intervention designed for young couples with breast cancer. The program consists of six experiential learning modules based on relationship principles demonstrated to underlie optimal couple coping. Approximately fifteen couples have been guided through the online program. Although the program is self-guiding to a large extent, ongoing communication and interaction with the facilitator play an integral role in supporting the couple's learning process. **RESULTS:** The online facilitator received high ratings on helpfulness suggesting that the majority of couples found value in the facilitator's involvement and support. Ongoing facilitator tasks included: maintaining a balance between flexibility and structure; tailoring facilitator involvement to suit each dyad's unique issues and strengths; and fostering compliance. Insights with respect to the benefits and challenges of online facilitation, and strategies to facilitate greater meaningfulness will be shared and highlighted through the use of examples. **CONCLUSIONS:** Online-interventions with younger couples with breast cancer demonstrate distinct advantages as well as challenges. Recommendations for the development and implementation of strategies to increase compliance, reduce differential involvement in dyads, and facilitate meaningful conversations among couples are provided.

#### S1922

##### **Why Psychosocial Care is Difficult to Integrate into Routine Cancer Care: Stigma is the Elephant in the Room**

**SYMPOSIUM DESCRIPTION: PURPOSE:** This symposium aims to review the concept of stigma relating to cancer and psychological distress, specific tumor sites, the personal, cultural and health system factors that may contribute, and interventions to combat stigma and its consequences. **METHODS:** The symposium will comprise 3 papers: 1) a historical context and overview of the international progress and barriers to integration of psychosocial care in routine oncology practice; 2) a review of stigma relating to cancer and mental health problems including specific cancer sites; contributing factors and the adverse impact on patients and their carers 3) review of models for potential interventions to address such stigma of psychological distress in the care of patients with cancer drawing upon evidence from population and clinical studies, including issues in diverse geographic and cultural settings. **RESULTS:** Important gains have been made internationally in recognition of psychological distress in cancer care. There is a widespread call for greater integration of psychosocial care in routine cancer care, yet major attitudinal barriers persist to this being translated to clinical services. The stigma of psychological distress and psychosocial interventions as have been under-addressed as a major barrier to integration of psychosocial care barriers at the patient, family, and health system level. **CONCLUSIONS:** Stigma regarding psychosocial distress and mental health needs continue to present a major barrier to achieving the important goal of integration of psychooncology services in routine care. Such stigma can influence patient, family, clinician and health service responses to psychosocial needs in the setting of cancer. Strategies to address these attitudinal and organisational barriers can be identified and represent a critical area for future psychooncology research and service development.

#### S1922-1

##### **Stigma: A Hidden Barrier to Psychosocial Care**

Jimmie Holland

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**OBJECTIVES:** This paper will review major barriers and impediments to the integration of the important achievements of psychooncology into routine cancer care with a specific focus on the ongoing adverse impact of stigma attached to

psychosocial needs. **METHOD:** An historical overview of international developments in the promotion of integrated psychosocial care within routine cancer care was conducted, including the key policy directions such as the 2007 Institute of Medicine report on cancer care, clinical guidelines, effective methods and tools for detection and management of psychological distress in routine cancer care. These are reviewed alongside available evidence regarding translation into clinical practice. **RESULTS:** Major gains have been made in recent years in recognition of the essential role of psychosocial care in cancer services, yet the progress towards integration of such care in oncology services has been limited. Despite some improvement in cancer-related stigma, substantial unaddressed attitudinal barriers exist to patients receiving effective care, to cancer clinicians ensuring provision of quality psychosocial care, and to health services ensuring its inclusion in routine practice. **CONCLUSIONS:** The calls from professional bodies, policy makers and advocacy groups for greater integration of psychosocial care in cancer services have not been matched by integration of psychosocial care in routine practice in many settings. Stigma is a major hidden barrier to be confronted and addressed in order to achieve the necessary improvements in quality and access to psychosocial care in cancer services.

#### S1922-2

##### **Overcoming Stigma in Psychooncology: Removing the Elephant from the Room**

Brian Kelly

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**OBJECTIVES:** This paper will briefly discuss stigma specifically relating to mental illness; review major international strategies aimed to combat such stigma and application of lessons from these programs to the task of promoting integrated psychosocial services in cancer care. **METHOD:** Findings were reviewed from international studies investigating contemporary attitudes and beliefs regarding mental disorders and psychological distress, with a focus on interventions to address stigma and the implications of these findings for improving wider availability of psychosocial care in cancer services. **RESULTS:** Despite large-scale international programs addressing the stigma of mental illness, beliefs and attitudes that discourage recognition and seeking effective help for psychological distress are common. These have direct relevance to attitudes to distress in the setting of cancer. Multifaceted strategies are recommended to build patient's confidence in psychosocial care, address attitudinal barriers within clinicians as well

as the broader community, and promote service models appropriate to the diverse clinical and geographic settings of cancer care. **CONCLUSIONS:** Strategies to address stigma are a major international priority. Psycho oncology research has potential to contribute to understanding methods to combat stigma in this setting and improve translation of the unanimous call for integration of care into routine practice. This also requires attention to the cultural socioeconomic and geographic diversity of settings of routine cancer care (including primary care, and specialist services).

#### S1922-3

##### **The Stigma of Cancer: Current Themes**

Mark Weinberger

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**OBJECTIVES:** There is heightened social stigma associated with specific cancer sites based on the origin of the disease, the perceived role of health behaviours or lifestyle and prevailing views about its preventability (i.e. lung cancer and smoking, cervical cancer and sexual activity) and the effects of the disease (i.e. prostate and breast cancer and sexuality). This paper will discuss stigma related to different cancer sites. **METHOD:** Findings were reviewed from studies investigating contemporary attitudes and beliefs related to specific cancer sites including lung, cervical, breast, gynaecologic and prostate, as well as HIV-related cancers. **RESULTS:** Compounding the stigma associated with cancer in general, there appears to be recalcitrant and pervasive attitudes towards people with cancers that are related to their lifestyle and behaviours. Where tumour risk is associated with tobacco use or linked to stigmatized behaviours (such as sexuality), there is heightened stigma aimed at these subgroups. In addition to a review of the literature, clinical observations from the speakers will also be shared. **CONCLUSIONS:** Specific strategies to address stigma of specific tumor sites is imperative. Interventions are necessary to attenuate heightened stigma toward specific subgroups of cancer patients. As psycho oncology research continues to examine stigma and cancer overall, an eye toward specific subgroups is necessary.

#### S1924

##### **A Tale of Two Cities: The Quality of Dying and Death for Metastatic Cancer Patients in Toronto and Jerusalem**

**SYMPOSIUM DESCRIPTION:** Interest in 'the good death' has grown in recent years a result of

increased openness to the discussion of death in many societies, the lengthening trajectory from onset of illness to death and the demographic shift in Western countries. Nevertheless, systematic research on the quality of death and dying has lagged behind that of other clinical outcomes, and has been hampered by methodological, ethical and practical difficulties. Much of the research which has been published thus far has been limited in its geographic location and was conducted prior to the rapid growth in palliative and end of life care services. It is unclear to what extent there have been improvements in the quality of death and dying over the past decade and also whether these outcomes have been affected by changing expectations and values regarding death and dying. It is also not established how the quality of death and dying is affected by regional differences in the delivery of palliative care and other health care resources and by cultural attitudes regarding the end of life. This symposium will include an overview of the concept of the quality of death and dying and its measurement and findings from a research project on the quality of death and dying and on bereavement morbidity which is being conducted in Canada and Israel. These countries have many similarities in standards of medical care, but also some differences in the availability of palliative care and in cultural and religious expectations regarding the end of life. We interviewed bereaved caregivers of patients with solid tumours 8-10 months after the death of the patient. The quality of death and dying was evaluated using the multidimensional Quality of Dying and Death questionnaire and bereavement morbidity in the caregivers was evaluated using the Beck Depression Inventory-II, the Texas Revised Inventory of Grief and the Impact of Event Scale-Revised 8 to 10 months after patient death. Data will be presented regarding the quality of death and dying and its relationship to bereavement morbidity. The implications of these findings will be discussed in terms of understanding the determinants of the quality of death and dying and the methodological issues which affect the measurement and interpretation this construct.

#### S1924-1

##### **The Quality of Dying and Death Construct and Its Measurement**

Sarah Hales, Gary Rodin, Camilla Zimmermann  
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**OBJECTIVES:** Ensuring a 'good death' for the terminally ill has not only become an important goal of medicine but has also now captured the popular imagination. However, there has been little agreement regarding its definition, measurement,

and how its evaluation is affected by cultural, socioeconomic or individual factors. We have reviewed the literature on the quality of dying and death construct and have evaluated currently available tools to measure the quality of dying and death. **METHOD:** The health care literature (databases MEDLINE, Healthstar, and CINAHL) was searched using keyword terms 'quality of dying/death' and 'good/bad death'. Letters, editorials, historical reports, case reports and reviews were excluded. We selected papers for further review in which the quality of dying and death was defined or conceptualized or in which a quality of dying and death measure was described. **RESULTS:** The quality of dying and death construct consistently includes physical, psychological, social, spiritual/existential domains. Freedom from pain and suffering is most commonly identified as important in the quality of death and dying. However, individual and family differences are found regarding preferences for death preparation and for the circumstances of death, with 'flexible realism' emerging as death approaches. National differences are evident, based on such factors as resource availability and cultural values such as autonomy and control. **CONCLUSIONS:** There is remarkable consistency in the dimensions of the quality of dying and death identified across cultures, although research has been limited by methodological, practical, and ethical considerations. A wide range of interventions are now being applied to improve the quality of dying and death, however, further research is needed to clarify the factors which shape this outcome and the interventions which will ensure, at the very least, the 'good-enough' death.

#### S1924-2

##### **The Quality of Dying and Death for Metastatic Cancer Patients in Toronto, Canada**

Sarah Hales<sup>1</sup>, Christopher Lo<sup>1</sup>, Lucia Gagliese<sup>2</sup>, Camilla Zimmermann<sup>1</sup>, Amna Husain<sup>3</sup>, Michal Braun<sup>4</sup>, Gary Rodin<sup>1</sup>

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**OBJECTIVES:** The Quality of Dying and Death questionnaire (QODD) is one of the best available standardized measures of quality of dying and death, but to date it has not been applied specifically to cancer populations or those outside of the United States. This study aimed to assess the quality of dying and death in metastatic cancer patients and its relationship to bereaved caregiver distress and other demographic and care variables. **METHOD:** Participants were bereaved caregivers

of metastatic solid tumour cancer patients treated at a Canadian comprehensive cancer care treatment centre and home palliative care program. They completed the QODD and measures of depression (Beck Depression Inventory-II), grief (Texas Revised Inventory of Grief) and stress-response symptoms (Impact of Event Scale-Revised) 8 to 10 months after patient death. **RESULTS:** In 239 deaths evaluated, the mean QODD score was 65.8 (range 32.5 to 93.3, *SD* 12.0) on a scale of 0 to 100, with higher scores indicating better quality of death. Scores >60 were found in 68.9% of the sample. After multiple regression analysis, patient female gender, greater caregiver age, location of death at home, and less caregiver stress response symptoms predicted better quality of death, accounting for 20% of the variance ( $p < 0.05$ ). **CONCLUSIONS:** The relatively high QODD ratings in this sample, compared to previous research and the Israeli arm of this study, could be due to greater death acceptance and preparation, almost universal access to palliative care, and /or caregiver recruitment and response biases. Caregiver and patient characteristics may affect QODD ratings due to their influence on the process of dying and location of death and/or due to the impact of the bereavement on the retrospective evaluation.

### S1924-3

#### The Quality of Dying and Death for Metastatic Cancer Patients in Jerusalem, Israel

Michal Braun<sup>1</sup>, Ilanit Hasson-Ohayon<sup>2</sup>, Daliah Galinsky<sup>3</sup>, Wilner Omer<sup>3</sup>, Sarah Hales<sup>4</sup>, Christopher Lo<sup>4</sup>, Lucia Gagliese<sup>5</sup>, Camilla Zimmermann<sup>4</sup>, Gary Rodin<sup>4</sup>

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**OBJECTIVES:** The majority of research evaluating the quality of dying and death has been conducted in the United States and the United Kingdom. More research is required to assess how judgments regarding the dying experience are influenced by differences in culture, religion and health care provision. This study examines the quality of dying and death of metastatic cancer patients in Jerusalem, Israel, and its relationship to bereaved caregiver distress, demographic and care variables. **METHOD:** Bereaved caregivers of metastatic solid tumor cancer patients were recruited. They were administered the Quality of Dying and Death questionnaire (QODD) and measures of depression (Beck Depression Inventory-II), grief (Texas Revised Inventory of Grief) and stress-response symptoms (Impact of Event Scale-Re-

vised) 8 to 10 months after patient death. **RESULTS:** 95 deaths were evaluated. Mean QODD score was 57.2 (*SD* 15.0), on a scale of 0 to 100 with higher scores indicating better quality of death. Scores >60 were found in 47.4% of the sample. QODD correlated with older caregiver age ( $p < 0.05$ ), greater depression ( $p < 0.05$ ), stress response symptoms ( $p < 0.05$ ) and with location of death at home ( $p < 0.05$ ). The QODD scores were lower than in the North American arm of the study. **CONCLUSIONS:** The quality of dying and death evaluations in this sample of metastatic cancer patients were lower than those found in a similar study conducted in Toronto, Canada. Possible explanations may include cultural differences (e.g. regarding death acceptance) and/or in the availability of palliative care programs. These differences will be discussed.

### S1928

#### The Family Journey Through Illness: The Story Of Margaret

**SYMPOSIUM DESCRIPTION:** Theoretical concepts: In the lifetime of every person, high stress situations and periods of intense and anticipated crisis occur. Of these life events and situations, those which make the greatest demands on a person's coping ability are the unexpected events that have no direct or causal link with the lifestyle or particular behaviour - such as life threatening disease which intrudes into and engulf every dimension of life. Cancer is one of such life-threatening events. **Methods:** The presentation of a clinical narrative of a young patient with cancer and her family will set the stage for the discussion concerning different techniques and approaches to the family management. The focus will be on the patients coping skills, the health team communication with patient and family, the sense of meaning and the family dynamics within the illness context. **Discussion:** Cancer affects three out of four families and cancer diagnosis and treatment should be viewed as both intra- and interpersonal process. When a patient has cancer, the family also has cancer as a component of its daily life. The discussion will encourage a complementary of dimensions: E. Andritsch will present the complexities of the patient and family symbiosis, and the medical aspects of the patient, Dr. D. Razavi will discuss his expertise on the health team communication; Prof. Dr. William Breitbart will concentrate on the aspects of sense of meaning and Prof. Dr. Lea Baider will talk about the family dynamics. **Conclusion:** By understanding the trajectory of the illness within each patient's particular narrative and family social context, we may provide them and their health care team with more appropriate

tools and meaningful answers during the long trajectory of illness.

#### S1928-1

##### **A Never-Ending Challenge For Psycho-Oncology: Dealing And Responding Appropriately To The Numerous Dimensions Of Patients' And Relatives' Distress**

Darius Razavi

*Jules Bordet Institute, Cancer Center of the Université Libre de Bruxelles, Bruxelles, Belgium*

**OBJECTIVES:** Elisabeth Andritsch presentation of the situation of a 21 years old woman with an advanced osteosarcoma and of the reactions of her parents will give an opportunity to propose, beside theoretical hypothesis, suggestions for an appropriate multidisciplinary intervention. **METHOD:** After having recalled the numerous theoretical frameworks needed to understand the dynamic of the clinical problems encountered (i.e. trauma, distress, anxiety, regression, protective shield, defensive idealization, splitting), suggestions about needed interventions will be presented: adjusted and personalized - dyadic or triadic -communication with the patient and her parent (form and content), communication with the staff (form and content). **RESULTS:** This presentation will allow a discussion about the transfer to clinical settings of results of empirical studies on communication and care organization in highly emotional and uncertain contexts. **CONCLUSIONS:** Case presentation during symposium at an international level is needed to consider the difficulties to implement in a clinical setting information and recommendations derived from pertinent research. Parent and child relationships in oncology, as one of the most complex clinical situation, offer a unique opportunity to discuss this issue.

#### S1928-2

##### **Beyond Words: Family Interaction Of A Young Cancer Patient**

Lea Baider

*Hadassah University Hospital. Jerusalem, Jerusalem, Israel*

**OBJECTIVES:** Cancer is a life threatening disease that every family matters. Families provide the context of adjustment in which the person with cancer responds and behaves to the disease. And every member of the family is profoundly affected during the entire trajectory of cancer. **METHOD:** The methods will be based on the analysis and psychological understanding of a classical clinical history of a young cancer patient and her family. The family adaptation to cancer diagnosis and treatment is a continuing process with many critical

cycles. It can be seen as a threat and an opportunity, and as a chance for resilience, recovery and a new modes of adaptation. **RESULTS:** Furthermore, illness within the family necessitates sharing and communication. The family 's collective perception shape the meaning of the illness of each family member. And the family appraisal of the illness is an integral part of living together, with their conflict, their broken routine, their silences and the unspoken words. Family members can be supportive of one another through their own mode of silent or open verbal communication. **CONCLUSIONS:** To understand and conclude the best mode of family interaction through the clinical case to be presented. And to observe how some families cultures value quiet acceptance of events over which they have no possible control, and others value the open discussion of feelings as a way to enhance their sense of togetherness and well being.

#### S1928-3

##### **Applying Concepts of Meaning Centered Psychotherapy in the Clinical Setting**

William Breitbart

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**OBJECTIVES:** A case vignette will be presented of a 21 year old woman with a diagnosis of osteosarcoma and lung metastases. The purpose of my presentation is to discuss the application of concepts of Meaning-Centered Psychotherapy to a specific clinical case, as part of a multi-perspective (i.e. family approach, communications approach, and meaning centered approach) discussion of the case. **METHOD:** Meaning-Centered Psychotherapy (MCP) is an existentially oriented approach to psychotherapy in patients with advanced cancer, based on the work of Viktor Frankl, and developed by Breitbart and colleagues and Memorial Sloan-Kettering Cancer Center. To date this approach has been studied in research clinical trials, in both group and individual formats with demonstrated efficacy. **RESULTS:** The case will be discussed from the perspective of the importance of meaning in human existence, particularly as one faces life limiting illness. The concept of meaning and the sources of meaning; experiential sources, creative sources, historical/legacy sources, and the attitude that one takes towards suffering will be presented as specific to working with this patient. Existential concepts of Freedom, Responsibility, Existential Isolation, Fear of Meaninglessness, and Death Anxiety will also be highlighted. **CONCLUSIONS:** A meaning-centered approach to the care of advanced cancer patients is another perspective on psychotherapeutic intervention that may be

useful to clinicians treating such patient in Psycho-oncology practices.

## S2000

### **Integrating Oncology Nursing and Psychosocial Oncology**

**SYMPOSIUM DESCRIPTION:** Cancer and its treatment have more than a physical impact. There are social, psychological, emotional and practical consequences as well. Some individuals, given relevant information and support, mobilize their own networks and manage to cope with the situation. Others, however, benefit from additional deeper intervention and/or referral. Nonetheless, all individuals with cancer need to be screened to assess the level of distress given that screening for distress is the sixth vital sign. Oncology nurses are the pivotal point of contact for cancer patients regarding psychosocial concerns. The nurse's initial interaction and assessment has a significant impact on whether cancer patients feel supported and are connected with the appropriate resources. This symposium will explore the role of oncology nurses in meeting psychosocial health needs of cancer patients. Best practices and professional standards describe the role of oncology nurses in screening for distress, assessment for identified patient concerns, and the provision of evidence-based psychosocial interventions. We intend to highlight current developments to support and engage oncology nurses to provide psychosocial care for cancer patients, with a particular focus on screening for distress. The following speakers will provide the session:

Deborah McLeod – CAPO representative – focus on educational preparation of oncology nurses to prepare them in psychosocial care.

Ruth McCorkle – IPOS representative who will focus on screening and assessment

Doris Howell – CANO representative – focus on psychosocial health assessment guideline and the resources to support practice, such as algorithms.

Sanchia Aranda - ISNCC representative - focus on distress screening and assessment in other countries

## S2000-1

### **Development of a Web-based Education Resource to Support a National Screening for Distress Program**

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**OBJECTIVES:** The completion of a screening tool is an important first step in addressing the psychosocial health needs of people affected by

cancer. In addition, screening must be followed by timely, evidence-based interventions if screening is to have an impact on relevant outcomes. This project was designed to address the learning needs associated with a screening for distress program for nurses and other health professionals. **METHOD:** To address these needs, the Canadian Association of Psychosocial Oncology (CAPO), with support from the Canadian Partnership Against Cancer, created a web-based education program to support the national screening for distress agenda. The education program was designed for health professionals, particularly nurses, to address screening results, and to plan appropriate interventions. The final education program was designed to take 5–6 hours to complete. **RESULTS:** The program supports clinically grounded and interactive learning through the use of PowerPoint presentations, video clips of clinical interactions with patients and family members, and test questions. Presentation topics include, for example, strategies for dealing with screening results, managing referrals, and supportive counseling. The supportive counseling modules were developed based on the Canadian Association of Nurses in Oncology (CANO) Standards of Practice. This learning resource is currently being piloted. Preliminary evaluation results will be presented. **CONCLUSIONS:** Based on our experience with the IPODE project, we know that health professionals value web-based learning for its accessibility and convenience. We expect the uptake to be high and that the program will be useful to nurses and other health professionals as they transition to using screening tools for distress.

## S2000-2

### **Overview and Implications of the Institute of Medicine Report, Cancer Care for the Whole Patient: Meeting Psychosocial Health Needs**

Ruth McCorkle

*Yale University, New Haven, CT, University of Arizona, Tucson, AZ, Memorial Sloan Kettering Cancer Center, New York, NY, USA*

**OBJECTIVES:** To present a summary of the Institute of Medicine(IOM) report and its recommendations; to discuss the role of the American Psychosocial Oncology Society (APOS) in forming the Alliance for Quality Psychosocial Cancer Care. **METHOD:** In October 2007 the Institute of Medicine (IOM) released a report titled Cancer Care for the Whole Patient: Meeting Psychosocial Health Needs mandating changes in the delivery of quality cancer care to include psychosocial services. Ten recommendations were made including that all cancer care should include appropriate psychosocial services. **RESULTS:** Psychological distress, particularly depression and anxiety, in adults

diagnosed with cancer has been well documented and significantly influences cancer recovery and quality of life. Symptoms of depression, for example, are associated with decreased compliance with adjuvant therapy and a number of cognitive and functional impairments. Psychological distress in older cancer survivors can increase treatment-related side effects and decrease abilities to manage their symptoms, adding to the burden of the illness. With the publication of the report, there is a growing national recognition that many patients and their families report unmet psychosocial needs, and that psychosocial assessment and treatment is a standard of quality cancer care. The National Comprehensive Cancer Network (NCCN) has published clinical practice guidelines for distress management, including screening. **CONCLUSIONS:** APOS has firmly established itself as the single national organization devoted solely to psychosocial care in cancer in the United States. APOS recognizes that psychosocial assessment is a standard component of cancer care and that each patient's psychosocial needs must be documented with a plan for needed services. APOS took the lead in forming the Alliance for Quality Psychosocial Cancer Care which currently includes more than 30 member organizations committed to integrating psychosocial screening and related services into the standard of quality care for cancer patients.

### S2000-3

#### **Facilitating Better Psychosocial and Supportive Care Practices to Reduce Distress**

Doris Howell

*Oncology Nursing Research, Princess Margaret Hospital, Toronto, Canada.*

**OBJECTIVES:** Distress is a normative response to cancer with some patients experiencing more serious distress related to multi-determinant causes such as unrelieved symptoms and difficulty adjusting. Reducing distress is dependent on ensuring the provision of best practices in symptom care, supportive-education, and social connections. **METHOD:** We used adaptation (ADAPTE) methodology to develop evidence-based algorithms to support better practices in psychosocial and supportive care. Local contextual adaptation of

guidelines is an initial step in fostering translation into practice. This should be followed by use of a knowledge translation framework to facilitate a systematic and planned implementation process with use of multifaceted approaches to address multi-level barriers to practice change. **RESULTS:** The focus of this presentation is on facilitating practice change through systematic planning and tailored implementation approaches. The evidence supporting a multifaceted approach will be reviewed and application in knowledge translation demonstrated. **CONCLUSIONS:** Improving practice requires systematic planning, high quality facilitation, and multifaceted approaches to address known barriers to practice change at multi-levels of the adopters and organization

### S2000-4

#### **Supportive Needs Screening - An Australian Experience**

Sanchia Aranda

*Peter MacCullum Cancer Centre and Melbourne University, Melbourne, Australia*

**OBJECTIVES:** With the increasing emphasis on the importance of supportive care, a goal of having informed and supported patients was included in the 2001 strategic plan of the Peter MacCullum Cancer Centre in Melbourne, Australia. **METHOD:** In 2002, a project to implement supportive needs screening was initiated. Cancer site-specific services with an appointed service lead clinician shifted the focus away from medical, radiation and surgical oncology to an integrated treatment approach and formal multidisciplinary structures. Infrastructure funding allowed a parallel development of supportive care, nursing research, and practice development efforts that gave momentum to the strategic directions. **RESULTS:** Eight years later, this project has developed into a well established program of initial needs screening and response across all clinical tumor streams. The work is now influencing State policy with targets set for all health services to implement supportive needs screening in cancer populations. **CONCLUSIONS:** This presentation will reflect upon this journey, exploring the barriers and facilitators that have influenced progress along the way.

## ORAL ABSTRACTS

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A-2

### **Working Towards an Understanding of the Psychosocial Needs of Young Adults: Examining Distress, Social Support and Interest in Online Support**

Liane S. Kandler<sup>1</sup>, Scott M. Sellick<sup>2</sup>  
*Lakehead University, Thunder Bay, Ontario, Canada<sup>1</sup>, Thunder Bay Regional Health Sciences Centre, Thunder Bay, Ontario, Canada<sup>2</sup>*

**OBJECTIVES:** Cancer in young adulthood has unique psychosocial implications, making it imperative that these needs be evaluated. We aim to assess distress levels of young adults, social support, and interest in online support for young adults. Our goal is to compare distress screening measures commonly used, to examine the relationship between support and distress, and to evaluate interest in online support. This is the first stage, to be followed by a 10-week semi-structured online support group. **METHOD:** Young adults (18 to 44) diagnosed at the Cancer Centre after September 2004 will be invited to complete a questionnaire package. Participants will be asked to complete a demographic questionnaire which also assesses computer and internet use, and interest in receiving support online. Distress measures include the Hospital Anxiety and Depression Scale, the Personal Well-Being Checklist, and the Edmonton Symptom Assessment System. The Berlin Social Support Scale will measure actual and perceived support. **RESULTS:** Questionnaire mailing took place January 6, 2010; results are pending. We aim to analyze 1) whether social support and distress predict interest in participating in an online support group using a multiple regression analysis, with particular emphasis on separating actual versus perceived social support and the individual distress measures, and 2) the relationships between distress measures. **CONCLUSIONS:** Online support groups are an explosive new communication medium within healthcare, but little research exists describing factors motivating online use. We aim to add to this growing body of literature by evaluating

interest in online support, and how this relates to social support and the level of distress experienced by the individual. This preliminary research will be used to guide the development of an online support group.

A-3

### **Medical, Psychological and Social Aspects of Cancer Diagnosis Disclosure and Non-Disclosure in Romania**

Degi Laszlo Csaba  
*Babes-Bolyai University, Cluj Napoca, CJ, Romania*

**OBJECTIVES:** Only few studies are concerned with consequences of cancer diagnosis non-disclosure. We aim to compare cancer patients based on cancer diagnosis disclosure and also we evaluate the odds of non-disclosure. **METHOD:** 420 cancer patients were included in our study, 342 with malign and 78 with benign tumors. 238 women and 185 men completed our questionnaire which included standard measures of depression, hopelessness, ways of coping and life events. Oncology clinicians answered short questionnaire in which they indicated type, stage and location of tumor, treatments received and whether patients have knowledge of their cancer diagnosis or not. **RESULTS:** Cancer patients who were not informed about their cancer diagnosis are older, more isolated, undereducated and also they have significantly higher levels of depression, hopelessness and consequently lower problem-focused coping potential. Odds of cancer diagnoses non-disclosure are mainly influenced by tumor type (malign) and depression. **CONCLUSIONS:** Our results underline the importance of patient-focused cancer diagnosis disclosure. Relevancy of our clinical research should be addressed starting from the fact that in Romania there are no previous reference data about cancer diagnosis non-disclosure, based on multivariate statistical analyses.

## A-4

**Coping with Breast Cancer, A Phenomenological Study**

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**OBJECTIVES:** The purpose of this study was to gain a more in depth understanding of the coping strategies espoused by breast cancer Lebanese women. **METHOD:** The study followed purposeful sampling and saturation principles in which 10 female participants diagnosed with breast cancer, stages I–III were interviewed based on their genuine knowledge of the phenomena, and their willingness to communicate that information. Interviews were conducted between December 2007 and May 2008. All interviews were audio taped and transcribed verbatim. Data were analyzed following a hermeneutical process as described by Diekelmann and Ironside (1998). **RESULTS:** Seven main themes and one constitutive pattern emerged from the study describing the Lebanese women's coping strategies with breast cancer. Emerging positive coping and hindering factors are similar to experiences and coping strategies of other breast cancer women; however, the negative stigma of cancer in the Lebanese culture, and the imbedded role of religion in Lebanese society are bases of the differences in the coping strategies of Lebanese women with breast cancer. **CONCLUSIONS:** The results of the present study add to the knowledge base, as they portray subjective experiences of coping with breast cancer. These findings cannot be directly generalized but they could act as a basis for further research on which to base a development of a framework for an approach to care that promotes coping processes in Lebanese women living with a breast cancer.

## A-6

**Interdisciplinary Treatment Planning for Patients with Cancer Pain: Incorporating Psychosocial Issues**

Diane Novy  
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**OBJECTIVES:** Identify the unique contributions of different disciplines in cancer pain treatment. Identify the patient's involvement as the treatment plan is developed. Consider ways to integrate each team member's perspective into a comprehensive treatment plan. **METHOD:** This is a case presentation with a video of a patient with phantom limb pain following surgery for sarcoma. Perspective of team members (physician, chaplain, psychol-

ogist, social worker, rehab specialist) are presented. **RESULTS:** This video demonstrates the work at M. D. Anderson Cancer Center's Center of Excellence Pain Center in providing a comprehensive treatment approach to pain. Numerous psychosocial issues are discussed by patient and the video offers ways that those issues are handled. **CONCLUSIONS:** There are a number of cancer care professionals who are integral to the management of each patient. For the patient example used in the video, the roles of the physician, rehab expert, psychologist, chaplain, and social worker are made clear. The psychological processes that affect physical symptoms and pain are also discussed.

## A-10

**Cancer and Spiritual Experiences: Redefining the Self Through Initiatory Ordeal**

Vonarx Nicolas  
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**OBJECTIVES:** Present the results of a study that focused on the presence of religious practices and knowledge in the journeys of cancer patients searching for meaning and a cure. Show how the discussion of spiritual experiences led us to examine how people's identities were tested through their cancer ordeal. **METHOD:** The data collection for this study was conducted in Québec with 10 cancer patients. We interviewed each person individually, discussing their experience of the disease and the resources to which they turned. **RESULTS:** By following the identity-building process that was at work in illness, we came to a greater understanding of how religious practices and knowledge can be useful. We observed that these resources were particularly helpful when they were used to turn inwards, pay attention to oneself, strive for wholeness, connect with something greater than oneself, and transform values so that they supported a psychosocial version of oneself. **CONCLUSIONS:** Examining the role played by religious and spiritual practices and knowledge in cancer patients required that we attempt to understand their spiritual experiences by focusing on the self-discovery that occurred through the initiatory ordeal of their illness.

## A-12

**Exploring the Therapeutic Value of Hope in Palliative Nursing**

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**OBJECTIVES:** Hope is a multi-dimensional concept that is integral to a dying person's needs. It is an essential resource that assists individuals with a

life threatening illness to cope during times of intense physical and psychological distress. The objective of this article is to explore and analyze the therapeutic value of hope in Palliative nursing. **METHOD:** The phenomenon of hope will be explored through the analysis and application of Dufault and Martocchio's Multidimensional Model of Hope to a clinical scenario that was experienced by the authors. **RESULTS:** Factors determining hope in cancer patients will be identified as well as interventions that can foster hope in dying patients. Discussion includes examination of literature gaps, relevance to nursing practice, and practical strategies to engender hope and thereby enhance quality of life in advanced cancer patients. **CONCLUSIONS:** Most terminally-ill patients require hope to maintain their dignity, to cope with their stressors and to enhance their quality of life. The Multidimensional Model of Hope explains the concept of hope in the form of two spheres and six dimensions. The MMH has contributed significantly to the depth and breadth of our current knowledge base of hope in palliative settings.

#### A-13

##### **Coping Strategies and Self Efficacy as the Mediator of the QOL in Cancer Patients**

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**OBJECTIVES:** General: To study the role of different types of coping strategies and self efficacy, on The Quality of life of cancer patients in Sudanese community. Specific: 1. To evaluate the effect of different type of coping strategies on the Quality of life of cancer patients.; 2. To understand coping strategies specific to different phases of disease.; 3. To investigate the role of self-efficacy in predicting Quality of life for cancer patients **METHOD:** Two hundred of newly diagnosed cancer patients with various types of cancer. Age 17–60 and both gender will be recruited from Sudan. Tools: Questionnaires using the Ways of Coping Inventory-Cancer Version, Self-Efficacy Scale-cancer version (Schwarzer, 1992) and Quality of life scale- (Cohen *et al.*, 1995) Cancer version will be used. Data will be analyzed using SPSS computer software. Statistical significance will be considered at ( $p < 0.05$ ). **RESULTS:** Expected results: Applying these coping strategies is expected to significantly reduce the psychological distress in most of the cancer patients pairing in mind different type of personality and culture effects. As well as self efficacy can be mediator on the Quality of life. Our study will shed light on the significance of applying different type of coping strategies in patients with cancer and the influence of self efficacy on human functioning.

**CONCLUSIONS:** Expected conclusions: Psychological coping strategies will have an important influence on QOL in patients with cancer. As well as self efficacy can be mediator on the QOL. Our study will shed light on the significance of applying DIFFERENT TYPE coping strategies in patients with cancer.

#### A-18

##### **Survivorship: A Key Component for Breast Center Accreditation**

Diane Thompson, Darlena Chadwick

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**OBJECTIVES:** Survivorship is a crucial issue that merits additional attention. The purpose of this abstract is to review accreditation programs that consider a survivorship program a standard requirement. Breast accreditation programs include the National Quality Measure for Breast Centers (NQMBC), administered by the National Consortium of Breast Centers, and the National Accreditation Program for Breast Center (NAPBC), administered by the American College of Surgeons with board representation from 15 organizations. **METHOD:** Standards for NQMBC, NAPBC and The Commission on Cancer were reviewed. Additionally, we reviewed the quality measure requirements for other cancer programs and professional memberships. These included Centers for Medicare and Medicaid Services: Physician Reporting Quality Initiative (PQRI), American Society of Clinical Oncology: Quality Oncology Practice Initiative (QOPI), and the American Society for Therapeutic Radiology and Oncology: Performance Assessment for the Advancement of Radiation Oncology Treatment (PAAROT). Of note, the PQRI may be linked to pay-for-performance criteria. **RESULTS:** Currently only the NAPBC requires centers to provide a surveillance plan for survivors. While there are no specific requirements as to the nature of the program, a description of an accredited program may be helpful: The program emphasizes overall quality of life. It includes a mammography/ultrasounds recall information system, mental health and nutrition counseling, a survivorship navigator, education and support programs. A complimentary web-based platform, facilitated by the navigator provides ongoing communication between the treatment team and the survivor. **CONCLUSIONS:** National standards as mandated by the NABPC will encourage breast programs to develop a survivorship plan. Over 1,100 breast centers have expressed interest in NAPBC accreditation and 105 breast centers are now accredited since the program began one year ago. Additional survivorship qualifications should be added to the NQMBC, PQRI, QOPI and the PARROT programs. With

survival rates as high as 95% for early stage breast cancers, survivorship management should be an integral part of the treatment plan.

#### A-21

##### **Impact of Spirituality on Palliative Care Physicians: Personally and Professionally**

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**OBJECTIVES:** The overall purpose of this study was to explore palliative care physicians' personal and professional experiences regarding spirituality including any differences they perceived between religion and spirituality. **METHOD:** This study employed the qualitative method of phenomenology. A purposeful sample of participants was recruited. Physicians were identified by the researchers based on prior knowledge of physicians who were articulate, good communicators and prepared to share their personal and professional feelings, attitudes and experiences concerning spirituality in palliative care. Maximum variation with respect to gender and years in practice was considered. **RESULTS:** A number of interpretive categories and themes emerged in relation to palliative care physicians' perspectives and experiences about the spiritual domain of care including the concept of spirituality and the difference between spirituality and religion. The quintessential theme permeating all the themes was the concept of how the participant's own spirituality impacted their practice of palliative care and how the practice of palliative care impacted their own spirituality. These were inextricably woven together. **CONCLUSIONS:** This study revealed the relational nature of how spirituality interacts with physicians' personal and professional beliefs and practices and that addressing spirituality is essential to providing compassionate and holistic care. Despite a broad view of spirituality there seemed no doubt that the spiritual domain was fundamental to physicians fulfilling the mandate of alleviating suffering and promoting healing which in turn nourished personal spirituality allowing some defence against the emotional stress of the work.

#### A-24

##### **Pilot Study of Performance of the Arabic Functional Assessment of Cancer Therapy (FACT-G) in Egyptian Cancer Patients**

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**OBJECTIVES:** To test FACT-G (Arabic) on Egyptian cancer patients. **METHOD:** FACT-G was administered to 23 Egyptian patients followed by a semi-structured interview requesting patients to identify any difficulties. Audio-recordings of the patient-researcher interview were made and content analysis performed. Twenty-three patients were enrolled over 8 weeks. **RESULTS:** Response pattern showed U shaped distribution in 12/23 patients(52%). Fourteen patients(60.8%) responded with (not at all) or (very much) to more than half the items. Analysis of responses per item showed U/J-shaped curve except pain which was normally distributed. Cronbach's Alpha was 0.824 for physical functioning subscale but markedly lower for social and family well being. Questions involving satisfaction/acceptance were perceived in unique cultural context eliciting responses of pre-destined acceptance regardless emotional functioning. Nineteen patients (82.6%) reported questionnaire was difficult to understand. **CONCLUSIONS:** These results raise concerns regarding the comparability of QOL data collected from Arabic speaking communities in multinational clinical trials to the data collected from western countries and the methodological appropriateness of licensing drugs based on QOL advantage from such data. Cultural adaptation of Arabic translation of FACT-G is recommended before results can be pooled with other populations.

#### A-26

##### **Complementary and Alternative Medicine Use and Distress Among Australian Women with Cancer: A Prospective Longitudinal Investigation**

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**OBJECTIVES:** While several cross-sectional studies have examined the medical, demographic and psychological correlates of complementary and alternative medicine (CAM) use among women with cancer, few prospective longitudinal investigations have been reported. The purpose of the present study is to prospectively examine (i) whether pre-cancer distress is predictive of CAM use at cancer diagnosis, (ii) whether CAM use predicts distress after cancer, and (iii) whether CAM mediates the relationship between pre- and post cancer-related distress. **METHOD:** Four waves of data from the Australian Longitudinal Study of Women's Health were analysed. Participants were women who did not have cancer at Survey 1, but who reported developing cancer at subsequent surveys. Measures included CAM usage (number of CAM consultations over the

past 12 months); and distress (SF-36; CES-D; the Goldberg Anxiety and Depression Scale). Longitudinal analyses were conducted according to a time-lag model using Linear Mixed Modelling, which can model repeated measures. **RESULTS:** The changes in prevalence over time for CAM usage and distress within each age cohort and by cancer type will be discussed. Findings from the prospective predictive and meditational analyses of the (i) combined samples and (ii) separate age cohorts will then be presented. **CONCLUSIONS:** It is anticipated that the findings of this study will provide longitudinal confirmation of the correlations previously observed between distress, CAM and cancer. That is, this study will provide insight as to whether utilising CAM is an effective intervention for managing the distress arising from cancer diagnosis, and whether particular age groups obtain greater benefit.

#### A-29

##### **An Investigation of Psychological Distress (Depression and Anxiety) in People with Head and Neck Cancer**

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**OBJECTIVES:** Studies demonstrate that patients with head and neck cancer experience elevated psychological distress, and that distress and quality of life change during treatment. However, little is known about the psychological distress, particularly symptoms of depression and anxiety, amongst Australian patients. The purpose of the current study was to assess symptoms of depression and anxiety in patients with head and neck cancer (HNC) before and after radiotherapy. **METHOD:** Prospective longitudinal observational study of consecutive HNC outpatients at a tertiary cancer centre in Australia. Eligibility included a diagnosis for the first time of cancer in the head and neck region, where the patient agreed to undertake cancer treatment involving radiotherapy with curative intent. Data were collected before commencement of radiotherapy and again three weeks after completing treatment. Symptoms of depression and anxiety were assessed by the Hospital Anxiety and Depression Scale (HADS). **RESULTS:** Seventy-five participants completed pre- and post-treatment questionnaires. Depression mean scores significantly increased from pre- to post-treatment, while anxiety scores significantly decreased over the same period. The prevalence of

mild to severe depression was 15% pre-treatment and doubled to 30% post-treatment. The prevalence of mild to severe symptoms of anxiety was 30% pre-treatment, reducing to 17% post-treatment. Pre-treatment depression and receiving chemotherapy predicted post-treatment depression. Pre-treatment anxiety scores and gender predicted post-treatment anxiety. **CONCLUSIONS:** These results suggest that rates of depression in HNC patients increase following cancer treatment, with one third of patients experiencing clinically significant symptoms of depression following radiotherapy. Therefore, ongoing monitoring to identify patients at risk is important. Psychosocial interventions need to be developed and evaluated to meet the changing needs of this patient group as they undergo treatment for HNC.

#### A-37

##### **Cognitive Behavioral Therapy and Physical Exercise for Climacteric Symptoms in Breast Cancer Patients Experiencing Treatment Induced Menopause: First Results of a Multicenter Trial**

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**OBJECTIVES:** Premature menopause is a major concern for younger women undergoing adjuvant therapy for breast cancer. Hormone replacement therapy is contraindicated; non-hormonal medications show bothersome side-effects. Cognitive behavioral therapy (CBT) and physical exercise (PE) have been shown to have a positive impact on symptoms in naturally occurring menopause. The objective of this study is to assess the effectiveness of these interventions on climacteric symptoms and quality of life (QoL) in breast cancer patients experiencing treatment-induced menopause. **METHOD:** In this randomized controlled multicenter trial, patients are being allocated to (1) CBT, (2) PE, (3) combined intervention (CBT/PE) or (4) a waiting list control group. Questionnaires are completed at baseline (T0), twelve weeks (T1) and six months (T2) follow-up. Outcome measures include menopausal symptoms (FACT-ES; HFRS), sexuality (SAQ), body- and self image (QLQ-BR23), urinary symptoms (BFLUTS), psychological distress (HADS) and health-related QoL (SF36). Preliminary intention-to-treat (ITT) and per-protocol (PP) analyses have been conducted. **RESULTS:** To date, 334 patients have completed the first follow-up questionnaire (T1). Non-compliance rate with the interventions was 46%. Nevertheless, significant group differences favoring the interventions were observed for menopausal symptoms (FACT-ES: ITT  $p = 0.022$ ; PP  $p = 0.039$ ) (HFRS: both ITT and PP  $p < 0.001$ ),

urinary symptoms (ITT  $p = 0.022$ ; PP  $p = 0.006$ ), psychological distress (PP only  $p = 0.015$ ), self-reported physical functioning (ITT  $p = 0.007$ , PP  $p = 0.002$ ), fatigue (ITT  $p = 0.023$ , PP  $p = 0.031$ ), and general health perceptions (PP only  $p = 0.013$ ). **CONCLUSIONS:** Both cognitive behavioral therapy and physical exercise appear to reduce climacteric symptoms and have additional benefits for health-related quality of life. If proven effective over the longer follow-up period, implementation of this intervention program, perhaps with modifications to increase compliance, will be a welcome addition to the regular medical care of breast cancer patients experiencing treatment-induced menopause.

#### A-38

##### **Coping Together: Development and Pilot Testing of a Self-Directed Coping Skills Intervention for Patient-Primary Support Person Dyads**

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**OBJECTIVES:** Patient's (Pt) and their primary support person's (PSP) distress is partially mediated by the counterpart's illness adjustment and ability to cope with challenges, which in turn substantiate the need for holistic psychosocial interventions targeting the Pt-PSP dyads. To date, effective Pt-PSP dyad-based coping interventions are delivered by highly trained health professionals, limiting their long-term sustainability and patient reach. To overcome these limitations, the research team developed a self-directed coping skills training intervention for Pt-PSP dyads. **METHOD:** A coping skills training workbook was developed to provide Pt-PSP dyads with effective strategies to manage common physical or psychosocial challenges faced in the early post-diagnosis period. Topics included in the workbook were based on the outlines of professionally-led, Pt-PSP-based coping interventions and empirical evidence in this area. Early on in the development process, the workbook was presented to 25 Pt-PSP dyads participating in an interview to evaluate its suitability and strengths/weaknesses. **RESULTS:** The workbook addresses five topics: symptom management, information-seeking, feelings and emotions, communication, and decision-making/problem-solving. This resource goes beyond mere provision of information by suggesting strategies that Pt-PSP

dyads can use to address independently, as much as possible, their concerns. This is achieved by engaging them in exercises that encourage the application of knowledge to their situation. Pt-PSP dyads ( $n = 25$ ) are currently reviewing this resource and findings will be available at the time of this presentation. **CONCLUSIONS:** A novel, evidence-based, self-directed coping skill straining intervention, which is acceptable to Pt-PSP dyads, was developed. This workbook is anticipated to provide dyads with the resources needed to appraise more positively the challenges they face and their ability to cope with these. This workbook translates cutting-edge psychosocial research and makes it available to Pt-PSP dyads. In 2010, the workbook's effectiveness in decreasing Pt-PSP dyad's anxiety will be evaluated.

#### A-42

##### **Identifying Empirical Targets for Intervention in Men with Prostate Cancer**

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**OBJECTIVES:** Prostate cancer is the most common cancer in men, excluding non-melanoma skin cancer. With increasing incidence and survival from prostate cancer, the number of men in the community living with the consequences of diagnosis and treatment is increasing. Men diagnosed with prostate cancer face a number of health and psychosocial challenges throughout diagnosis and treatment. Identifying intervention targets to improve men's quality of life is important in assisting men through their cancer journey. **METHOD:** Participants were 1074 men newly diagnosed with prostate cancer who were referred to the study by their diagnosing urologist. Participants were part of a broader longitudinal epidemiological and psychosocial study examining the patterns of care and long term outcomes for men diagnosed and treated for prostate cancer. Participants completed baseline assessments (average 25.5 days post-diagnosis) examining health concerns, psychosocial outcomes and quality of life. A subset of 131 men also completed questionnaires on lifestyle behaviours. **RESULTS:** More than one-third of men reported having high cholesterol; 15% heart disease; 40% high blood pressure; 41% arthritis; and 11% diabetes. Using body mass index as an indicator, 70% of men were obese or overweight representing a higher percentage than current norms. In addition, a higher percentage of men were sedentary or not meeting guidelines for sufficient time in physical activity than available norm data. **CONCLUSIONS:** Prostate cancer is a

disease associated with aging such that most men diagnosed are over 55 years of age. These men will often experience co-morbid chronic illnesses and are likely to be overweight and sedentary. Any intervention that seeks to make a significant impact on quality of life for men with prostate cancer should consider the broader health issues these men face and the impact this has on their health-related quality of life.

#### A-44

##### **Translating Peer Support into a Research Setting: Working with Different Priorities**

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**OBJECTIVES:** A source of support that has high uptake amongst cancer patients is peer support. However, the efficacy of peer support as a method of psychosocial intervention has not been empirically tested. We developed a randomised controlled trial of a tele-based support intervention for couples following prostate cancer designed to be delivered by peers: men who have previously undergone treatment for prostate cancer. This presentation describes the challenges of translating peer support into the research setting. **METHOD:** Nine peer support volunteers underwent extensive training to support their role. Training included: working within a research protocol, role description and boundaries, current treatment approaches, helping couples and sexuality after prostate cancer. Therapy manuals were developed to assist the peer support volunteers throughout the delivery of the intervention. The intervention aimed to support couples through diagnosis and treatment, with a focus on coping with the sexuality side-effects of treatment. **RESULTS:** Challenges experienced in undertaking this research included: identification of appropriate peers; ensuring peers worked within the boundaries of the study and their role and adhered to research protocols; monitoring intervention calls to ensure adherence to protocols; minimising inappropriate disclosures from peers; encouraging peers to engage female partners of the men with prostate cancer; and ongoing supervision. **CONCLUSIONS:** Working with peer support volunteers is an intensive process that requires in-depth training and monitoring. Peers often report frustration with the boundaries and protocols that define their role within a research context as these may not reflect their own priorities and agenda in providing support to men and their partners after prostate cancer diagnosis. Providing regular opportunities for peers to meet and discuss these challenges assists with the transition of peers into research.

#### A-45

##### **Supporting Couples Following Prostate Cancer Diagnosis: Peer Support as a Model for Intervention**

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**OBJECTIVES:** Men diagnosed with prostate cancer face a number of psychological and physical challenges. In particular, erectile dysfunction (ED) following surgery for prostate cancer is quite common. ED may not only impact on the patient but also intimate relationships with partners. A common source of support for men following a prostate cancer diagnosis is peer support. This presentation describes a pilot of a couples-based sexuality support intervention designed to be delivered by peers. **METHOD:** 13 couples undergoing surgery for prostate cancer were recruited through their diagnosing urologist. The peer support intervention focused on the challenges of diagnosis and treatment, in particular relationship enhancement and coping with ED. Therapy manuals guided the delivery of the support intervention, with 2 calls delivered pre-treatment and 6 calls delivered in the first 6 months following treatment. Couples completed psychosocial assessments at baseline, 3 and 6 months post-treatment; and intervention outcomes were recorded. **RESULTS:** Most common intervention components delivered pre-treatment were: treatment side-effects, managing side-effects, psycho-education and couple communication. Common post-treatment intervention components were: relationships and intimacy, managing side-effects, couple communication and doctor communication. At 3 months post-treatment, all participants showed significant decreases in cancer specific distress ( $p = 0.000$ ), although partners showed greater decreases than the men ( $p = 0.017$ ). Compared to pre-treatment, men showed significant increases in sexuality supportive care needs ( $p = 0.035$ ) and post-traumatic growth ( $p = 0.023$ ) after treatment. **CONCLUSIONS:** Peer support as a model of intervention following a diagnosis of prostate cancer may be appropriate and effective. Peers are able to identify and articulate with the common challenges and concerns of men and their partners following prostate cancer treatment. Our early results show that peers are able to engage not only the man but also his partner in the delivery of a couples-based sexuality support intervention.

A-46

### The Nature and Meaning of Hematological Cancer Nursing: Moving Beyond Adverse Psychosocial Consequences Towards Compassionate Presence

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**OBJECTIVES:** The purpose of this doctoral research was to explore occupational health among a little studied sub-specialty of oncology nursing, the blood and marrow transplant (BMT) nurse. While initially postulated that working with BMT patients and families could be expected to result in adverse psychosocial consequences such as compassion fatigue, burnout, moral distress and vicarious trauma, the research was expanded to include the benefits BMT nurses derived from providing care for this patient-family population. **METHOD:** A qualitative design grounded in interpretative phenomenology (Heidegger and van Manan) was used to explore the nature and meaning of BMT nursing at 3 Canadian tertiary healthcare facilities. Twelve nurses were recruited and participated in two telephone interviews each. Open-ended questions were used to elicit the stories of BMT nursing work. Two focus groups were conducted to provide the nurses with an opportunity to discuss the findings and offer their 'so what next' suggestions. **RESULTS:** Using thematic analysis, four core themes emerged: bearing witness to suffering, navigating uncertainty, comfortable in one's skin and the need for support which provided a rich description of the nature of BMT nurses' work. Compassionate Presence was a de nova finding threaded throughout the four core themes and came to reflect the meaning of BMT nursing work. The findings will be presented along with their relevance for practice, education and future research. **CONCLUSIONS:** While providing care for acutely ill patients in pain and suffering or at end-of-life may be considered emotionally overwhelming and stressful, it does not inevitably lead to adverse psychosocial consequences (compassion fatigue, burnout, moral distress and vicarious trauma) as has been suggested by researchers in occupational health and trauma. Compassionate Presence appeared to serve as a counterpoint suggesting that when nurses exhibit this quality it may potentially serve to protect them from adverse psychological effects.

A-47

### The Impact of Expectations on Experience: Further Exploring the Influence of Anxiety and Cancer Coping Styles on Chemotherapy-Naive Patients' Expected Side Effects

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**OBJECTIVES:** The experience of side effects differs between patients receiving similar chemotherapy regimens. With a lack of pharmacological explanations for such variations, previous research has highlighted how expectations of certain toxicities can impact on a patient's experience of treatment. However, not much is known about how psychological variables impact upon the creation of such expectations. This preliminary investigation aimed to improve on previous studies while further exploring the impact of anxiety and cancer coping styles. **METHOD:** Fifty-eight chemotherapy-naive patients rated their expectations of having 20 chemotherapy side effects on 100-point linear analog self-assessment (LASA) scales. Patients also completed the State Anxiety Inventory (SAI) and the Mental Adjustment to Cancer (MAC) scale. After their first chemotherapy session, 45 patients completed the same 100-point LASA scales indicating their perceived experience of the same 20 side effects. Primary nurses also rated their expectations of the patients' toxicities, to control for their influence. **RESULTS:** After controlling nurses' expectations and patients' performance status, hierarchical regressions showed patient expectations accounted for significant variance on perceived experiences of sleeping disturbance (26%), skin itchiness/scaling (25%), bleeding (17%), feeling tired (15%), mood changes (12%), and hair loss (8%). Correlations with toxicity expectations showed the coping style 'Anxious Preoccupation' to have the highest associations while 'Fighting Spirit' showed no significant relationships. State anxiety was only significantly related to expectations of nervousness and mood changes. **CONCLUSIONS:** The current study builds on our previous findings of how expectations of chemotherapy side effects can negatively impact patients' treatment experiences. These results, while only preliminary, can now guide future explorations into how coping styles can seriously impact on the perceived experience of chemotherapy, especially for patients with high levels of anxious preoccupation with their diagnosis.

A-48

### Mindfulness Based Stress Reduction - Too Stressed to Participate? Psychosocial Characteristics of Participants and Non-Participants: Initial Results From a Randomized Controlled Trial (MICA)

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**OBJECTIVES:** Mindfulness based stress reduction (MBSR) is a well-described eight-week course,

including 24 contact hours+45 min. home practice six days a week, thus quite demanding for patients. A randomized controlled trial is being conducted to evaluate the effect of MBSR on various psychosocial, lifestyle and existential outcome among Danish women with non-metastatic breast cancer (BC). Data on psychosocial characteristics of participants and non-participants will be compared in order to determine possible significant psychosocial differences. **METHOD:** A total of 338 women diagnosed with BC stage I-III, receiving standard medical care were randomized to either 8-week MBSR intervention or assessment only, while 120 eligible non-participating women only filled out the baseline questionnaire. The questionnaire contains standardized scales measuring levels of depression and anxiety, elements of mindfulness, personality, psychological symptoms, wellbeing, sleep, late effects, diet and existential well-being. Study-specific questions on socio-demographic factors, smoking, alcohol consumption, and exercise habits are included. **RESULTS:** The results of statistical analysis of similarities and differences between participants and non-participants with regard to personality, psychosocial symptom burden, existential well-being and lifestyle choices, all potentially related to stress, will be presented. **CONCLUSIONS:** Firm knowledge of both differences and similarities between participants and non-participants will inform clinicians about the acceptability of the MBSR intervention among non-metastatic BC patients in standard medical care.

#### A-50

##### **Knowledge and Self-Care Skills of Childhood Cancer Survivors Transitioning From Paediatric to Adult Care**

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**OBJECTIVES:** Survivors of childhood cancer treated in the paediatric cancer centre often transition to the adult cancer centre, yet clinical data indicates that as many as 30% are lost to follow-up. To successfully manage this transition, knowledge of their cancer history and associated risks and independent self-care skills are necessary. The presentation will describe the knowledge and self-care skills of survivors of childhood cancer at the time of transition from paediatric to adult tertiary cancer centres. **METHOD:** The knowledge and self-care skills of 44 survivors were evaluated at their last paediatric clinic visit and at their first adult clinic visit approximately one year later. These skills were assessed using self-report questionnaires. Participants were all a minimum of four

years post-diagnosis and at least two years post-treatment completion. Survivors who were significantly neurocognitively impaired and/or deemed unable to comprehend the study questionnaires were excluded. Only data from the first assessment are reported here. **RESULTS:** Participants endorsed knowing how to manage activities related to academic and vocational planning, but were less likely to report having the skills required to manage the logistics of their healthcare. One third of participants were unable to provide their specific diagnosis and over 40% could not identify their risks for specific late effects. **CONCLUSIONS:** Survivors are not exiting the paediatric system with the knowledge and self-care skills required to successfully navigate the adult health care system. This suggests that more attention needs to be placed on preparing survivors for this transition.

#### A-51

##### **Incidence and Correlates of Positive and Negative Effects of BRCA1/2 Genetic Testing on Familial Relationships: A Three-Year Follow-up Study**

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**OBJECTIVES:** Previous studies have shown that most individuals undergoing BRCA1/2 genetic testing share their test result with their first degree relatives quickly after it is disclosed. However, little is known about how the communication of BRCA1/2 test results affects the relationships between family members in the long term. We assessed the incidence of positive and negative family relationship effects of BRCA1/2 testing in the three years following result disclosure, and identified factors associated with such effects. **METHOD:** This study includes 552 French-Canadians (485 women, 67 men) who underwent BRCA1/2 testing between 1998 and 2004. Three years following result disclosure participants were asked whether having undergone genetic testing had any positive and/or negative effects on relationships with their relatives and, if so, to identify those with whom the relationship improved or deteriorated. Demographic, psychosocial and medical characteristics potentially associated with these outcomes were assessed at pre-test, and 1, 12 and 36 months post-disclosure. **RESULTS:** Globally, 13% of participants reported that BRCA1/2 testing had positive effects on their relationships, and 4% reported negative effects. The corresponding figures were 12% and 4%, and

15% and 1.5%, for women and men, respectively. Among women, both positive and negative effects were most often reported by mutation carriers and involved relationships with sisters. Having had cancer, lower education, and psychological distress were also associated with the perception that genetic testing negatively affected familial relationships. **CONCLUSIONS:** Genetic testing for breast cancer susceptibility is associated with more positive than negative effects on familial relationships. However, some individuals are at higher risk of family adverse effects following genetic testing. They and their providers may need to be alert to these unexpected effects of testing. A better understanding of how BRCA1/2 testing can positively affect family dynamics may suggest strategies for genetic services providers to help individuals derive the most from their testing experience.

#### A-52

##### **Below the Belt: Talking About Life After Prostate Cancer. Results of a Randomised Controlled Trial**

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**OBJECTIVES:** 'Below the Belt: Talking about life after prostate cancer' is a psychological group therapy intervention for men living with sexual dysfunction post radical prostatectomy that was developed and evaluated at the Royal Melbourne Hospital, Australia. This group therapy program is an 8-week structured psychological therapy group program conducted by two experienced psychologists with men more than 6 months post radical prostatectomy. **METHOD:** A total of 65 men took part in the 8-week group intervention. Participants were randomly assigned to either a wait-list group ( $n = 34$ ) or intervention group ( $n = 31$ ). All participants received the intervention. The intervention group completed three sets of questionnaires; - 8 weeks, baseline and completion of the intervention. The waitlist group completed two wait-list questionnaire sets at - 16 weeks and - 8-weeks as well as baseline and at completion of the intervention. **RESULTS:** A paired-sample t-test was conducted which indicated a number of significant changes across the intervention time as compared to the 8 week wait time. Sexual arousal significantly improved ( $t(56) = -2.49, p = 0.016$ ); Sexual drive and relationship quality significantly improved ( $t(52) = -2.86, p = 0.006$ ); Sexual Confidence significantly improved ( $t(57) = -9.12, p < 0.0001$ ); Masculine self-esteem significantly improved ( $t(57) = 2.07, p < 0.05$ ); The perception of Cancer Control significantly improved ( $t(57) = 2.54, p = 0.014$ ) and the perception of making an informed decision worsened ( $t(55) = 2.05, p < 0.05$ ). Further results will be discussed.

**CONCLUSIONS:** The results obtained as well as qualitative information gathered throughout the group program indicated that men benefit from participating in a structured group therapy program across a number of QoL domains. Men reported feeling more confident in their sexual lives, more self-confident in terms of their masculinity as well as well feeling supported by group members. This study lends strong support to the need for appropriate and timely psychological interventions for men coping with sexual dysfunction.

#### A-61

##### **Breast Cancer in a Cultural Context: Spousal Relationship, Body Image, and Emotional Distress in Arab Breast Cancer Survivors**

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**OBJECTIVES:** The cultural context of personal and spousal coping with breast cancer, especially its effects on women in traditional societies, is an area little studied. We set out to examine three major areas which are culturally constructed and also very greatly affected by breast cancer: spousal relationships, sharing household tasks, and body image, and their effects on emotional distress in Arab breast cancer patients. **METHOD:** Participants were 56 Arab breast cancer survivors and 71 age- and education-matched healthy Arab women (control group). They filled out questionnaires giving personal and medical details, spouse's support, division of household tasks, body image, and emotional distress. **RESULTS:** Breast cancer survivors reported receiving more support from their spouses, more cooperation in household tasks and higher emotional distress than the controls, while no difference was found in body image. Emotional distress was predicted by education, income, lower perceived support, and an interaction of group  $\times$  body image, indicating that body image was associated with emotional distress in the study group only. Perceived spousal support mediated the relations between education and income and emotional distress. **CONCLUSIONS:** The findings support the view of spousal support being universally associated with personal well-being. However, sharing household tasks is less expected from husbands in Arab society, so its absence does not affect women's well-being. In contrast to data from Western societies, associations between body image and distress were prominent in the survivors group only. The findings illuminate the mutual effect of illness and cultural context and the importance of cultural competence in psycho-social interventions.

## A-65

**Enhancing Psychosocial Oncology/Palliative Care:  
A Community-Based Supportive Care Continuing  
Education Program for Health Care Professionals**

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**OBJECTIVES:** A project was funded to assess the education and training needs of health care practitioners in relation to their provision of psychosocial oncology and palliative care for oncology patients and families. This presentation will describe this project development and delivery experience, highlighting important themes for continuing education of health care professionals. Of particular relevance to this conference theme will be the attention given to training in issues of distress management and hope focused communication skills. **METHOD:** The project was structured in three phases: Networking and Needs Assessment (12 months): Focus groups with health care professionals, patients and families to identify knowledge and skill areas for development. Development, Test Piloting and Delivery of Education Services (18 months): Content analysis of focus group information to identify themes for continuing education and development of related training modules. Project Evaluation and Dissemination (6 months): Summative and formative evaluation strategies and final project report. **RESULTS:** 217 health care professionals and 75 patients/families have been interviewed across 20 rural communities and small urban centers. This represents the consumer base of the current health care system designed to administer both generalist and specialist health care programs and services over a large geographically disperse region. Content analysis yielded a series of 9 continuing education modules. On-site delivery of many of these modules has taken place. It is anticipated that many more will be scheduled in 2010. **CONCLUSIONS:** While health care professionals more readily identified specific skills set requirements for training, patients and families reported needing more human relationship attributes from their care providers, such as compassion and empathy. Nine training modules have been developed to address these findings as follows:

Introduction to Psychosocial Oncology and Palliative Care

Distress and Hope

Counseling the Cancer Patient and their Family

Nutrition

Pain and Symptom Assessment and Management

Communication

Dying and Death

Grief and Bereavement

## A-74

**The Right To Know vs. The Duty To Be Aware**

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**OBJECTIVES:** Should adult terminally ill patients be told about their impending deaths? How much and when should they be told? Who should make the decision? **METHOD:** Theoretical conceptualization of the 'right to know' in medical setting was used. 'Israel's Dying Patient Law' which emphasizes autonomy and the right to know, establishes the physician's duty to inform dying patients of their prognosis. We will contrast the interpretation of the right to know with three different types of rights: the right to education, the right for parenthood, and the right for freedom of speech. **RESULTS:** Discussion: The right to know is a moral value, and knowledge about an impending death has practical advantages. Rights and duties can be viewed as diametrically positioned - with rights beginning where duties end. Rights are created when human needs are not met, and are subsequently recognized socially and legally. A legally recognized right assumes someone else has a duty to fulfill it. **CONCLUSIONS:** The law demands that the doctor tell the patient the 'whole truth'. But is there a duty to know 'all' that there is to know? What happens when disease impairs cognitive ability and emotional distress precludes full disclosures? What is the level of awareness be considered suitable for a 'good death'? How do we define 'awareness'? We must be cautious that the right to know does not become a burdensome obligation to be told.

## A-75

**Neurocognitive Assessment in Pediatric Cancer Patients - Our Experience in Tertiary Care Cancer Center in India**

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**OBJECTIVES:** Neurocognitive problems are a frequent long-term outcome following treatment of cranial irradiation and/or antimetabolite chemotherapy. Cranial radiation is known to adversely affect the developing central nervous system (CNS), which subsequently leads to neurocognitive deficits. Existing researches have shown that impairments within the domains of memory, processing speed, and attention occur very commonly in pediatric cancer patients and this can adversely affect academic, social, and vocational success, thereby impacting quality of life from

childhood to adulthood. **METHOD:** A retrospective analysis, of all new referrals for Neurocognitive testing to our unit of an oncology tertiary care hospital, over a 3 year period was carried out. A proforma was designed to note demographic variables & referral patterns. Neurocognitive testing details were also evaluated. Descriptive statistics are used. **RESULTS:** A total of 87 cancer patients were assessed on neuro cognitive tests between 3–19 years of age. All patients were assessed on standardizes tests. Majority of were referred by medical oncology mainly for scholastic difficulties and adjustment issues. Overall, approximately 22(25%) patients had average intelligence and 21(24%) had mild to moderate retardation. 15(17%) patients were of borderline intelligence and 18(20%) with above average intelligence. Details of domain impairments are discussed. **CONCLUSIONS:** Majority of patients had adjustment and behavioral problems and scholastic difficulties despite average and borderline intelligence. **Research Implication:** Identification of domains in neuropsychological testing in different groups of children with cancer, based on various factors like disease, psychological, socio-cultural, modalities of treatment used should be studied further. **Clinical Implications:** Neurocognitive testing prior to and post chemotherapy as well as radiation can be more helpful in assessment of functional status and therapeutic intervention planning.

#### A-77

##### **Understanding and Improving Breast Cancer Self-Management Through Social Networks and Infrastructures within Portuguese-Speaking Communities in Toronto: A Pilot Study**

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**OBJECTIVES:** The purpose of this study is to describe Portuguese speaking women's social and cultural capital, behavior patterns and networks and their challenges, barriers, readiness and intentions to use breast cancer self-management services. Moreover, within the aim of the present study is to explore the potential of creating and consolidating new supportive networks as perceived by health care professionals, social services providers, breast cancer survivors and other community members. **METHOD:** This study embraces

a critical ethnography approach. The researchers are interested in both service providers and women's perspectives on using or refusing services that can improve breast cancer self-management. Interviews and focus groups are conducted with community members including at least 25 Portuguese speaking women living with breast cancer and community providers of social and health care services until reaching data saturation. The analysis will be done through thematic and content analysis. **RESULTS:** The study is ongoing. Currently, five health care organizations serving Portuguese population have been contacted. We are in the process of planning a focus group with men from the Portuguese community. The individual interviews with Portuguese women affected by breast cancer have been completed. **CONCLUSIONS:** The findings from this study will contribute to the body of knowledge related to the uptake of breast cancer services by Portuguese speaking women in the greater Toronto area and to building socio-ecological strategies for chronic disease prevention and management. The findings will also be used to guide and inform future program development of clinical services to be offered to this population by the Breast Cancer Survivorship Program at Princess Margaret Hospital, Toronto, Ontario, Canada.

#### A-83

##### **'Meaning and Purpose', A Pilot Study of 'MaP Therapy' in an Advanced Cancer Cohort**

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**OBJECTIVES:** This paper describes the development and piloting of a brief meaning and purpose (MaP) focused psychotherapy. **METHOD:** Two previous studies considering the role of meaning in adjustment to cancer, conducted by the authors, offered a model to develop this intervention. A cohort of patients with advanced cancer participated in the therapy and was interviewed about this experience using qualitative methods. **RESULTS:** Participants' descriptions of their MaP therapy experience illustrated that each of our goals (promoting coherence, encouraging meaning and purpose while recognising suffering and strengthening meaning in relation to others) were all relevant to this therapy. Specific themes described in their experiences offered useful information about the process of MaP therapy and meaning based therapy in general. **CONCLUSIONS:** The themes arising from this study suggest that MaP therapy encourages reflection, offers insights, can be confronting but can also allow the participant to 'shift' their perspective and focus on meaningful goals. This therapy can be counterintuitive to both patient and counsellor and yet has the potential to

positively impact on adjustment in the setting of advanced cancer.

#### A-84

##### **Don't Hold Back: Exploring Work Strain and Stress Out Of The Oncologists' Perspective**

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**OBJECTIVES:** The purpose of the present pilot-study, conducted within the framework of a Trans-European Mobility Programme for University Studies (TEMPUS), was to explore major difficulties and strain experienced by medical professionals in the context of their daily oncological practice. The project consortium comprised partners from France, Luxembourg and Russia; data collection for the present study was realized in Russia. **METHOD:** Data were collected in 2008 in medical schools and affiliated hospitals. The study sample consisted of  $N = 158$  participants; thereof 29% were oncologists, 24% general practitioners and 57% were medical students. As for the methodology, anonymous paper-pencil questionnaires were conjointly developed by researches and practitioners, and translated by the respective project partners. The completed questionnaires were assembled locally and transferred to Luxembourg for data coding and statistical analyses. **RESULTS:** On a descriptive level, results elucidated increased levels of subjective stress in oncologists and general practitioners compared to the medical students. On a multivariate level, hierarchical cluster analyses, assembling subjects with respect to their experienced stress intensity and problem frequency, resulted in a three-cluster solution: The largest cluster regroups physicians with 'moderate' self-reported strain, whereat the two latter clusters assemble physicians categorized at 'high risk' for burnout. **CONCLUSIONS:** All in all, the findings stressed the overall need and the explicit request for a problem-tailored psycho oncological training programme in medical personnel. A first draft of a modular training programme in development will be presented and discussed.

#### A-85

##### **Palliative Care in Canada: The Economic Perspective for Families and Health Care System**

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**OBJECTIVES:** Demographic changes and an increase in life expectancy have resulted in an aging of the population. This situation has increased the demand for health and social services for people with diminishing abilities or a terminal disease. The purpose of this study was to provide policy makers, policy analysts and other groups with information regarding the economic burden of personally borne costs attributable to the palliation phase of care and the context in which they occur. **METHOD:** Prospective survey of 248 family caregivers looking after terminally ill patients in five regions across Canada. This study was comprised of four specific objectives: Identify and measure resource utilisation (goods/services) during the palliative phase of care; estimate resource costs; identify who delivers these goods and services (public health care system, families, private for profit and non profit, voluntary sector) and determine who (patient, informal caregiver, government, volunteer organisations, etc.) pays for what. **RESULTS:** The study provides: descriptive data for the physical resources average personal costs; estimation of health care service utilisation and related costs. In regard to cost sharing, the government and families sustained respectively 71.3% and 26.6% of the mean total cost per patient. **CONCLUSIONS:** The study results allow us to draw a clear picture that highlights the extent to which, and the areas that, families need to be assisted in their efforts to care for their loved ones.

#### A-87

##### **The Production of a Resource Manual to Assist in the Education of Those at Risk of Developing Lymphedema**

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**OBJECTIVES:** The development of lymphedema can be a physical complication accompanying the diagnosis and treatment of cancer. This process can lead to limitations in physical function and negative feelings about self image. With timely education and possible intervention lymphedema can sometimes be avoided or if it develops its progress can be mitigated. Our aim was to develop an educational tool which would assist in the education of those at risk of developing lymphedema. **METHOD:** An amalgamation of lymphedema education and treatment resources was completed. The language and descriptions utilized were altered to facilitate patient acquisition of knowledge. Areas attended to include lymphedema of the upper extremity, lower extremity, trunk, head and neck. The focus was to highlight signs and symptoms to be monitored, risk reduction practices and self management techniques. **RESULTS:** A partnership of Physiotherapists in

the Psychosocial Oncology Program at the Ottawa Hospital Cancer Centre was able to produce a resource manual to support the population they serve. The guide defines Lymphedema, outlines its risk factors, highlights signs and symptoms to be aware of, offers treatment options and predominantly focuses on self management strategies. **CONCLUSIONS:** This guide has now become the framework for a monthly education session being offered to all patients of The Ottawa Regional Cancer Centre. It was felt that a one hour presentation would be the most effective and efficient method of reaching and educating a wide population of at risk cancer survivors.

#### A-88

##### **A Metasynthesis Study of the Hope Experience of Family Caregivers of Persons with Chronic Illness**

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**OBJECTIVES:** Health care of persons with chronic illness is increasingly being provided by family caregivers. A key psychosocial resource among family caregivers to deal with their caregiving experience is hope. Given the importance of hope to family caregivers, the development of knowledge in this area is critical. The purpose of this metasynthesis study was to describe the hope experience of family caregivers of persons with chronic illness. **METHOD:** The metasynthesis of qualitative research studies followed the procedures outlined by Sandelowski and Barroso (2007). The procedural steps were: (a) comprehensive search, (b) appraising reports of qualitative studies, (c) classification of studies, and (d) synthesis of the findings. Eight databases were searched for qualitative and mixed method studies of the hope experience of primary caregivers caring for persons of all ages with chronic illnesses between 1988 and 2008. Study findings were analyzed. **RESULTS:** Fourteen studies were included. Several types of coexisting hope (possibilities for positive future outcomes) were found that varied with internal, external, and situational factors. The degree of uncertainty with respect to achieving the hopes of family caregivers of persons with chronic illness determined which processes or pathways of hope they engaged in to strengthen their hope. Hope outcomes were identified. A new conceptual model of hope emerged entitled: Transitional Dynamic Possibilities Within Uncertainty.

**CONCLUSIONS:** The new model proposes a unique understanding of hope that has not been previously found in the literature. It clarifies the relationships between uncertainty and hope, factors influencing hope, and hope outcomes. Factors influencing hope and the outcomes of hope may play a role in assessing hope, and differing pathways of hope provide a foundation for future hope interventions. Hope was essential to the health and well-being of family caregivers of persons with chronic illness.

#### A-89

##### **Improving Access to Psychosocial Oncology Care Using ESAS Scores**

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**OBJECTIVES:** Research has shown that a significant gap exists between the expressed psychosocial needs of cancer patients and their access to psychosocial oncology care (JCC Patient Satisfaction Survey, 2008). The aim of this study was to assess whether using the Edmonton Symptom Assessment Scale (ESAS) scores of anxiety and depression as a screening tool for Oncology patients would improve access to psychosocial services. **METHOD:** ESAS scores of all patients coming to a regional cancer centre for a 2 week period in January 2009 were reviewed. Patients with a score of  $\geq 7$  on anxiety or depression are reported here. These patients were contacted by a psychosocial oncology professional to discuss their self-assessed scores. The patients were invited to schedule a psychosocial appointment. The number of patients eligible for contact, those contacted, demographics and patient reported concerns, were collated. **RESULTS:** Ten percent of patients who completed the ESAS (34/344) had a score  $\geq 7$  on anxiety = 9.0% (31/344) and depression = 5.2% (8/344). Of these, 24 (70%) were contacted. Fifty four percent reported concerns around financial, resource, or relationship issues. Of patients contacted 11(45.8%) were interested in scheduling a psychosocial appointment. Females were more likely to request an appointment than males (8:3), and 6 patients (54.5%) had been previously referred by their oncology team. **CONCLUSIONS:** This study further demonstrates that a clinically significant number of cancer patients report a high degree of anxiety and depression at their regular clinic visits as documented in the literature. Some ESAS scores may reflect situational or instrumental issues which can be effectively addressed by a social worker. A score of  $\geq 7$  for anxiety or depression may represent a reasonable clinical threshold for an automatic referral to psychosocial oncology services.

## A-91

**Fear, Fate and Fatality: Portrayal of Cancer in Indian Film Media**

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**OBJECTIVES:** Cancer is an emerging health care problem in India and is associated with tremendous fear and stigma in the country. Studies suggest that Indian public holds inaccurate beliefs and misconstrued opinions about Cancer. Bollywood (Hindi films) is inextricably linked to Indian socio-cultural fabric and plays a crucial role in influencing the beliefs and attitude of its population. Are myths and fear about cancer being promoted through movies? This paper explores the cinematic representations of cancer in popular Bollywood films. **METHOD:** The review was limited to Hindi movies released between 1950 and 2008. Movies depicting or having cancer as central theme were selected for study. In each of these films the depiction of cancer was a key factor or the turning point of the story and one of the protagonists suffers from cancer. The content and characters of the movies were analyzed in the context of cancer and were related to contemporary oncology knowledge and practice. **RESULTS:** This analysis of 20th-century Hindi films with cancer themes revealed (1) Fear, fatalism and inevitability are the common themes associated with cancer in the films (2) Bollywood films rarely depict common cancers. Cancers like leukemia and brain tumors predominate because they are considered 'visually acceptable' (3) Contemporary health policy issues and Important clinical oncology issues, including treatment, symptom management, amelioration of side effects, and facilitation of the process of dying, have not been reflected in movies. **CONCLUSIONS:** Cinematic portrayals are not representative of the types of cancer that are prevalent among Indians, nor are filmmakers concerned with realistic aspects of Cancer. Altogether, Bollywood films have remained deficient in their attempt to represent adequate and appropriate cancer knowledge and practice. The depictions lacked informed attitudes about cancer and the role of medical intervention to overcome it. In short, learning about cancer from the glamour world could be termed a 'gloomy affair' for the Indian audience.

## A-92

**A Support Group Programme for Family Members in Palliative Care**

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**OBJECTIVES:** Relatives were invited to take part in a support group programme during the late palliative phase of their family member. The group met once a week, for six weeks, and each meeting had a theme with a professional guest from the specialized palliative team. The purpose of the study was to describe relatives experiences of the support group programme and the subsequent impact on their lives as relatives of a terminally ill person. **METHOD:** Qualitative interviews were chosen as the data collection method and ten persons were interviewed after participation in the support group programme. A strategic selection was made with regards to the participants age, gender and relation to the patient in order to get as many experiences as possible. The analysis was inspired by the phenomenological method as described by Giorgi (1989). **RESULTS:** The relatives' experiences were categorised into six key constituents: confirmation; insight into the gravity of the illness; sense of belonging created by similar experiences; participation in the care system; being able to rest; and strength to provide support for the patient. These six constituents resulted in a sense of safety in relation to the patient, the illness, the nursing staff and the care unit. **CONCLUSIONS:** Relatives to terminally ill persons experienced support in the support group and the participation provided relief in their day to day life. The study's findings show that interventions of this kind may be integral to the relatives' ability to handle their situation when caring for a terminally ill family member.

## A-97

**Screening for Distress in Cancer Patients: The Italian Society of Psycho-Oncology Multicenter Study on the Distress Thermometer**

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**OBJECTIVES:** The need to facilitate the screening for emotional distress has led the NCCN panel to develop the Distress Management guidelines which include the routine use of the Distress Thermometer (DT) as a specific tool. The DT has been validated in several cultural contexts (e.g. French-speaking countries, Japan, Turkey, Netherlands). The aim of the study was to validate the DT in the Italian cultural context. **METHOD:** In 2 days of an index-week on baseline (T0) and follow-up (3 months – T1) the DT, the Hospital Anxiety Depression Scale (HADS) and the Brief Symptom Inventory (BSI-18) were administered to cancer out-patients of 38 cancer centers in Italy meeting the following criteria: Karnofski Performance score 80, no cognitive disorder, age between 18

and 70 years, any site and stage. **RESULTS:** 1,108 patients (age  $53.27 \pm 9.27$  years; 70% females, 30% males) participated at T0 and 748 (67%) at T1. No relationship was found between the DT score and age, stage, while DT score was significantly associated with HAD-Anxiety, HAD-Depression, HAD-Total, BSI Somatization, Anxiety, Depression and Total. A cut-off score 4.5 on the DT maximized sensitivity and specificity in identifying HAD-S cases and BSI-18 cases. **CONCLUSIONS:** The study indicated that the DT is a easy-to-administer instrument and confirmed previous results on the DT cut-off score to be employed in order to identify cases of distress among cancer patients in Italy. Evaluation of more dimensions rather than only distress is important in cancer settings, as shown by the 'aspecific' correlation of DT with different emotional areas explored (i.e. anxiety, depression, somatization).

#### A-101

##### **Coping Together: Development and Pilot Testing of a Self-Directed Coping Skills Intervention for Patient-Primary Support Person Dyads**

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**OBJECTIVES:** Patient's (Pt) and their primary support person's (PSP) distress is partially mediated by the counterpart's illness adjustment and ability to cope with challenges, which in turn substantiate the need for holistic psychosocial interventions targeting the Pt-PSP dyads. To date, effective Pt-PSP dyad-based coping interventions are delivered by highly trained health professionals, limiting their long-term sustainability and patient reach. To overcome these limitations, the research team developed a self-directed coping skills training intervention for Pt-PSP dyads. **METHOD:** A coping skills training workbook was developed to provide Pt-PSP dyads with effective strategies to manage common physical or psychosocial challenges faced in the early post-diagnosis period. Topics included in the workbook were based on the outlines of professionally-led, Pt-PSP-based coping interventions and empirical evidence in this area. Early on in the development process, the workbook was presented to 25 Pt-PSP dyads participating in an interview to evaluate its suitability and strengths/weaknesses. **RESULTS:** The workbook addresses five topics: symptom management,

information-seeking, feelings and emotions, communication, and decision-making/problem-solving. This resource goes beyond mere provision of information by suggesting strategies that Pt-PSP dyads can use to address independently, as much as possible, their concerns. This is achieved by engaging them in exercises that encourage the application of knowledge to their situation. Pt-PSP dyads ( $n = 25$ ) are currently reviewing this resource and findings will be available at the time of this presentation. **CONCLUSIONS:** A novel, evidence-based, self-directed coping skill straining intervention, which is acceptable to Pt-PSP dyads, was developed. This workbook is anticipated to provide dyads with the resources needed to appraise more positively the challenges they face and their ability to cope with these. This workbook translates cutting-edge psychosocial research and makes it available to Pt-PSP dyads. In 2010, the workbook's effectiveness in decreasing Pt-PSP dyad's anxiety will be evaluated.

#### A-107

##### **Sexual Dysfunction After Breast Cancer: Predictors and Patients' Needs for Counseling**

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**OBJECTIVES:** Several treatment-related and psychosocial factors have been identified for the explanation of sexual dysfunction (SD) after breast cancer. However, not all women develop SD and little is known in what they are different from the symptomatic patients. The purpose of the present study was to identify characteristics and counseling needs of patients with SD after breast cancer treatment as a prerequisite to improve quality of care in psycho-oncology. **METHOD:** Internet-based survey including  $N = 292$  breast cancer patients containing three sections: (1) sociodemographic and medical history, (2) validated questionnaires assessing subjectively reported menopausal complaints (MRS), anxiety and depression (HADS), body image (EORTC-QLQ-BR23), sexuality (FSFI) and relationship satisfaction (PFB) and (3) patient's experience and needs with regard to counseling on sexuality. Multiple logistic regression analysis was used to identify the impact of treatments and psychological factors (entered blockwise) on sexuality in patients with and without SD. **RESULTS:** According to FSFI cut-off score, 76% of the respondents showed clinically relevant levels of SD. The impact of chemotherapy and antihormonal therapies for the development of SD was lost after entering psychological factors. Most significantly, climacteric symptoms, relationship problems and lower levels of anxiety contributed to SD. Patients with SD

most often express their wish to talk about sexuality with partners and physicians while 30% wish for psychological support together with the partner. **CONCLUSIONS:** The present survey points to the role of psychological factors for the explanation of *SD* after breast cancer. Patients with high levels of climacteric complaints and relationship difficulties are prone to have *SD*. With the contraindication of hormone replacement therapy after breast cancer, non-medical and psychobehavioral and partner including therapies have to be found and evaluated to support the patient in her sexual adaptation process after breast cancer.

#### A-108

##### **Beyond Communication: A Training Package for Hospital Staff in the Detection and Management of Psychological Distress: Can Nurses Be Trained to Deliver This Package as Successfully as Clinical Psychologists? - Preliminary Results**

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**OBJECTIVES:** In the UK, a Four Tier model of Psychological Support suggests staff at Level 2, such as nurses and doctors should be proficient in the detection and management of psychological distress. A training package was developed, administered across the region, and evaluated thoroughly. A significant increase in staff confidence was evidenced through pre and post questionnaires. This study investigates whether other staff can be trained to administer the programme as effectively as the authors. **METHOD:** Senior staff including Nurse Specialists, Occupational Therapists, Counsellors and Psychologists were trained by the author to deliver the package, in order to increase access to the programme. The pre and post questionnaires were used to assess increases in staff confidence. All facilitators retained access to the author (a Psychologist) for advice and support. Three modalities are compared - Nurse led, Nurse and Psychologist led (not the author Psychologist) and those run by the author. **RESULTS:** Staff confidence significantly increased in all areas assessed, in all three modalities. There is no significant difference in the level of increase in confidence between the groups ( $F = 0.16, p = 0.85$ ). **CONCLUSIONS:** These are preliminary results with small numbers, however, they suggest that facilitators can be trained to deliver the programme as effectively as the author, even if facilitators are

not Psychologists but nurses with access to support and advice. This has far reaching implications given the shortage of Psychologists in cancer care in the UK. Six month follow-up data is being collected as well as further data as more courses are run around the country.

#### A-110

##### **Women's Constructions of the 'Right Time' to Consider Decisions about Risk-Reducing Mastectomy and Risk-Reducing Oophorectomy**

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**OBJECTIVES:** Women who carry a BRCA1/2 mutation are presented with surgical options to reduce their risk of breast and ovarian cancer, including risk-reducing mastectomy (RRM) and oophorectomy (RRO). Growing evidence suggests a sub-group of women do not make decisions about RRM and RRO immediately following genetic testing, but rather, consider these decisions years later. The purpose of this research was to describe how women construct the 'right time' to consider decisions about RRM and RRO. **METHOD:** In-depth interviews were conducted with 22 BRCA1/2 carrier women and analyzed using qualitative, constant comparative methods. **RESULTS:** The women constructed the 'right time' to consider these decisions to be when: (1) decisions fit into their lives, (2) they had enough time to think about decisions, (3) they were ready emotionally to deal with the decisions and the consequences, (4) all the issues and conflicts were sorted out, (5) there were better options available, and (6) the health care system was ready for them. **CONCLUSIONS:** These findings offer novel insights relevant to health care professionals who provide decision support to women considering hereditary breast and ovarian cancer risk-reducing surgeries.

#### A-111

##### **Preserving the Self: The Process of Decision Making about Hereditary Breast and Ovarian Cancer Risk-Reduction**

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**OBJECTIVES:** Women who carry a BRCA1 or BRCA2 gene mutation have up to an 88% lifetime risk of breast cancer and up to a 65% lifetime risk of ovarian cancer. Strategies to address these risks include cancer screening and risk-reducing surgery (i.e. mastectomy and salpingo-oophorectomy). **METHOD:** A grounded theory study with 22 BRCA1/2 mutation carrier women was conducted to understand how women make decisions about these risk-reducing strategies. **RESULTS:** The process of preserving the self was the overarching decision-making process evident in the participants' descriptions. This process was shaped by contextual conditions including the characteristics of health services, the nature of hereditary breast and ovarian cancer risk-reduction decisions, gendered roles, and the women's perceived proximity to cancer. The women engaged in five decision-making styles and these were characterized by the use of specific cognitive and emotional decision-making approaches. **CONCLUSIONS:** These findings provide theoretical insights that could inform the provision of decisional support to BRCA1/2 carriers.

#### A-114

##### **Some Couples Find Sex to be Satisfying While on Androgen Deprivation Therapy for Prostate Cancer**

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**OBJECTIVES:** Androgen deprivation therapy (ADT) is a common treatment for both localized and advanced prostate cancer. ADT is associated with many life changing physiological and psychological side effects for patients, including erectile dysfunction, loss of libido, reduced physical ability, increased emotional lability and bodily feminization. As a consequence of these side effects, many couples report a loss of sexual intimacy and an erosion of the relationship bond. **METHOD:** A qualitative study was conducted to determine how patients and their partners adjust to the changes brought about by ADT. Transcripts from interviews with eighteen patients and their partners were analyzed using a grounded theory methodology. **RESULTS:** Most patients were told that continuation of a sexual relationship would likely be impossible while the man is androgen deprived. Some couples were able to maintain satisfying sex despite alterations in sexual function. A second group accepted that sex was not possible and were content with this change. A third group was distressed because, while they could not accept the end of their sexual relationship, they were unable find a

satisfying way to maintain sex. **CONCLUSIONS:** These findings raise questions about what information men and their partners should be given, regarding potential changes in sexual functioning while on ADT. It may be beneficial for all couples to learn how some couples are able to maintain satisfying sex while the man is androgen deprived.

#### A-115

##### **A Preemptive Educational Intervention to Reduce the Psychological Distress of Androgen Deprivation Therapy on Prostate Cancer Patients and Their Female Partners: Results of an RCT**

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**OBJECTIVES:** Improved prostate cancer detection has resulted in more patients beginning androgen deprivation therapy (ADT) earlier and remaining on it for extended durations. ADT is associated with many distressing side effects including weight gain, loss of muscle mass, breast growth, loss of libido, erectile dysfunction, genital shrinkage and depression. Currently, little is done to help patients and their partners manage with this life altering treatment. **METHOD:** Research questions: Do patients and partners fare better when fully informed of the possible side effects and provided with suggestions for adjusting to ADT? Is the intervention more effective when given before vs. after initiation of ADT? Procedure: Couples completed baseline questionnaires assessing QoL, ADT knowledge, sexual function, and intimacy. After stratification by sexual activity, couples were randomized to receive the intervention immediately after beginning ADT, or in six months. Couples were reassessed at 3, 6, 9 and 12 months. **RESULTS:** The lives of couples in both groups were improved by a two part intervention. The first part consisted of providing couples with a comprehensive booklet that explained the various side effects associated with ADT and potential solutions for each. The second part was an educational sessions with a male and female counsellor where the issues in the booklet pertinent to the couple were discussed. A preference for receiving the intervention immediately was expressed by both groups. **CONCLUSIONS:** Although ADT may delay the onset of cancer symptoms, life without testosterone can be profoundly challenging for both the patient and his partner. Providing information at the time of treatment initiation about what to

expect, as well as suggestions for management, has been found to help couples successfully adjust to ADT.

#### A-122

##### **Hidden Behind the Cultural Curtains: Betel Quid as a Surrogate for Smokeless Tobacco Use Among South Asian Immigrants in British Columbia**

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**OBJECTIVES:** Oral cancer is a leading cancer in South Asian (SA) countries which is largely attributed to betel quid (BQ) chewing in addition to alcohol and tobacco. In British Columbia (BC), oral cancer incidence rates among SA men and women are higher than the general population and more commonly involve the gums and cheeks (sites associated with BQ chewing). However little is known about patterns of access, marketing and usage of BQ. **METHOD:** Using an interpretative ethnographic approach, data were collected through participant observations and semi-structured interviews in a SA community situated in an urban setting in BC. Observations were made at SA restaurants, stores and shops where BQ was sold. Interview participants were recruited from these settings. Research team meetings were held to develop a coding framework, discuss analysis and interpretations of these data. N-vivo software was used to facilitate data analysis. **RESULTS:** Field work revealed that BQ was readily available in SA stores and restaurants, its frequent use was supported as a common cultural practice following meals and at social functions because of its qualities as mouth freshener. However, forms of BQ included smokeless tobaccos which were marketed as a 'safer' and socially acceptable alternative to smoking. Packaging for BQ (with tobacco) did not include health warnings; and no sales restrictions for minors were evident. **CONCLUSIONS:** BQ with or without smokeless tobacco is a risk factor for oral cancer. There is a need to include BQ into tobacco control policy: for example, appropriate taxation; packaging with language-appropriate health warnings; advertising bans; limits on purchase by minors; and no visibility on store shelves. This study generates new knowledge that can be used for targeted oral cancer prevention and health promotion programs for SA in BC.

#### A-125

##### **Identification of Patient Reported Distress by Clinical Nurse Specialists in Routine Oncology Practice: A Multicentre UK Study**

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**OBJECTIVES:** There is uncertainty regarding how well cancer clinical nurse specialists are able to identify distress in routine care. We aimed to examine the recognition of patient reported distress by nurse specialists across three sites in the East Midlands (UK). **METHOD:** We approached over 100 nursing staff who reported on 433 interactions. Of these we received 350 clinical opinions (80.8%). Clinicians were asked to report on their clinical opinion using two methods i. a precise narrow focus and ii. An intentionally broad focus. Distress was defined by the Distress Thermometer (DT) at a cut-off of four or higher. Nurses opinion was without the aid of scales or tools. **RESULTS:** Looking for just distress, detection sensitivity was 11.2% (95% CI 6.9% to 16.9%) and detection specificity 98.3% (95% CI 95.2 to 99.7%). Looking for any mental health complication sensitivity was 50.6% and specificity 79.4%. There was significantly better performance using the broad approach. Clinicians had better ability to recognize higher severities of distress but no difference according to the stage or type of cancer. **CONCLUSIONS:** Nurses working in cancer settings have difficulty identifying distress using their routine clinical judgement but may benefit from looking for broadly defined mental health problems rather than distress alone. Evidence based strategies that improve detection of mild and moderate distress are required in routine cancer care.

#### A-126

##### **What Is the Optimal Screening and Case Identification Tool for Depression in Cancer and Palliative Settings: A Meta-Analysis of Diagnostic Validity Studies**

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**OBJECTIVES:** Despite many reviews there is still uncertainty about which is the optimal tool for identification of depression. We examined all possible instruments in both a screening capacity and a case-finding capacity. Screening refers to the

systematic application of a test in order to optimally rule-out those without the disorder with minimal false negatives. Case-Finding refers to the application of a test in order to optimally identify those with the disorder with minimal false positives. **METHOD:** There were 41 valid analyses involving almost 5000 patients, 29 in oncology settings and 12 in palliative settings. We reviewed the following methods: BDI, BDI fast screen, PHQ-9, PHQ-2, the two stem questions, GHQ-12 and GHQ-28, CES-D, GDS, GDS-15, Zung, HADS-D, HDRS. Unfortunately most had not received independent validation. **RESULTS:** From 29 non-palliative analyses there were three studies on the BDI-II, 4 studies using the DT and remainder of studies involved the HADS. The optimal method was the BDI-II although the DT was good in a screening capacity. Across 12 palliative analyses there were 6 studies of a single question, three studies involving two Questions and 3 studies of the EPDS. The optimal initial method was the two question approach. **CONCLUSIONS:** Although no single method is flawless, considering accuracy and efficiency, a simple two-question approach (followed by the BD) appears to be the optimal case-identification method for depression in cancer settings from published data. However a positive finding must be followed by further clinical action.

#### A-127

##### **Witnessing Suffering Transforms Suffering: Applying Video and Documentary Film in End-of-Life Counseling**

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**OBJECTIVES:** The purpose of this study is to illustrate the rationale and demonstrate the utility of video/film as a medium in End-of-Life counseling. Facing the reality of death is not only an once-in-a-lifetime experience for advanced cancer patients, but also an experience that goes beyond words. End-of-Life counseling is conducted under the conditions of patients' physical deterioration, declining cognitive ability, and uncertain lifespan. Developing efficient and effective methods to fulfill the psycho-spiritual needs of advanced cancer patients and their families is critically important. **METHOD:** Utilizing video/film in facilitating advanced cancer patients' psycho-spiritual transformation was developed at the Heart Lotus Hospice Palliative Care Ward at Tzu-Chi Buddhist Hospital in Taiwan from 2002 to 2005. More than ten short films describing patients' psychological growth and pursuit of life's meaning were made and applied in End-of-Life counseling. This study articulates the theoretical and practical frameworks

underlying the development of using video/film in End-of-Life counseling and attempts to propose various dimensions in applying video/film in clinical work. **RESULTS:** Three practical frameworks include Healing in Actions, Healing in Rebuilding Relationships and Healing through Transpersonal Connection. Assessment before utilizing video/film is proposed. Eight dimensions of applying video/film are summarized with examples including helping patients gain an understanding of the future, regulating family relationships, extending meanings of limited life, facilitating discussion through images, providing families a different perspective to see their beloved ones, witnessing existential experience, and facilitating reflection and transcendental understanding. The role of psychotherapist and ethical issues are discussed. **CONCLUSIONS:** This study demonstrates that video/film serves as a vehicle which deepens advanced cancer patients' perception of living and dying, and facilitates patients' psycho-spiritual changes. Video/film can be applied in individual, family, and group counseling and can be integrated into the holistic care given by a Multi-disciplinary team in a palliative care unit or hospice setting. 'Witnessing others' suffering transforms the witness' own suffering' is not only a concept in Buddhism but can be concretely practiced in End-of-Life counseling.

#### A-128

##### **What is the Physicians' Perception on Giving Bad News in Oncology? Qualitative Analysis of the Quality Criteria Regarding the Disclosure of Bad News**

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**OBJECTIVES:** In order to decrease psychological impact of bad news on cancer patients and improve physician-patient communication, protocols for breaking bad news have been developed. Despite these protocols, there still seems to be a gap between physicians' perception on giving bad news and patients' preferences regarding the disclosure of bad news in oncology. The aim of this study was to explore the physicians' perception on quality criteria regarding the disclosure of bad news in oncology. **METHOD:** A qualitative exploratory design was adopted to capture physicians' perception on giving bad news in oncology. Using semi-structured interviews, thirty-one physicians facing the disclosure of bad news in their practice were asked to explain us the way they deliver bad news, and their quality criteria regarding the disclosure of

bad news. Interviews were audiotape-recorded and subsequently transcribed verbatim. Data collected were coded according to thematic analysis. **RESULTS:** Giving information to the patient is the most important quality criteria reported by physicians, concerning the disclosure of bad news. Physicians also pay attention to their patients' reactions. They want to ensure their patients' understanding. Surprisingly, physicians are not satisfied of their disclosure if patients' emotional reactions are too intensive. Nothing is reported regarding empathy or emotional support provided to patients. **CONCLUSIONS:** For physicians, the quality criteria concerning the disclosure of bad news lies in giving the information and ensuring that this information is understood by patients. Despite an improvement concerning information given to patients, there is still a lack of emotional support provided by physicians to their patients. These first results bring us to question the effect of the way the bad news is broken on the patients' psychological wellbeing.

#### A-129

##### **Quality of Life and Psychological State in Patients with Choroidal Melanoma: A Longitudinal Study in a French Cancer Centre**

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**OBJECTIVES:** To describe patients' quality of life and psychological state during the course of conservative treatment for choroidal melanoma (CM), the most common primary intraocular malignant cancer in adults. Mortality rate is around 50% by 10 years after treatment. Treatments for CM generate largely unknown consequences on the level of the quality of life (QoL) and psychological status. Prospective published work is relatively rare and their results are not consistent. **METHOD:** Population: 69 patients treated for CM by conservative treatment (proton beam irradiation or iodine plaques) in a French cancer centre of reference for a CM. Tools: QoL (EORTC-QLQ-C30+QLQ-OPT-30), adjustment to cancer (MAC-44), anxiety and depression (STAI-B, HADS), Fear of Cancer Recurrence (FCRI) were administrated at each evaluation. Collection: prospective study with four evaluations: T0: before treatment, T1: 1 month after treatment, T2: 6 months after treatment, T3: 12 months after treatment. **RESULTS:** Preliminary results of the first two evaluations will be presented. The QoL's general and functioning levels remained relatively good and stable except

for the social functioning which decreased after treatment ( $p = 0,0319$ ). The problems with appearance decreased ( $p < 0,0001$ ) and the FCR was stable. More than half of the patients (median at 8) had a moderated rate of anxiety before treatment which decreased significantly a month later ( $p = 0, 0099$ ). The depressive symptoms were lower and remained stable after treatment. **CONCLUSIONS:** The first results of this study confirm the importance of exploration of the anxiety's and fear of cancer recurrence's (FCR) evolution among patients treated for CM. These dimensions were changing in a different way and this could testify that FCR assesses a construct close to but nevertheless distinct from psychological distress and cancer specific anxiety. The FCR requires further investigation and screening in CM patients for make possible a better prevention in mental health.

#### A-133

##### **It's Like Being a First Class Patient: A Pilot Study Examining the Experiences of Patients Participating in a Cancer-Related Clinical Trial**

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**OBJECTIVES:** To explore the experiences and identify the psycho-social support needs of patients enrolled in a cancer-related clinical drug treatment trial. **METHOD:** This paper outlines a two-phased pilot study. Fourteen participants were recruited to phase one in which 3 focus groups and two interviews were conducted. The focus groups and interviews were audio-recorded, transcribed and coded according to emerging themes. Nineteen participants were recruited to phase two in which longitudinal data was collected across three time points. **RESULTS:** Participants experienced a mixture of hope, uncertainty and apprehension as they considered whether to take part in a clinical trial. Trial participation was also associated with a number of emotional and practical challenges. The end of the trial was associated with a mix of emotions, including relief, disappointment, hope of future help, uncertainty and abandonment. Generally participants were very positive about the support they received from health professionals, family and friends. **CONCLUSIONS:** Clinical trial participation is, in general, a positive experience for many patients with cancer, although there are a number of associated practical and emotional challenges. Trial participants may benefit from closer follow-up from clinical trial staff, especially the treating doctor, assessment of support needs,

and help in re-evaluating the meaning of their trial participation if their initial hopes and expectations are not met.

#### A-135

##### **Factors Influencing Treatment Choices in Patients with Newly Diagnosed Breast Cancer**

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**OBJECTIVES:** Although breast cancer is a highly treatable disease, a significant number of women either delay seeking a diagnosis despite breast symptoms, or reject conventional treatment after diagnosis, opting for alternative regimens alone, and potentially denying themselves a chance for a cure. This study sought to understand these women's decisions and identify messages and approaches that would have led to more appropriate treatment. **METHOD:** This study explored treatment decision-making through in-depth interviews with sixty breast cancer patients. Thirty interviews were conducted with women who delayed seeking a diagnosis or refused recommended conventional treatment in favor of alternative therapies ('Refusers'); thirty were conducted with control subjects, who accepted conventional and alternative treatments. Each woman also completed the Beck Anxiety Inventory and the Rotter Locus of Control Scale to identify differences in generalized anxiety and Locus of control. **RESULTS:** Fear and negative experiences with doctors were the main factors that women rejected potentially life-prolonging conventional therapy. Refusers believed that chemotherapy and radiotherapy were riskier and less beneficial than did controls ( $p = 0.007$ ). Controls perceived alternative medicine alone as riskier than did refusers because its value for treating cancer is unproven ( $p < 0.0001$ ). From their own research, refusers concluded they could heal themselves from cancer with even simple holistic treatments (raw fruits/vegetables; juicing; supplements). **CONCLUSIONS:** Some women reject conventional breast cancer treatment, opting for alternative regimens alone, despite physician warnings that this could cost them their lives. This decision is apparently due to a combination of fear, despair, negative experiences with doctors and misinformation. According to these women, a caring, compassionate approach to cancer care and physicians who

acknowledge their fears, communicate hope and encouragement, and educate them about their options would have led them to make better treatment choices.

#### A-141

##### **Psychometric Testing of the Spiritual Well-being Scale on a Terminally Ill Cancer Sample in Taiwan**

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**OBJECTIVES:** Terminally ill cancer patients' spiritual well-being is an important indicator for hospice care, but appropriate assessment tools are unavailable in Taiwan. This study therefore tested the psychometric properties of the Spiritual Well-being Scale Mandarin version (SWBS-M) in terminally ill patients in Taiwan. **METHOD:** This cross-sectional study recruited 241 cancer patients from 5 teaching hospitals throughout Taiwan. Patients' spiritual well-being and quality of life were assessed using the SWBS-M and McGill Quality of Life Questionnaire (MQOL). **RESULTS:** The SWBS-M had internal consistency reliability of 0.89. Exploratory factor analysis showed 4 underlying factors explaining 60.03% of the variance. SWBS-M scores correlated moderately with MQOL ( $r = 0.48$ ,  $p < 0.01$ ). Cancer patients' SWBS-M was inversely related to their average pain in the past 24 hours ( $r = -0.183$ ,  $p = 0.006$ ). Cancer patients' SWBS-M also differed significantly with their pain experience ( $t = -3.67$ ,  $p < 0.001$ ). Terminally ill patients with pain in the past 24 hours had worse spiritual well-being than those without pain. **CONCLUSIONS:** According to the findings of this study, clinicians can improve terminally ill patients' QOL by improving their spiritual well-being. In addition, a better pain management may improve terminally ill cancer patients' spiritual well-being and their QOL.

#### A-150

##### **A Website for Children and Their Families When a Family Member Has Cancer**

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**OBJECTIVES:** There is a growing body of research which documents the impact of parental cancer on children. To help families cope, a website was created for children aged 6 to 12 years. The site provides support for parents, health care professionals and school personnel. The website was developed to provide access to support for families with geographical challenges, for parents who are unable to attend counselling, and for families to access support when they need it. **METHOD:** An

interdisciplinary team, including clinicians, multi media and web design experts, were involved in the development of the site. In designing the site, the cancer literature on the impact of a parental diagnosis on children was reviewed. Additionally, knowledge about the learning characteristics of children, the cognitive developmental level and the 'digital behavior' of this age group was integrated into the design. Children, parents and clinicians tested the site at key points during its development. **RESULTS:** The site integrates the psychosocial and medical aspects of care, key messages are communicated through visual language and embedded in the site, and the focus is on learning, not information. The site helps children explore non-verbal ways of expressing feelings about cancer through interactive, expressive and playful activities. It helps them to learn some basic information about cancer and treatment. Parents can access tools to help them talk more openly with their children about cancer. **CONCLUSIONS:** In the first month of launching, there were 1256 visits to the site. 25% of these visits were international. The site has received a national interactive applied arts award, educational category. Although the website is not designed as therapy, all aspects of the site are meant to be therapeutic. This presentation will include an overview of the key elements and a demonstration on how to use it.

#### A-153

##### **Impact of Nueva Vida's Model on Self-Efficacy in Latinas with Breast Cancer**

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**OBJECTIVES:** The goal of this community based organization-academic partnership project is to evaluate the impact of Nueva Vida's model on levels of self-efficacy, psychological distress, and quality of life. Nueva Vida (NV) was founded in 1996 by Latina breast cancer survivors and health professionals to address the lack of culturally sensitive cancer support services for Latinas in the Washington, DC area. **METHOD:** This study is a time-series design with time 1 data collection on the day of initial contact with NV, time 2 within 3–10 days of initial contact, time 3 at 4 months, and time 4 at 12 months. The sample will include 90 Latina women diagnosed with breast cancer who are offered individual counselling, various support group participation, patient navigation, and peer support. Self efficacy, psychological distress and quality of life are measured. **RESULTS:** Data collection for this study took

place between March 2008 and December 2009. The findings will be presented in regards to the self-efficacy, psychological distress, and quality of life over time. The results will guide the development of a problem-solving intervention which will be implemented in the third year of the grant. **CONCLUSIONS:** This study increases awareness of the impact of breast cancer on Latinas and the impact of a targeted program for Latinas has on the study participants. Further, this study illustrates the ups and downs of collaboration between a community-based organization and a university in developing and undertaking a research project.

#### A-154

##### **Informed Consent in Randomised Clinical Trials (RCT). What Patients Need in Consultations About RCT from their Oncologists—A Checklist Derived from Patients' Interviews**

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**OBJECTIVES:** When patients are informed about a possible participation in a RCT, it is an ethical imperative that patients clearly understand the information provided, so they are able to give a clear Informed Consent (IC). Reality shows that this imperative is not always met in practice, thus a clear IC is not achieved. This dilemma has to be addressed and patients' needs in those consultations have to be assessed. **METHOD:** Cancer patients who were asked to participate in a randomised trial were interviewed using a semi-standardised interview which was developed by the authors to assess patient's understanding and patient's needs in those consultations. The sample contained eight patients who participated in a trial and two who declined participation. The data were evaluated on the basis of Mayring's qualitative analysis. The answers from the interview were transferred to a checklist. **RESULTS:** The checklist includes the following items (extract): a preannounced, clear and thorough IC, preferably at a point when their health would be in a stable condition; taking enough time for the patient; considering the pace of the conversation and avoiding incomprehensible expressions and jargon; giving the patient time to think about his decisions and inviting the patients to ask questions and to let their relatives join the IC conversation. **CONCLUSIONS:** Two main goals have been reached by this research: (a) the exploration of patients' needs in consultations about clinical trials and (b) above all, patients' desires were clarified and summarised in a useful, clearly structured checklist to help physicians to inform future patients in a more effective

and concise way about possible participation in a RCT.

#### A-157

##### **The Evaluation of the Psychosocial Pathway of Breast Cancer: Diagnosis, Surgery and Treatments**

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**OBJECTIVES:** Women diagnosed with breast cancer are confronted with different stressors throughout the illness trajectory, e.g. awaiting diagnosis, having surgery, anticipating the possibility that the cancer has spread, coping with side effects and, finally, facing the risk of recurrence. The aim of this study was to investigate the impact of the psychosocial pathway of breast cancer (phase 1 'diagnosis', phase 2 'surgery', phase 3 'treatments'). **METHOD:** A total of 360 women diagnosed with breast cancer were evaluated, on 3 separate occasions, in relation to: emotional state, emotional control, neuroticism, social support, coping, quality of life (QoL) and demographic characteristics. We used structural equation modeling (SEM) to examine the relationships among all the variables. **RESULTS:** The structural equation models (SEM) indicate that the emotional, cognitive response, and the QoL, suffered significant changes concerning diagnosis (phase 1), surgery (phase 2) and treatments (phase 3). Furthermore, results indicate that an adapted emotional response is associated to efficient coping strategy, and satisfaction with the perceived social support and good QoL at all levels. This is particular the case when women are under psychological intervention. **CONCLUSIONS:** To help breast cancer patients adjust to their situation the clinical psychologist should encourage the patient to adopt more efficient coping strategies (i.e. a fighting spirit). By doing so, patients may indeed experience less psychological distress and a higher quality of life, thereby increasing their overall sense of well-being.

#### A-158

##### **The Psychosocial Adjustment of Breast Cancer Women at Diagnosis, Surgery and Treatments: A Longitudinal Study**

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**OBJECTIVES:** Distressing events can lead to negative outcomes, such as post-traumatic stress symptoms (PTSS), but they can also lead to positive outcomes, an experience termed post-traumatic growth (PTG) or Benefit Finding (BF). In the context of cancer, PTG may improve important psychological outcomes, including depression, positive wellbeing, health behaviors and

positive affect. This longitudinal study aims to investigate the psychosocial adjustment of breast cancer women (phase 1 'diagnosis', phase 2 'surgery', phase 3 'treatments'). **METHOD:** A total of 30 women diagnosed with breast cancer were evaluated, on 3 separate occasions, in relation to: emotional state, emotional control, neuroticism, social support, body image perception, coping and quality of life (QoL). We used the non-parametric Friedman test to compare the variables in each occasions. **RESULTS:** The analysis of the changes occurred in the variables throughout the psychosocial pathway of breast cancer illustrated a slight impact of the breast cancer, as a negative life event. This results show a good adjustment at all levels (emotional, social and physically). The levels of neuroticism and body image perception indicated significant changes all the way throughout time. **CONCLUSIONS:** The results show that finding positive meaning in response to a distressing event, such as breast cancer, is psychologically protective and thus may be indirectly influence the long-term occurrence of depressive symptoms and impaired QOL. In light of the rapidly growing population of cancer survivors it's important to understand their treatment experiences in further studies.

#### A-159

##### **Examining Ethnic and Neighborhood Variation in Cervical Cancer Survival Outcomes**

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**OBJECTIVES:** Earlier detection and more effective treatment have resulted in a tremendous increase in survival from cervical cancer over the last decade. However, ethnic and neighborhood variation may influence survival outcomes among cervical cancer survivors (CCS). The purpose of this study was to investigate: (1) the differences in survival status by ethnicity and neighborhood median income level; and (2) predictors influencing survival status among a population based cohort diagnosed with invasive cancer of the cervix uteri. **METHOD:** This study is based on data from 1,847 multiethnic CCS (395 European-, 187 African-, 980 Latina-, and 285 Asian-Americans) recruited through the California Cancer Surveillance Program. The dependent variable was days of survival from date of cancer diagnosis. Neighborhood income was obtained from the zip-code-based median income categorized by ethnicity to consider the neighborhood context. The Kaplan-Meier, univariate and multivariate Cox Proportional Hazards Regression were used to determine associations of the predictors with the outcome. **RESULTS:** Ethnicity was significantly associated with the survival ( $X^2 = 23.652$ ;  $p < 0.001$ ), indicating that

African-Americans showed the shortest survival. Differences in the survival between high- and low-income regions were not observed. However, when ethnicity was considered, Asian-Americans who live in the high-income region showed a longer survival than women in the low-income region ( $X^2 = 4.531$ ;  $p < 0.05$ ). After controlling for clinical information, ethnicity was a significant factor influencing survival (HR = 0.698;  $p < 0.05$ ). Age at diagnosis, cancer stage, and the scope of surgery also remained highly significant factors. **CONCLUSIONS:** Asian-Americans with cervical cancer have the best survival outcome, while African-American showed the shortest survival. In addition to cancer characteristics, contextual dimensions such as neighborhood or socio-ecological stress may be important correlates of survival. The findings support the need for greater examination of the unique contribution of ethnicity and neighborhood contexts on cancer survival as well as a fuller appreciation of the contextual dimensions of survivorship outcomes.

#### A-160

##### **Enhancing Chinese Cancer Patients Safety and Access to Support - Development of Cultural and Language Specific Bilingual Patient Materials**

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**OBJECTIVES:** Chinese population is a major visible minority group in Canada, particularly in cities such as Vancouver and Toronto. However, culturally and linguistically specific cancer support is limited. Research on barriers to cancer care in the Chinese community has found that many Chinese cancer patients are unfamiliar with the supports available and lack information on cancer illness. This presentation shows how patient materials could enhance Chinese patients' safety and their access to support. **METHOD:** Information on gaps was gathered from focus groups with the Chinese community, research with members of a support group, and key informant interviews with health care professionals working with the cancer population. In the developmental phase, materials were reviewed, revised and piloted. Best practice guidelines for developing bilingual adult education materials and for culturally specific materials were used. Patients and health care providers were asked to give feedback. **RESULTS:** Bilingual materials including a resource guide, screening instrument and navigational guide are available to be used by both Chinese speaking patients and English speaking care providers. The presentation will discuss the process, quality indicators, challenges and success

in developing culturally sensitive, language specific materials for non-English speaking patients. **CONCLUSIONS:** Quality patient education materials for Chinese speaking patients enhance patient safety and access to support. The possibility of transferring the experience to other provinces with significant proportions of Chinese-speaking patients, and the development of cultural and language specific patient materials for other non-English speaking groups will be discussed.

#### A-162

##### **Prevalence Rates of Anxiety and Depressive Disorders in Adult Cancer Patients - A Consecutive Complete Assessment at the Time Point of Cancer Diagnosis**

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**OBJECTIVES:** Rates of anxiety and depressive symptoms in cancer patients vary widely across studies. Variability may be mainly attributed to sample characteristics, types of cancer, assessment instrument used, and choice of cutoff. This study evaluates rates of anxiety and depressive disorders at the time point of cancer diagnosis and initiation of treatment in a large consecutive cohort of cancer patients. **METHOD:** From 2004 to 2008 all newly diagnosed cancer patients entering two cancer care centers in British Columbia were screened for emotional distress using the PSSCAN questionnaire. Data from a total of 11,284 patients with various cancer types were collected in the respective time frame. **RESULTS:** On average, 16.2% of patients exceeded cut-offs for a diagnosis suggesting an anxiety disorder and 12.5% of a depressive disorder. Patients with gynecological cancer (23.4%) reported the highest level of anxiety, followed by lung (20.1%), breast (19.5%), and neuro-endocrine neoplasms (19.2%). Gynecological (18.8%), lung (17.2%), neuro-endocrine (15.6%), and head and neck (15.5%) cancer patients were among the most depressed. Age and gender related prevalence rates will also be presented. **CONCLUSIONS:** Prevalence rates of symptoms suggestive of anxiety and depressive disorders were relatively low. However, females were almost two times more likely to develop clinically relevant symptoms. In addition, middle aged patients were more anxious and depressed as were those with specific cancer types. Patients with more unfavorable tumor types were more likely to experience an anxiety or depressive disorder.

## A-165

**How women feel after attending the Look Good Feel Better Program**

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**OBJECTIVES:** The Look Good Feel Better (LGFB) Program has run free cosmetic workshops for Australians receiving cancer treatment since 1990. The purpose of this study was to evaluate the impact of the LGFB Program on the self-consciousness of appearance of people with cancer who attended a LGFB workshop. **METHOD:** This was a prospective cohort study, with consenting participants completing questionnaires before, and 1-, and 4-months after attending a workshop. The primary outcome was change in self-consciousness of appearance measured by the Derriford Appearance Scale (DAS24). **RESULTS:** 267 English-speaking females 28–84 years (mean = 57) participated (response rate 43%). 65% were partnered, 47% tertiary educated, most diagnosed with breast cancer (63%), <12 months ago (69%). 73% reported concerns regarding appearance, commonly hair, breast, or weight. While no significant changes were detected in self-consciousness of appearance, quality of life, anxiety, depression, stress, or adjustment, over time, most reported the workshop enjoyable and helpful (95%), practical (94%), relevant (83%), although some found it confronting (21%). **CONCLUSIONS:** The LGFB program was enjoyable, helpful and practical to participating women diagnosed with cancer, but did not significantly change their self-confidence of appearance and other psychosocial outcomes.

## A-166

**Patient Denial; Family Caregivers are Frustrated and Angry Too**

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**OBJECTIVES:** It is widely accepted that cancer impacts the family of a person with cancer, particularly affecting their family caregivers. Patient denial of some aspect of the illness is not uncommon, yet we know little about how patient

denial affects these family caregivers. The purpose of this project was to explore the way in which a cancer patient's denial is perceived, experienced, and understood by the patient's family caregivers. **METHOD:** A prospective phenomenological methodology guided the study. Family caregivers of cancer patients who clinical oncology staff believed were in denial were purposefully sampled to achieve a heterogeneous sample in terms of age, gender, and relationship to the patient. Data was collected via semi-structured interviews with 19 family caregivers. Sixteen were retained, as three did not contain clear evidence of patient denial. Data were analyzed by a team consisting of a social worker, nurse, and psychologist. **RESULTS:** Caregivers described their experience of the patient's denial in terms of: the strategies they used to understand it (e.g. knowing the patient's usual way of coping and communicating); the various sources of burden it added (e.g. patients endangering themselves by not following medical advice); its emotional impact on them (e.g. feeling frustrated, angry, alone, disenfranchised); and strategies they used to cope with it (e.g. avoiding confronting denial; using nonverbal cues to communicate with doctors). **CONCLUSIONS:** Cancer patients' denial had an impact on their family caregivers in many important ways; affecting the caregivers' well-being, as well as undermining their ability to provide care. Our results have implications for strategies health care providers can use [if patients permit] to enable family caregivers to compensate for the barriers to care imposed by patient denial, so they may be better able to fulfill their caregiving roles, and preserve their own well-being.

## A-167

**Neuropsychological Assessment in Patients with Head and Neck Cancer After Radiotherapy or Chemo-Radiotherapy**

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**OBJECTIVES:** Evidence from neuropsychological studies in breast cancer patients suggests that cancer and/or its treatment can affect cognitive functioning. Patients with head and neck cancer may be particularly vulnerable to cognitive dysfunctions because of the treatment these patients receive (radiotherapy = RT, or chemo-radiotherapy = CRT) and pre-cancer risk factors such as alcohol and smoking history. Here we examine whether there is evidence of cognitive dysfunction in head and neck cancer patients. **METHOD:** Ten relapse-free patients after curative-intent

RT ( $n = 5$ ) or CRT ( $n = 5$ ) for squamous cell carcinoma of the head and neck underwent a comprehensive neuropsychological battery, questionnaires of subjective cognitive functions, quality of life (QOL) and affect; and blood tests to assess hematological, biochemical, endocrine and cytokine status. Retrospectively, the dosimetry of incidental radiation to the brain was determined in all patients and the dose intensity of cisplatin was determined in chemo-radiotherapy patients. **RESULTS:** Mean time since treatment was 20 months. Patients showed reduced cognitive functioning compared with pre-morbid estimates, with memory most affected. Severity of memory impairment correlated significantly with radiation dose to the temporal lobes, suggesting that at least some deficits may be treatment related. CRT patients did not show more dysfunction than RT patients. There was no association between measures of objective cognitive functioning and subjective cognitive functioning, QOL, affective, hematological, biochemical, endocrine and cytokine status. **CONCLUSIONS:** The relationship between radiation dose and degree of memory disturbance provides evidence that cognitive dysfunction observed in these patients is in part related to their cancer treatment. Further examination is warranted because cognitive dysfunction can negatively impact on patients' lives and contribute to problems in post-treatment rehabilitation. We are currently recruiting participants for a prospective study with a larger sample of patients and control participants to assess if and how cognitive abilities change over time.

#### A-172

##### **Spiritual Care Delivery for Elders with Cancer**

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**OBJECTIVES:** More than 60% of cancers in the United States now occur in older adults and the number of new cancer diagnoses in elders is expected to rise during this century. Elders present with unique physical and spiritual needs. The expertise of the healthcare team addresses physical needs; however, spiritual care delivery frequently is lacking in meaning and/or individualization. This presentation discusses the competence of geriatric nurses to address spiritual needs of older adults with cancer. **METHOD:** The researchers developed a qualitative instrument which elicited geriatric nurses' perspective of their ability to provide comprehensive, holistic spiritual care that was highly individualized to the patient. Demographic data was also elicited that addressed level of

education, educational experiences that addressed spiritual care competence, personal spiritual practices and professional roles. A randomized sample of the membership of the National Gerontological Nursing Association received the survey; 150 of the returned surveys have been analyzed. **RESULTS:** Data were analyzed using nVIVO. Results demonstrated that the majority of the respondents were between 35 and 50 years of age, received little preparation, either academic or professional, for the delivery of spiritual care, were employed in a variety of settings, and varied considerably in their personal expression of spirituality. Confusion between religiosity and spirituality was a consistent theme as were expressions of discomfort in addressing spiritual issues and reliance on the pastoral care team. **CONCLUSIONS:** Geriatric nurses are not well-positioned to provide spiritual care to elder cancer patients. It is evident that educational curricula lack attention to this component of care. Nurses have a professional responsibility to develop their competence and confidence in this care component. It also is incumbent upon healthcare institutions to recognize the value of this aspect of care in generating optimism that has significant benefits for elder's response to cancer and its treatment.

#### A-177

##### **Implementation of a Screening Programme for Cancer Related Distress: Part I - Does Screening Influence Detection of Distress?**

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**OBJECTIVES:** It is generally accepted that cancer clinicians are unable to accurately identify distress in routine care. We aimed to examine the effects of a simple screening programme based around the Distress Thermometer (DT) on recognition of patient reported distress by nurse specialists across three sites in the East Midlands (UK). **METHOD:** We asked approximately 100 nurses from three independent sites to give us their clinical opinion before and after screening 382 patients for distress. Distress was defined by a score of 4 or higher on the DT. Clinical opinion was by pencil and paper, consecutive judgements returned centrally for blind rating. We analysed quantitative and qualitative change. **RESULTS:** Without the aid of screening, detection sensitivity was 49.7% and specificity of 79.3%. PPV was 67.3 and NPV was 64.1%. After screening detection sensitivity was 55.8% and specificity was 79.8%. There was a nonsignificant trend for improved detection sensitivity ( $\chi^2 = 1.12$

$p = 0.29$ ). 43% reported the tool helped them discuss psychosocial issues especially in those unwell. 28% of clinicians reported the tool informed their clinical judgement, again mostly in those unwell. CONCLUSIONS: We conclude from these initial results that the introduction of screening for distress makes a small difference to number of detections and no appreciable difference to specificity. However screening does appear to help clinicians talk with their patients and informs subjective clinical judgement especially in people considered to be unwell.

#### A-178

##### **Implementation of a Screening Programme for Cancer Related Distress: Part II - Does Screening Aid Clinicians' Communication, Judgement or Accuracy of Anxiety and Depression?**

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**OBJECTIVES:** It is generally accepted that cancer clinicians are unable to accurately identify distress in routine care. We aimed to examine the effects of a simple screening programme based around the Emotion Thermometer (ET) on recognition of patient reported depression and anxiety by nurse specialists at one UK site. **METHOD:** We asked chemotherapy nurses of the Leicester Royal Infirmary to give us their clinical opinion before and after screening 269 patients for anxiety and depression plus anxiety or depression. Depression and anxiety were defined by a score of 4 or higher on the ET. We measured detection accuracy before and after screening and ability of screening to improve communication and inform clinical judgement. **RESULTS:** Before screening, clinicians sensitivity was 55.4% for depression and 41.7% for anxiety. Specificity was 87.5% and 81.9%, respectively. After screening detection accuracy did not change. However on 38% of occasions staff rated the instrument as useful in improving communication with the patient. On 28.6% of interactions, staff rated the tool as useful for informing clinical judgement. Nurses did not help 51.3% who screened positive vs 67% of those negative ( $\chi^2 = 9.28$   $p = 0.0023$ ). **CONCLUSIONS:** We conclude from these chemotherapy results that the introduction of screening for depression or anxiety appears to make no appreciable difference to the actual number of detections but screening does appear to help clinicians ability to talk with patients, it also informs clinical judgement and aids a clinically helpful response.

#### A-181

##### **Existential Meaning and Adaptation to Cancer**

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**OBJECTIVES:** Cancer induces psychological processes involving existential meaning. The Life Attitude Profile-Revised (LAP-R-48; Recker, 1992) was developed as a self-administered questionnaire for assessing existential meaning in general or clinical populations; it comprises six dimensions, leading to two global scores (the personal-meaning-index (PMI) and existential-transcendence (ET)). This longitudinal study aimed to highlight whether existential meaning dimensions play a favourable or unfavourable role on adaptation to cancer, as regards illness perception, quality of life and treatment experience. **METHOD:** 64 cancer patients aged  $55.4 \pm 10.4$  years (75% females; breast ( $n = 33$ ); colon ( $n = 13$ ); head and neck ( $n = 10$ ); ovarian ( $n = 3$ ); other ( $n = 5$ )) were evaluated 2 to 4 months after the diagnosis (T1) and 51 of them one year later (T2). Patients completed at T1 and T2 the LAP-R, the Illness Cognition Questionnaire (ICQ-18), the EORTC-30 Quality of Life (QOL) questionnaire for cancer patients, and a questionnaire on treatment experience (T2). Data were controlled for cancer severity. **RESULTS:** At T1, QOL was correlated positively with LAP-R purpose, choice/responsibleness and negatively with existential-vacuum; ICQ-18 helplessness was correlated positively with existential-vacuum and negatively with death-acceptance and ET; ICQ-18 perceived-benefits was positively correlated with existential-vacuum. At T2, helplessness was correlated positively with concurrent and baseline goal-seeking and negatively with concurrent purpose, PMI and ET; ICQ-18 illness-acceptance was correlated positively with concurrent ET and negatively with baseline goal-seeking; perceived-benefits was positively correlated with concurrent purpose and PMI. **CONCLUSIONS:** Results support the hypothesis that purpose, coherence, choice/responsibleness, death-acceptance and, more globally, personal-meaning-index and existential-transcendence play a protective role on adaptation to cancer. On the contrary, existential-vacuum and goal-seeking play a detrimental role. The pattern of these relationships changes

during the follow-up. The opposite direction of the associations regarding existential-vacuum and goal-seeking scores among the set of LAP-R dimensions is congruent with the construct of the questionnaire. Findings could be helpful for psycho-oncology practice.

#### A-184

##### **Helping Children Cope When An Adult Has Cancer**

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**OBJECTIVES:** Talking with children about cancer is an increasingly common challenge for adults around the world. Research shows that parents, school professionals, and other adults want developmentally appropriate support to help children cope with a cancer diagnosis and treatment; yet finding trusted resources to help children is challenging. The Great MacGrady, the animated program from the award-winning PBS series Arthur, is an effective tool that engages and educates children and the adults who care for them. **METHOD:** Given what we know about the power of television to educate, it's surprising that so little children's programming has been developed on the subjects of cancer and survivorship. The Arthur series harnessed this power to create a special broadcast with significant community outreach designed to help kids grapple with the cancer diagnosis of a loved one. This episode is an effective springboard to family conversations that invite kids to talk about their feelings and fears. **RESULTS:** Arthur's producers joined with multi-disciplinary partners in the cancer community to create a half-hour episode involving the cancer diagnosis of a central adult character. The program addresses the range of reactions child characters have, and models how adults and children can come together to support one another. Garnering 4 million viewers in its first broadcast week, the episode was one the series' highest rated among children 9–11. **CONCLUSIONS:** This collaborative model, bringing together clinicians, multi-media specialists, and outreach experts, has created a compelling and accessible suite of materials to support families in need. It is a model that leverages the strengths of partners from different fields to create a program that can empower loving adults to help children cope when a person they care about has cancer or another serious illness.

#### A-186

##### **Barriers to Physical and Psychosocial Rehabilitative Care for Young Breast Cancer Survivors in Atlantic Canada**

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**OBJECTIVES:** A growing number of studies have shown that younger women have a greater physical, psychological and social morbidity and poorer quality of life after a breast cancer diagnosis than older women. The purpose of this study was to assess the rehabilitation needs of young women under the age of 50 with breast cancer in Atlantic Canada and to identify factors that impact or prevent cancer rehabilitation utilization post-treatment. **METHOD:** A qualitative study involving in-depth telephone interviews with 39 breast cancer survivors under the age of 50 in Atlantic Canada (New Brunswick, Nova Scotia, Newfoundland & Labrador, and Prince Edward Island). The interviews were semi-structured and focused on the young women's overall breast cancer experiences; the physical, psychological and social issues and challenges faced; and the general awareness, perceptions and experiences with cancer rehabilitation services post-treatment. Interviews were recorded, transcribed and analyzed using thematic coding. **RESULTS:** Systemic barriers to rehabilitation after breast cancer include lack of availability of services and resources; general accessibility issues (i.e. distance/travel); cost of services; lack of or limited health insurance coverage; limited support available specific to the needs of young women; and the lack of awareness about the services available. Personal barriers include appointment fatigue, lack of time, patient compliance, acceptance of limitations and a fear of burdening the system or facing long wait times. **CONCLUSIONS:** A considerable amount of barriers exist to receiving physical and psychosocial rehabilitation post-treatment for young breast cancer survivors. Unmet rehabilitative needs can prevent women from returning to their former social roles, both within the household and within the workforce. Recognizing these needs and addressing the barriers to receiving support will help health care professionals identify ways of optimizing the outcomes for this population and improve their overall quality of life.

#### A-188

##### **Urinary Symptoms After Gynecologic Cancer Treatment and Their Impact on Quality of Life**

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**OBJECTIVES:** Gynecologic cancer patients are at risk for bladder dysfunction as a result of surgery, radiotherapy, and factors that predispose them to cancer. Few studies have investigated urinary symptoms after gynecologic cancer treatment and their impact on quality of life. The purpose of this study was to examine the prevalence of urinary symptoms in gynecologic cancer patients, identify risk factors for urinary symptoms, and examine the relationship of symptoms to quality of life. **METHOD:** Participants in the current study were 105 women with recently diagnosed gynecologic cancer who were scheduled to begin treatment. Mean age of participants was 54 years ( $SD = 14.0$ ; range 27–83). Seventy-eight percent had cervical or endometrial cancer. Fifty-six percent were post-menopausal prior to treatment. Participants completed the urinary symptom subscale of the Menopausal Symptom Scale and the Medical Outcomes Study-Short Form prior to treatment and six months after treatment. **RESULTS:** At six months, 58% of participants reported urinary symptoms; 30% rated symptoms as moderately to extremely bothersome. Radiotherapy and higher pre-treatment body mass index, but not disease characteristics, chemotherapy, surgery type, age, race, menopausal status or tobacco use were significantly associated ( $p < 0.05$ ) with urinary symptoms at six months. Symptoms were significantly associated ( $p < 0.05$ ) with worse physical and mental QOL in all domains even after controlling for pre-treatment urinary symptoms. **CONCLUSIONS:** Findings suggest urinary symptoms are highly prevalent in gynecologic cancer patients after treatment. Potential risk factors for symptoms include receipt of radiotherapy and higher body mass index prior to treatment. Symptoms are associated with significant distress and adversely impact women's physical and mental quality of life. Future research should be designed to elucidate patients' efforts to manage symptoms and identify barriers to seeking help so effective interventions for managing symptoms in survivorship may be developed.

#### A-189

##### **Emotional Reinforcement as Protective Factor for Healthy Eating in Domestic Settings**

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**OBJECTIVES:** Home meals have been shown to be healthier than away-from-home ones. This study hypothesized that part of this protective home effect, among other psycho-social factors, is tied to more positive emotions being experienced herein. Through an emotional reinforcement process, some of the positive affective states experienced at home may be associated with food

consumption, and especially with healthier food, which lacks biologically reinforcing qualities compared to sweeter, fatter alternatives. **METHOD:** By using an Experience Sampling Method, the present study had 160 non-obese adult women reported their eating behaviors and emotional states six times a day over ten observation days (3950 meal episodes in total, and 24.69 per participant). Each participant reported the relative nutritional quality on each meal based on her own baseline meal consumption. **RESULTS:** Hierarchical regressions reveal that home meals are followed by more intense positive emotions and less anxiety than away-from-home meals. Having healthier meals at home result in more positive emotions compared to baseline meals, with no such effects being significantly present in away-from-home settings. Only for home meals, a healthier choice is more likely to follow a positive pre-meal affective state. **CONCLUSIONS:** Results suggest that the home is a unique environment, where healthier food choices trigger and are triggered by more positive emotions, a pattern of emotional reinforcement that is not present in away-from-home settings. These findings provide insights into the development of novel approaches to cancer prevention, which highlights that positive emotions, beyond health and nutritional knowledge, can be associated with healthy food consumption and contribute to healthier eating.

#### A-190

##### **Depressive Mood Predicts Cancer Diagnosis in Women Undergoing a Colonoscopy**

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**OBJECTIVES:** In patients presenting with clinical signs that may indicate a colorectal cancer, clinicians may interpret the presence of a depressive mood as decreasing the likelihood of cancer diagnosis, especially in women. This study aimed to examine the association between depressive mood and subsequent diagnosis of cancer in candidates for a colonoscopy. We hypothesized that depressive mood would be related to subsequent cancer diagnosis, after adjusting for confounding variables. **METHOD:** Ninety-three patients (34 men, mean age  $\pm SD = 56.6 \pm 9.7$  years, 59 women, mean age  $\pm SD = 54.2 \pm 12.9$  years) were given the 13-item Beck Depression Inventory

to assess depressive mood before undergoing colonoscopy. Psychological, demographic, and clinical covariates were collected, as well as the result of the subsequent colonoscopy. Cancer was defined as advanced neoplasia, or adenoma  $\geq 10$  mm, with high-grade dysplasia, villous/tubulovillous histologic characteristics, or any combination thereof. **RESULTS:** The colonoscopy found a cancer in 28 patients (30.1%). Cancer patients were older ( $p = 0.007$ ), more likely to be male ( $p = 0.025$ ), and to present with anemia ( $p < 0.001$ ) and unexplained weight loss ( $p = 0.003$ ). Depressive mood predicted cancer diagnosis in women ( $p = 0.005$ ), but not in men ( $p = 0.471$ ). In regression analyses both depressive mood and depression\*sex interaction predicted cancer diagnosis, even after adjusting for age, anemia, and unexplained weight loss ( $p = 0.01$  and  $0.041$ , respectively, for depression and depression\*sex interaction). **CONCLUSIONS:** Results suggest that depressive mood should not be interpreted as decreasing the likelihood of cancer diagnosis in patients presenting with clinical signs requiring a colonoscopy. On the contrary, even if depressive mood is frequent in irritable bowel syndrome patients, clinicians should consider depressive mood as increasing the likelihood of cancer diagnosis when appraising the need for a colonoscopy, to search for colorectal cancer in women.

#### A-191

##### **The Role of a Multimedia Computer-based Informational Intervention in Psychosocial Adjustment to Breast Cancer: A Feasibility Study**

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**OBJECTIVES:** A breast cancer diagnosis and ensuing medical management disrupt many aspects of a woman's life and can be associated with significant levels of distress and uncertainty. Supportive interventions including targeted cancer information can enhance psychosocial adjustment to cancer. In this feasibility study, we compared psychosocial adjustment, perceived informational support and satisfaction with cancer information between women newly diagnosed who either received usual care or a complementary computer-based breast cancer informational intervention. **METHOD:** Using a quasi-experimental design, the intervention group (participants from three oncology clinics) was provided with access to the Oncology Interactive™ Educational Series - CD-ROM version - for 8 weeks as well as a list of reputable websites and computer technician access. The control group received care and information as usual. Self-report measures of anxiety, depressive

symptoms, quality of life, informational support and satisfaction were completed at enrolment, 1–2 weeks post-intervention, and 3 months later. **RESULTS:** Two hundred and five women completed the study (intervention group = 120; control group = 85). Repeated-measure analyses of variance showed that, when compared to controls, the intervention significantly improved women's satisfaction with cancer information over time ( $p < 0.001$ ), prevented deterioration in physical quality of life ( $p = 0.030$ ) and marginally improved perceived oncologist informational support ( $p = 0.051$ ). There were no significant differences in anxiety ( $p = 0.107$ ), depressive symptoms ( $p = 0.823$ ), mental quality of life ( $p = 0.231$ ), or well-being ( $p = 0.585$ ). **CONCLUSIONS:** Computer-based tools represent a promising means of providing timely information to large numbers of individuals facing cancer. These feasibility findings provide preliminary evidence that a high quality multimedia computer-based cancer informational intervention can be supportive. A randomized controlled trial is planned to document the extent to which the enhanced person-centred and clinically integrated web-based next OIES generation - the Oncology Interactive Navigator™ (OIN) - can provide complementary guidance for patients and families throughout the cancer experience.

#### A-192

##### **Parental Hope when Facing Poor Prognosis after a Diagnosis of Childhood Cancer: A Prospective Study**

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**OBJECTIVES:** There is an emerging literature examining hope in caregivers in the context of a life threatening illness, specifically childhood cancer. Although the survival rate for children diagnosed with cancer has dramatically improved in the last two decades, there are still some children living with aggressive disease and poor prognosis. This study examines longitudinally and prospectively parental hope when the child has poor prognosis, for 18 months after diagnosis, considering the child's health status. **METHOD:** 35 parents (26 mothers, 9 fathers) of 30 children with poor cancer

prognosis, diagnosed mainly with leukemia and brain tumours, were interviewed individually at 3, 6, 9, 12 and 18 months post-diagnosis. 22 parents' children were doing 'well' (curative treatment, had no major complications); 13 parents' children were 'not well' (palliative treatment, had major complications). Data from the first three periods (3, 6 & 9 months) are presented. Grounded theory methodology was used. **RESULTS:** Parents described hope as a positive force with expectations for future. Parents' hope was linked to cure and positive treatment outcomes if child was doing well. If child was not doing well, hope was seen as a motivator and source of inner strength to enjoy 'the moment'. Means for maintaining hope over time included: child health, positive demeanor, desire for normalcy, honest communication with health professionals, family and friends support, and parental spirituality and optimism. **CONCLUSIONS:** This prospective study of parental hope, when their child had poor cancer prognosis and was undergoing treatment, presents a complex, paradoxical, stable and yet changing concept of hope. The various faces of hope were related to child's prognosis, treatment and health status, positive communication with and support from the health care team, parental spirituality and optimism and their social network. These findings have important clinical and policy implications, which will be thoroughly discussed.

#### A-193

##### **Internal Consistency, Face and Construct Validity of Empowerment-related Scales of the Health Education Impact Questionnaire (heiQ) among Canadian Cancer Patients/Survivors**

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**OBJECTIVES:** Empowerment in the context of cancer may be described as feelings of being better able to manage the disease experience, and represents a desired effect of information/support interventions. However, few empowerment measures exist in the cancer field. We assessed reliability and validity among cancer patients/survivors of five Health Education Impact Questionnaire scales (heiQ: originally developed for chronic diseases) that we considered relevant to empowerment: emotional well-being, constructive attitude, skill/technique acquisition, social

integration/support, health services navigation. **METHOD:** Individual debriefings were first conducted with patients/survivors to assess face validity. Then, patients/survivors diagnosed <27 months earlier with different types of cancer were randomly selected from the population-based provincial Manitoba Cancer Registry or recruited among users of the Canadian Cancer Society's telephone support programs. Participants ( $n = 731$ ) completed a mailed questionnaire including the five chosen heiQ scales, other instruments measuring related constructs, and questions about personal and medical characteristics. **RESULTS:** Cronbach alpha (internal consistency) ranged from 0.76 to 0.91. Using exploratory factor analysis with the number of factors specified, we obtained the same factor structure as heiQ developers, except for one item. The vast majority of *a priori* hypotheses about the direction and strength of correlations between heiQ scales and validated measures of conceptually linked constructs (self-efficacy, intrusive thoughts about cancer, mental and physical health, coping) were observed. **CONCLUSIONS:** The internal consistency and construct validity of empowerment-related heiQ scales among English-speaking Canadian cancer patients/survivors are supported. Assessing effects of interventions providing information and support may require measures more closely linked to anticipated intervention benefits. These heiQ scales are promising measures that may detect desired intervention effects not easily captured using more distal outcomes like distress or quality of life. The heiQ scales are currently being validated among French-speaking cancer patients/survivors in Québec, Canada.

#### A-194

##### **Contextualizing Illness: Exploring the Role of Gender and Age in Young Adult Women's Experiences of Cancer**

Meridith Burles

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**OBJECTIVES:** Although young adulthood is often thought of as a time of good health, approximately 10,000 young adults will be diagnosed with cancer each year in Canada (Cancer Care Ontario 2006). However, insufficient research has examined the experiences of young adults or identified the specific issues that they face. In response to this gap, I performed a qualitative study exploring the experience of serious illness during young adulthood, the findings of which will be described in this presentation. **METHOD:** Using phenomenological interviews and the visual method photovoice, I sought to understand what it is like to be ill from the perspectives of young women in their 20s and

30s who were recently diagnosed with a serious illness. Participants shared their stories of illness in in-depth interviews, and then were asked to take photographs that captured further aspects of their experiences. Follow-up interviews allowed participants to discuss the photographs that they produced and their meanings. **RESULTS:** Focusing on the participants in the study who were affected by cancer, I will describe how the young women experienced their illness in the context of socio-cultural understandings of age and gender. The interview and photographic data reveal that illness was disruptive to participants' identities as young adults and as women, leading them to re-examine expectations for their lives. **CONCLUSIONS:** The young women affected by cancer identified psychosocial issues related to the impact of illness on their bodies, identities, and social roles, which were contextualized by their life stage and gender. The findings support the recognition that illness is experienced and given meaning in relation to the social characteristics of affected individuals. Further, the identification of psychosocial issues specific to young women can assist those involved in providing health care and support services.

#### A-196

##### **Breaking the Silence: Identifying Factors that Contribute to the Stigmatization of Gynaecologic Cancer**

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**OBJECTIVES:** While existing literature indicates that social stigma continues to be associated with cancer, there is little discussion of the varying extent to which individuals affected by different types of cancer encounter stigma. Informed by sociological theories of stigma, this presentation will describe the findings of a review of the existing literature on gynaecologic cancer and stigma with a focus on the factors that contribute to the stigmatization of women affected by this group of cancers. **METHOD:** A systematic review of existing literature on gynaecologic cancer and stigma was performed in order to identify factors that contribute to stigmatization. Several academic databases were searched for journal articles that reported research on gynaecologic cancers, including cervical, endometrial, ovarian, uterine, and vulval cancer. Articles selected for inclusion were those that focused on women's experiences of gynaecologic cancer and the perception of stigma, difference, shame, and/or blame. **RESULTS:** Existing research on gynaecologic cancer indicates that there are a number of factors that contribute

to stigmatization. Such factors include: the mystery surrounding cancer in general, the poor prognosis and late diagnosis of some types of gynaecologic cancer, the association with sexuality and failure to take responsibility for one's health, the silence surrounding women's reproductive health, and the implications of gynaecologic cancer for women's bodies and social roles. **CONCLUSIONS:** There is a need to increase awareness and information about gynaecologic cancer in order to decrease the extent that women affected by this group of cancers are stigmatized, as stigma can profoundly affect women's everyday lives and psychosocial well-being. Awareness of the factors contributing to the stigmatization of gynaecologic cancer can assist health care providers and others in understanding and supporting women and their families dealing with such a cancer diagnosis.

#### A-201

##### **Discord of Measurements in Assessing Depression of African American Cancer Patients**

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**OBJECTIVES:** This study examines the consistency among the Center for Epidemiologic Studies-Depression Scale (CES-D), the Hamilton Rating Scale for Depression (HAM-D), the Beck Depression Inventory (BDI-II) and observer's rating in assessing depression of African American cancer patients. **METHOD:** 75 breast and prostate cancer survivors (33 men and 42 women) were recruited as a convenience sample, including 58 African Americans (AA) and 17 Caucasians. They were interviewed for 40 to 60 minutes. The interviews were audiotaped, transcribed and analyzed. The CES-D, HAM-D and BDI-II were administered and the interviewer's rating of depression was obtained. Nonparametric tests were performed. **RESULTS:** CES-D identified depression in Caucasians more than HAM-D, BDI-II and observer's rating by 29%, 38% and 6%. CES-D also identified depression in AA more than HAM-D, BDI-II and observer's rating by 12%, 24% and 9%, but under-identified 7% and 10% depressed AA than HAM-D and observer's rating. Similarly, the observer's rating identified more depressed Caucasians by 25% and AA by 9% and 22% than HAM-D and BDI-II, but under-identified 9% depressed AA than HAM-D. **CONCLUSIONS:** The surprising finding is that CES-D as a screening tool identified less depressive cases in AA than HAM-D and observer's rating. It is known that the CES-D and BDI-II emphasize affective symptoms, while HAM-D contains somatic symptoms and the observer's rating relies on nonverbal clues. The

study findings suggest that a certain symptoms captured by observation and the HAM-D tap at depressive manifestation unique to AA cancer patients, reflecting their unique life experience and culture.

#### A-209

##### **Breaking Bad News in China: The Dilemma Between Patients' Rights to be Informed and Traditional Norms. A First Communication Skills Training for Chinese Oncologists**

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**OBJECTIVES:** Breaking bad news in China is to disclose information first to family members, who then decide whether the patient should be informed. However, the patients right to be informed has been laid down by law. Oncologists find themselves in a dilemma and have to come up with an appropriate way to respect cultural and legal demands. This way should be conveyed in communication skills training (CST) which have not been established in China so far. **METHOD:** A first CST about breaking bad news took place at the Beijing Cancer Hospital in April 2009. 31 physicians were trained. The workshop included interactive presentations and role-play. To assess the acceptance of the workshop we used established questionnaires assessing (i) the acceptance (by rating scale from 1–6) and (ii) the feeling of competence of participating physicians before and after the workshop (by VAS of 10 cm). **RESULTS:** The workshop worked well: (i) the overall evaluation was rated very good (mean = 1.2), the learning environment (m = 1.3), practice orientation (m = 1.4) and role play (m = 1.4) (selection). (ii) After the workshop the physicians felt more secure in all domains, e.g. they had a higher theoretical knowledge (+3.9) and could apply it more easily (+3.1), they felt more secure talking about death with the patient (+2.1) and talking about prognosis with the family (+1.3). **CONCLUSIONS:** The workshop works also for Chinese culture. It shows high acceptance and can improve the feeling of competence of participating physicians in many domains. However, it also shows that some ideas have to be better adapted to Chinese culture. Communication workshops can address important

issues of breaking bad news and can trigger more discussion about finding the best way of breaking bad news in China.

#### A-210

##### **Individualized Communication Skills Training On Explaining Clinical Trials In Oncology. Results of a Randomized Controlled Trial**

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**OBJECTIVES:** When oncologists disclose information about randomized clinical trials (RCT), they have to address requirements of high research standard and respect patients' rights. This is one of the most difficult communication tasks and physicians lack adequate training. Only few Communication Skills Training (CST) concerning this topic have been developed. Results show the need for further improvement: focusing on individual needs of participants and evaluation in a randomized design. **METHOD:** We developed an individualized CST, focusing on individual learning goals derived from video-assessment, and integrated a coaching after the workshop. For evaluation, 40 physicians were randomly assigned to training or waiting control group. Training success was evaluated by blinded rater using a specific checklist to evaluate video-recorded standardized consultations with actor-patients (1). The physicians' feeling of competence in general (2), after each consultation (3) and the satisfaction of actor-patients (4) were assessed using questionnaires. **RESULTS:** (1) Objective evaluation show significant improvements in communication techniques on content specific items ( $p = 0.001$ ) and basic communication skills items ( $p = 0.038$ ) assessed by a checklist. (2) Physicians rated their feeling of competence significantly higher after the CST in most items. (3) The feeling of competence after each single consultation was higher in the training group. (4) Some significant improvements in the ratings of actor-patients can be reported, e.g. explaining randomization. **CONCLUSIONS:** The workshop causes significant improvements in consultations concerned with disclosing information about clinical trials. The feeling of competence of participating physicians can be increased. The individualized concept works well and provides information about how future training can be further developed. The results of actor patients have to be discussed and provide ideas on how future evaluation of those workshops can be improved.

## A-212

**Reliability of the Hereditary Nonpolyposis Colorectal Cancer Self-concept Scale Assessed in Three Countries**

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**OBJECTIVES:** Hereditary nonpolyposis colorectal cancer (HNPCC) renders high risks of colorectal and gynecological cancer and implies life-long surveillance. Knowledge of an increased risk of cancer offers possibilities for prevention, but may also influence self-perception and increase psychological distress. A 20-item self-concept scale has recently been developed with the aim to capture HNPCC-specific psychosocial difficulties. We assessed the reliability of this instrument, using data from three HNPCC populations in Denmark, Canada, and Sweden. **METHOD:** Self-concept scores were available from 591 individuals with HNPCC-predisposing germline mutations. The subgroups included 415 Danes, 108 Canadians, and 68 Swedes without differences in sex and age between the populations and with 43–63% being affected with cancer. ANOVA analyses were used to test for differences in the subgroups and principal component analysis was used to explain variance. **RESULTS:** Overall, the HNPCC self-concept scale provided similar results in the three countries, though differences were recognized for individual questions. Danes expressed lower degrees of guilt, but more pronounced worries for cancer, whereas Canadians more often expressed feelings of isolation and loss of privacy. PCA analysis demonstrated that all 20 items contribute to variability with questions related to gastrointestinal anxiety being major determinants. **CONCLUSIONS:** The HNPCC self-concept scale was found to be valid and reliable. Subtle differences in feelings of guilt, worries for cancer, isolation, and loss of privacy were identified between the countries. All items contributed to the variation in scores with items linked to gastrointestinal anxiety central.

## A-213

**Combining Self-Report Levels of Impulsivity with fMRI Among Smokers to Improve Lung Cancer Prevention Approaches**

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**OBJECTIVES:** Smokers have higher levels of self-reported impulsivity than non-smokers. Objective measures to further support these findings are needed. The purpose of this study was to use fMRI to corroborate self-report impulsivity with neural responses to smoking cues, an objective proxy of behaviour. Because previous research has demonstrated that smokers are more responsive to smoking cues, we hypothesize that increased impulsivity in smokers will be correlated with a stronger neural response to cues. **METHOD:** Thirty-one smokers were recruited. Participants were first administered the BIS/BAS, a self-report measure of impulsivity. During fMRI, individuals watched videos that included smoking and non-smoking cues. We then generated brain maps for assessing differences in cue reactivity (smoking minus non-smoking) for each group and compared them using a priori brain Regions of Interest (ROI). ROI were based on a previous study conducted by our lab using the presentation of the same smoking and non-smoking cues. **RESULTS:** As predicted, smokers who reported higher levels of impulsivity showed significantly greater activation in response to smoking cues in brain regions including the insula, middle frontal gyrus and anterior and posterior cingulate cortex. These brain regions have been previously associated with cigarette craving and self-monitoring of behaviour, suggesting that increased impulsivity is related to greater cigarette craving following exposure to smoking cues. **CONCLUSIONS:** A goal of psychosocial oncology research is to improve cancer prevention by reducing high cancer-risk activities (i.e. Smoking). Additional work is needed to further document why and how smoking persists despite well-known health risks. Our results suggest that, for instance, impulsive individuals should avoid smoking cues to assist in boosting abstinence. Future work will continue using fMRI to better understand what drives craving and smoking choices, leading to the design of more targeted interventions.

## A-216

**Validation of an Empowerment Questionnaire in Breast Cancer Survivors**

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**OBJECTIVES:** Research in the field of psychosocial oncology has done quite well in demonstrating problems patients encounter during and after cancer treatment, but research illuminating aspects of patients own strengths towards these problems is rare. The purpose of this study is to further define and operationalize the construct of empowerment

from the perspective of breast cancer survivors by validating an empowerment questionnaire. **METHOD:** In the Netherlands a questionnaire has been developed to measure Empowerment in psychiatric patients. Empowerment is defined as a process in which patients (re)discover their own power, develop and augment this power and use it to the fullest potential. The questionnaire consist of 40 items divided in six subscales: Health care, Social support, Self-esteem, Feeling connected, Self-management and Community support and a total empowerment score. This questionnaire will be validated in breast cancer survivors. **RESULTS:** This study involved non-metastatic breast cancer patient who were treated with curative intent with a mean of 5.5 years ago. Questionnaires were completed at home and 155 of the 258 breast cancer survivors returned them by mail (60%). The results of validation, such as content validity (factor-analysis), convergent and discriminant validity (intercorrelations), internal consistency (reliability, Cronbach's alpha) will be presented at the congress. **CONCLUSIONS:** By using the empowerment questionnaire in routine oncology care, structural attention will be given not only to problems (care as usual) but also to the resources of patients. In this way, patients strengths can be built and not just their problems corrected.

#### A-229

##### **Percentiles Curves: To Assess, Predict and Characterize the Distress**

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**OBJECTIVES:** Distress has been long identified and well documented as a significant issue for patients with cancer over the years. Despite this reality, less than 5% of distressed patients in busy clinics are recognized and receive any psychosocial treatments. The goal of this study was to develop an instrument based standard for individual assessment - percentiles curves of distress - to assess, compare and predict the distress in different moments of treatment. **METHOD:** A prospective study was done to chart the percentiles curves of distress, using the data of patients, from July 2007 to November 2009, from an oncology center, located in Brasília, the capital of Brazil. A total of 267 patients, between 14 and 86 years of age ( $M = 56$ ), 35.6% male and 64.4% female, answered the Distress Thermometer (DT) in three distinct stages of the chemotherapy protocol: beginning, middle and last day of treatment. **RESULTS:** The distress found allowed the chart of the percentiles curve. Considering patients with severe distress, at the beginning 61.80% were concentrated between the distress 5 (percentile 50%) to 10 (percentile

99%). At the middle and at the last day, the curve progressively decreased, 30.37% of the patients were between the score 4 (percentile 75%) to 8 (percentile 99%); and 18.24% were in the distress 5 (percentile 90%), 6 (percentile 95%) and 8 (percentile 99%), respectively. **CONCLUSIONS:** The percentiles curves make it easy to monitor the distress during the pre-established stages in the treatment, identifying not only those patients with a severe distress, but also those who are on the verge of having it. This deviation is especially important if the difference of the percentile occurs outside the existing standard in this sample. Thus, the health team may quickly identify and anticipate clinical problems, as it is worldly done with the growth curves.

#### A-235

##### **Improving Decision-making In Ovarian Cancer: Development And Evaluation Of Decision Aids To Help Women Make Informed Treatment Choices**

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**OBJECTIVES:** Women with ovarian cancer (OC) face difficult treatment decisions with uncertain QoL and survival outcomes. Decision Aids (DAs) have been shown to improve informed decision-making, but no such tools are available to women with OC. Study 1 involves an RCT to evaluate the effectiveness of a DA for asymptomatic women with rising CA-125 following initial treatment; Study 2 involves a pilot study to develop and assess a DA for women with resistant or refractory OC. **METHOD:** In Study 1, 178 women are randomised to receive either the DA or a general Cancer Council booklet, and complete standardised measures at baseline and 4-month follow-up. This DA helps women decide whether to start immediate treatment or wait for further evidence of cancer recurrence. In Study 2, 20 women provide feedback on the newly developed DA via a questionnaire and telephone interview. This DA helps women decide whether or not to continue active treatment. **RESULTS:** Overview and current progress on both studies will be presented. **CONCLUSIONS:** This research program addresses a neglected area in the management of women with OC. It is anticipated that the DAs will lead to improved understanding of treatment options, reduced decisional conflict and regret, and increased satisfaction with the decision-making

process. If effective, this relatively simple intervention has the potential to improve the clinical care, and ultimately quality of life, of women with OC.

#### A-236

##### **First Randomised Controlled Trial Of A Decision Aid In A Clinical Trial Setting (IBIS-II)**

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**OBJECTIVES:** Recruitment to clinical trials is generally suboptimal, with both patients/consumers and clinicians reporting difficulties with the consent process. Decision Aids (DAs), which present evidence-based information in a clear graphical form and facilitate participation in decision making, may improve this process by ensuring patients/consumers make decisions that are informed and value-sensitive. This RCT evaluated the efficacy of a DA for women considering participation in the IBIS-II Prevention trial for women at high risk of breast cancer. **METHOD:** Women eligible for IBIS-II, who had not decided about participation, were invited to take part in the DA study. Participants from 12 Australian and New Zealand IBIS-II centres were randomised to receive either the standard IBIS-II information and consent materials alone (Control group,  $n = 89$ ), or in combination with a DA booklet (DA group,  $n = 89$ ). Participants completed standardised and purpose-designed measures 1 week and 3 months after deciding whether or not to participate in IBIS-II. **RESULTS:** The majority of women (84%) reported the DA made it easier to understand IBIS-II than reading the information sheet alone, and 89% recommended providing both the DA and the information sheet to potential IBIS-II participants. No group differences were detected in levels of decisional conflict or knowledge of IBIS-II/clinical trials in general, due to floor and ceiling effects respectively. Similarly, no group differences were found in levels of decisional regret and satisfaction at 3-month follow-up. **CONCLUSIONS:** This is the first study to assess the effectiveness of a DA in a clinical trial setting. The use of DA was strongly endorsed by participating women and clinicians. Challenges of evaluating DAs in a Prevention trial setting will be

discussed. An RCT of a DA for the DCIS arm of IBIS-II is currently underway. The DAs have the potential to enhance the process of informed consent and reduce dropout rates in clinical trials.

#### A-237

##### **What Information Do Cancer Genetic Counselees Prioritize?**

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**OBJECTIVES:** The study objective was to explore counselees' expectations prior to the genetic counseling, and the preferred issues to be discussed during the first cancer genetic counselling session. Counselees had attended genetic counseling due to a personal and/or familial history of breast, breast/ovarian or colorectal cancer. **METHOD:** 110 counselees attending the cancer genetic counselling in 2009 constituted the study sample. The data was collected using Q-methodology and the QUOTE-GENE<sup>ca</sup> questionnaire. Counselees ranked 30 items, based on the order of importance to them. The responses were forced onto a quasi-normal distribution, asking the participants to identify the 3 most important, 3 least important, 7 very important, 7 next to least important and 10 items that were neither important nor unimportant. **RESULTS:** The counselees expected the counsellor to be skilled, provide clear explanations and risk estimations. The most important issues for counselees were to receive regular clinical examinations and information about symptoms that are important to be attentive to and seek further medical follow-up for. To receive general information on genetics, to be reassured, discussing emotional issues, and receiving supportive telephone calls or receiving support in communication with relatives was regarded as the least important topics. **CONCLUSIONS:** Unlike previously assumed, emotional and communicative difficulties relating to cancer genetic information, was not among the most important issues for the counselees. The highest priority appeared to be the practical aspects of the cancer susceptibility, since the counselees preferred to receive counselling including medical and risk information and suggestions as how to reduce their risk. Receiving emotional support or help in communicating the information to at-risk relatives was regarded as least important.

## A-239

**Quality of Life, Emotional Distress, and Relationship Adjustment in Spousal Caregivers of Primary Malignant and Non-Malignant Brain Tumor Patients**

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**OBJECTIVES:** Primary brain tumors (PBT) are treatable, but deemed incurable. The neurocognitive and psychosocial consequences of these diseases pose unique challenges for spousal caregivers, and declines in their quality of life (QOL) heightened emotional distress and relationship problems are well documented. However, there is only scant evidence as to the extent and severity of these problems. This study explores this and some of their determinants in caregivers of malignant and non-malignant brain tumor patients. **METHOD:** This cross-sectional study compares two samples of convenience: spousal caregivers of malignant PBT patients ( $N = 32$ ) and spousal caregivers of non-malignant PBT patients ( $N = 27$ ). The caregivers completed a demographic form and questionnaires on QOL (CQOL-C), emotional distress (BSI-18), and dyadic adjustment (DAS). Patients gave permission to extract demographic and medical information from their medical files. Questionnaires were administered in person or by mail, according to the participants' preferences. **RESULTS:** QOL and emotional distress scores were significantly worse for caregivers of malignant PBT patients than for caregivers of non-malignant PBT patients, caregivers in other palliative cancer settings, and the general population. Relationship adjustment scores were comparable between the two groups and not significantly different from the validation sample of the questionnaire. Emotional distress and dyadic satisfaction significantly predicted QOL outcomes. **CONCLUSIONS:** This is a first study comparing the QOL, emotional adjustment, and dyadic adjustment of caregivers of patients with malignant and non-malignant PBTs. Caregivers of malignant brain tumor patients experience greater distress and a poorer quality of life compared to caregivers of non-malignant brain tumor patients and to the standardization samples of respective questionnaires. Clinicians should monitor carefully the psychosocial status of caregivers of malignant PBT patients, and all caregivers should be asked about their satisfaction with their relationship.

## A-245

**Navigation and Survivorship Education Sessions**

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**OBJECTIVES:** A study by The Canadian Cancer Society (2003) showed that 89% of patients identified a need to obtain general information about services. Oncology research highlights that information needs are greatest at the time of initial diagnosis and again after treatment. Moreover, increased knowledge improves general coping (McQuellon *et al.*, 1998). For these reasons, we developed two education sessions: One targets all newly diagnosed patients (Navigation) and the second targets all patients finishing active treatments (Survivorship). **METHOD:** A literature review was conducted to determine the information needs of those initially diagnosed and those completing treatments. Material, which will be shared during this presentation, was developed to ensure the answers to these needs forming the basis of the hour long Navigation and Survivorship sessions. Both sessions are held on a regular and ongoing basis to ensure that all patients are able to attend. Community and clinic resources are also included in these sessions. **RESULTS:** The literature review showed that patients and their caregivers need information about general services, i.e.: who to contact, where to go for emotional support and how to deal with financial problems. These core needs were identified at both key informational time points and therefore provide the foundation for both the Navigation and Survivorship educational sessions. The focus is on providing resources while normalizing experiences in the hope of improved general coping. **CONCLUSIONS:** Literature suggests that our Navigation and Survivorship educational sessions should improve patient's and caregiver's general coping at the time of initial diagnosis and after treatment. Furthermore, providing these educational sessions assists in the early identification of those patients who need more intense intervention and facilitates referral to the appropriate professional earlier in the illness trajectory.

## A-246

**Initial Findings of a New Measure to Assess The Unmet Psychosocial Needs of Adolescents and Young Adults Who Have a Parent with Cancer**

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**OBJECTIVES:** This paper reports the development of the first comprehensive psychosocial needs measure for young people (12–24 yrs.) who have a parent with cancer - the Offspring Cancer Needs Instrument (OCNI). Items were based on a previous qualitative study and literature review. In this study, the psychometric properties of OCNI and the relationship between unmet needs and psychological health were explored. **METHOD:** Young people aged 12 to 24 years who had a parent diagnosed with cancer within the past two years or currently on treatment were recruited to the study. Participants were recruited through medical oncology centres and existing peer support organisations. Participants were asked to complete a survey which included the 65 item OCNI (across 6 conceptual domains) and a measure of depression and anxiety (K-10). **RESULTS:** Unmet need domains from highest to lowest were: information about parent's cancer, family issues, 'time-out'/recreation, support from friends and other young people, dealing with feelings, and practical assistance. The top three unmet needs related to information. A strong positive correlation was found between the OCNI and psychological distress scores, attesting to validity. The instrument also exhibits high reliability (Cronbach's alpha ranged from 0.90 to 0.95). Overall, depression and anxiety levels were elevated in this sample. **CONCLUSIONS:** The development of the OCNI takes an important step towards redressing the dearth of research into the psychosocial needs of young people through direct needs-based research. Information on where needs are not currently being met by service providers will assist in quality service delivery, with the view to promoting health and wellbeing outcomes for young people who experience the protracted illness of a parent who has been diagnosed with cancer.

#### A-247

##### **'Breasts Do Not A Woman Make.' Breast Cancer, Femininity, and the Competitive Sport of Dragon Boat Racing**

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**OBJECTIVES:** Embedded within medical and popular discourses on breast cancer is the belief that breast amputation is an emotionally devastating experience that threatens women's self identity as feminine/female. In contrast, the findings of this study illustrate that not all women experience breast loss as a threat to their gender identities. Rather, for most women a stable identity of feminine/female remained, and for the women in this study, their dragon boat racing experiences also played an important role in this experience. **METHOD:** A qualitative study involving

Grounded Theory, two data collection techniques were utilized. The first consisted of twenty-six (26) in-depth face-to-face interviews with members of a breast cancer survivor competitive dragon boat team located in a mid-sized city in southwestern Ontario. The second technique involved participant observation that continued for five (5) years and involved multiple locales. **RESULTS:** Integral to the ways in which women responded to the loss of their breast was the importance that breasts had for women in regards to their self definitions as feminine/female, how they physically experienced their breasts, and the roles their breasts played in their relationships with others. For these women, team membership exposed them to others who held antithetical views concerning the loss of their breast, and whose self presentations reinforced popular representations of femininity. **CONCLUSIONS:** Needed is a more thorough understanding of the complex ways in which some women experience the loss of their breast as a threat to their sense of self as feminine or female while other women do not, and to listen to women's own perspectives and concerns regarding their experiences of breast cancer.

#### A-248

##### **'I Look Forward To The Call': Evaluation Of A Telephone-Based Support Group**

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**OBJECTIVES:** The use of emotional and social support interventions, such as support groups, can facilitate positive adjustment amongst those affected by cancer. Interest in telephone-based support groups (TSG) is increasing, and these are now being offered as an alternative to traditional face-to-face support groups. We assessed the Cancer Council NSW telephone support groups to determine their acceptability to participants and facilitators, impact on participants' psychosocial wellbeing, and levels of burnout amongst group facilitators. **METHOD:** 136 TSG members (14 former, 82 current, 39 new) completed a computer-assisted telephone interview assessing utility (referral sources, reasons for joining the group) and acceptability (structure, content, leadership, between-member support and overall satisfaction) of the groups. New members also completed a survey assessing their psychosocial wellbeing before participating in their first group session and again 12 weeks later. All 11 group facilitators completed a burnout survey and interview exploring their

experiences of the groups. **RESULTS:** Lack of access to face-to-face support groups was the main reason for members participating in TSG. There was a significant reduction in new members' levels of depression ( $p = 0.013$ ), and improvement in overall mental health ( $p = 0.023$ ) and emotional/informational support ( $p = 0.031$ ) from pre- to post-group assessment. Members praised the TSG service and 96% would recommend it to others. Although facilitators identified challenges (workload, skills, group size), they reported significantly lower levels of burnout compared to reference values. **CONCLUSIONS:** TSG is highly acceptable to people affected by cancer. Preliminary evidence using a quasi-experimental design suggests TSG may contribute to improvements in some aspects of emotional wellbeing. These findings emphasise the value of including telephone-based support groups as part of the suite of supportive care services available to people affected by cancer. Attention should be directed to selecting, training and supporting group facilitators given their critical role in the success or not of the group.

#### A-253

##### **OMSORG - Dealing With Bereavement Implementation of Training Groups for Bereaved Children in Public School Settings in Denmark**

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**OBJECTIVES:** A very efficient way of helping bereaved children in coping with the sad feelings of loss and despair is to establish Training Groups lead by one or two responsible adults. In the group the children can meet with peers who are in a situation very similar to their own. They can listen to one another, discuss similarities, differences and problems. For once they can be in a forum where everyone can say: 'I know exactly how you feel'. **METHOD:** Since the start in the early 90's the Danish Cancer Society has managed to establish more than 200 training groups nationwide. Still this is far too few to meet children's needs, but it is a successful beginning. As a consequence of this we have just finished a two years pretesting programme on the benefits of implementing the Training Groups into Public School settings. **RESULTS:** One of the basic conditions in working with children in loss and grief is that the responsible adult person involved in the child's unbearable situation makes space for the child to be heard, seen and understood. For many reasons the Primary Schoolteachers are such persons. And the results of the pretesting clearly states the fact that schools in many ways are the perfect forum for running Training Groups for bereaved children. **CONCLUSIONS:** Every year more than 2,500

Danish children under the age of 18 experience the loss of a parent by death. Another 42,000 children experience that their mum or dad is acute hospitalized with a severe illness. These children are in great need of adult help. Therefore it is our goal that within 10 years time, at least 50 percent of all Danish Public Schools has established one - or more - training groups for bereaved students.

#### A-259

##### **Improving Communication During The Transition To Palliative Care In Oncology: A Concise And Individualized Communication Skills Training Demonstrates Content Specific Effects In A Randomized Controlled Trial**

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**OBJECTIVES:** Improving communication skills in consultations addressing the transition from curative to palliative care is necessary. Patients and relatives want to be informed about medical issues and need emotional care from their oncologists. However, physicians experience these consultations as difficult and distressing and lack communication skills training on this topic. We therefore conceptualized a content specific but individualized communication skills training (CST) addressing the challenges of the transition to palliative care. **METHOD:** The CST focuses on learning goals of participants derived from video assessment. These were the basis for practicing communication skills in role play in a 1.5 day workshop plus a coaching afterwards. The CST was evaluated in a RCT with 41 physicians with little/no CST experience. Objective evaluation was achieved by ratings of consultations with actor patients. Blind raters used a target-oriented checklist (COM-ON-Checklist). Two standardized scenarios were analyzed: acute and chronic palliative situation. **RESULTS:** The objective evaluation of the effects of our CST in consultations with actor patients using the COM-ON-Checklist shows significant improvement of the training group on content specific items ( $p = 0.02$ ). Concerning basic communication skills, we found no significant effect. There are hypotheses that factors like setting or length of the consultation modify results. Detailed analyses will be presented. **CONCLUSIONS:** Our CST addresses a crucial and difficult issue in physician-patient communication: the transition to palliative care. With a duration of 1.5 days it is quite short and focuses strongly on individual learning goals. Nevertheless, it proves to be effective in RCTs in

improving content specific communication skills of physicians rather inexperienced in CST. We conclude that it is also possible to practice communication skills concerning difficult topics, for which physicians feel that they require training.

#### A-260

##### **Presymptomatic Genetic Testing in Minors: The Experience of Preparatory Consultations**

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**OBJECTIVES:** Presymptomatic genetic testing in minors is based on an immediate medical benefit. Testing procedure influences the psychological impact. In our multidisciplinary approach we have introduced preparatory consultations for parents, aimed at thinking about the decision to realise the test for their child. The second step is the consultation with the minor and blood sampling, when he/she agrees. During the third step, the genetician announces the result to the minor and his parents. **METHOD:** Our multidisciplinary team undertook presymptomatic testing for 30 minors (mean age =  $9.98 \pm 4.92$  years) at risk for neuroendocrine tumors. Eighteen minors were tested (15 have already received the result). The procedure is ongoing for 12 children. We performed a preliminary retrospective qualitative analysis of the course of these 30 procedures in the aim to define criteria for 'good proceedings', limiting the traumatic impact of the result. **RESULTS:** We identified four criteria: 1- Decision is taken by both parents when they are ready to perform the test for their child; 2- Parents receive advice on the way to talk to their child about the hereditary disease; 3- Appropriate time for testing is discussed for each child, taking into account medical benefits, minor's school and personal schedules; 4- Periods of medical examinations or uncertainty for the carrier parent are avoided. **CONCLUSIONS:** Our experience regarding presymptomatic genetic testing in minors led us to give an important focus on the preparatory step with

the parents. Preparatory consultations aimed at the parents provide them with the possibility to think about their decision and to accompany their children during the procedure of genetic testing. The four criteria above-mentioned should be evaluated in a further prospective study, as potential predictors of emotional acceptance of the test result.

#### A-262

##### **Intuitive Expectation and Emotional Impact of Genetic Testing in Hereditary Endocrine Tumors**

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**OBJECTIVES:** Paragangliomas and pheochromocytomas are rare neuroendocrine tumors, inherited in 30% of cases. The hereditary form of the disease is characterized by an early onset with a higher risk of recurrency and/or malignancy. Genetic testing of patients and their families opens to earlier diagnosis and treatment of asymptomatic tumors in mutation carriers, but has also an emotional impact. Our study aimed at evaluating emotional impact of genetic testing in patients met during oncogenetic multidisciplinary consultations. **METHOD:** Baseline state and trait-anxiety (STAI), depression (BDI-13) and intuitive expectation of being carrier of the mutation (evaluated by a question), were assessed before the blood sample in 50 consecutive subjects (17 males, 33 females, mean age  $44.2 \pm 14.9$  years, 31 index cases and 19 relatives). A second assessment of state-anxiety, depression and traumatic impact of the announcement (IES-R) was performed directly after the definitive test result. **RESULTS:** 50 subjects were involved in the first assessment and 38 in the second. Psychological scores were not associated with subject's status (index case or relative). Intuitive expectation before the blood sample was not associated with psychological scores. No psychological score was associated with the test result. Final state-anxiety was higher than initial ( $p < 0.001$ ). A higher score of IES-R was found in subjects who expected to be carriers ( $p = 0.009$ ),

even after adjusting for the result. **CONCLUSIONS:** The statistical risk of being a mutation carrier is 50% (autosomal dominant model), but each subject perceives this risk with his own intuitive expectation. Our data encourage to evaluate the intuitive expectation of being a mutation carrier before the test. This sub-group may have a higher emotional impact of the test result, independently of the nature of the result.

#### A-264

##### **Delirium: Epidemiology and Risk Factors in Early Pos-op of Head and Neck Cancer Patients**

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**OBJECTIVES:** The authors' main goals are to determine incidence in early pos-op (1st 14 days) of Head and Neck and ORL cancer patients in an Oncology Institute and identify risk factors and their prevalence. Secondary goals are socio-demographic profile of study population and characterization of delirium time of onset, duration and course. **METHOD:** Prospective Cohort Study, including all adult patients admitted for elective surgery, in H&N and ORL wards, from 1 January 2010 until it's reached a total of 274 patients. This population will be characterized and evaluated according to the authors' protocol variables by the investigation team. Patients who develop delirium will be selected as cases and will be further evaluated during hospitalization and at discharge. Those with partial delirium remission will be followed up as outpatient. **RESULTS:** The authors started recruiting the sample at January 1st and expect to reach the end point in a 4 months period. The data will be analyzed by descriptive statistical methods and applied chi2 test. Multivariable logistic regression model will be used to test the predictive variables. **CONCLUSIONS:** Delirium is an organic neuropsychiatric entity that reflects a global cerebral dysfunction. It requires a clinical diagnosis with multiple organic evaluations. Usually with an acute onset and fluctuating course, it increases morbid-mortality in H&N patients. Undiagnosed cases reach 66%. Correction of underlying etiological factors can reverse the course of this syndrome, with total symptoms remission. The study's data will allow prevention, earlier diagnosis and better clinical management in this population.

#### A-266

##### **Developing a sense of Meaning and Hope in Cancer Patients through Hypnosis.**

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**OBJECTIVES:** For several years we have found that some patients undergoing psychotherapeutic interventions incorporating cognitive-behavioural and psychopharmacological interventions experience several relapses. This study aimed to examine the effect of incorporating hypnotherapy techniques which go beyond the thinking rational mind to explore patient's deep personal intrapsychic issues through self discovery (having a glimpse of the authentic self, experiencing strong emotional release and achieving new levels of mastery) ultimately helping the patient to discover his/her meaning and purpose. **METHOD:** The following hypnotic techniques were integrated into the existing psychotherapeutic interventions; Inducing relaxation and teaching Self-Hypnosis, Ego strengthening (dealing with feelings of guilt, self-blame, hopelessness, loss of self-esteem), Imagery (to strengthen adaptation mechanisms, induce positive feeling states, release of strong repressed emotions like anger, hurt and to bolster self-control and hope) Gestalt in Trance (verbalizing feelings that need to be expressed) finding 'The Healer Within' (to fuel a sense of personal power and meaning). **RESULTS:** A sample of 6 cancer patients with ongoing psychotherapeutic interventions and subsequent relapses was chosen. (Although these patients have learned to rationalize, and can generate alternatives, they still cannot resolve meaningful family communications, revealing high levels of distress, depression, anxiety and anger (Emotion Thermometers Tool, Mitchell *et al.*, 2007). Hypnosis implemented over the last 3 months has provided a new technique for uncovering repressed material, helping these patients achieve new levels of mastery hope and meaning. **CONCLUSIONS:** Adjunctive hypnotic treatment of cancer should be integrated into existing psychotherapeutic interventions to assist in the uniquely personal adjustments each patient has to make to his illness. Through Hypnosis patients can engage in magical thinking and experience 'strong emotional release 'which they could not allow themselves in more cognitively oriented therapy. Patients can learn to transcend many of their negative conditions, reaffirming the integrity of their self-image and finding a sense of ultimate meaning in their suffering.

#### A-271

##### **Emotional Adjustment and Coping in Elderly Couples During Prostate Cancer Treatment**

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**OBJECTIVES:** Old age is characterized by increasing difficulties in coping with stressful events and in the onset of certain diseases, such as prostate cancer. However, few studies have been able to directly examine the daily behaviors and emotional experience of couples during treatment for this condition. The aim of the present research is to examine coping strategies used by elderly spouses to cope with prostate cancer treatment using ambulatory assessment methods. **METHOD:** The current study examines data from the daily lives of 96 elderly French couples using the Experience Sampling Method (ESM). Participants completed 3 assessments per day over three distinct 4-day periods (beginning, middle, and end of radiation treatment). The principal advantages of ESM are that it allows researchers to establish the temporal relationship between coping strategies, anxiety and depression, and to examine both effects between subjects and within the couple. **RESULTS:** Multi-level regression analyses demonstrated that using emotion-focused coping increased psychological distress for both patients and spouses, and that problem focused coping decreased happiness in patients. Concerning coping strategies within couples, spouses used less emotion-focused coping strategies than patients during treatment, but used more problem-focused coping and social support seeking (particularly at the beginning of treatment). **CONCLUSIONS:** This study was funded by the National League for the Fight against Cancer, France, and contributes to understanding emotional adjustment and quality of life in patients and their spouses faced with prostate cancer. The findings underscore the importance of taking into account the couple in developing psychological interventions or supportive strategies.

#### A-272

##### **Is it Possible to Improve Residents' Breaking Bad News Skills in a Simulated Three-Person Consultation? A Randomized Study Assessing the Efficacy of a Communication Skills Training Program**

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**OBJECTIVES:** Although patients with cancer are often accompanied by a relative during breaking bad news consultations, little is known regarding the efficacy of training programs designed to teach

residents the communication skills needed to break bad news in a three-person consultation. **METHOD:** Residents were randomly assigned to a 40-hour training program or to a waiting list. A breaking bad news simulated three-person consultation was audiotaped at baseline and after training for the training group, and 8 months after baseline for the waiting-list group. Transcripts were analysed by tagging used communication skills with a content analysis software (LaComm) and by tagging phases of bad news delivery: pre-delivery, delivery and post-delivery. Training effects were tested with GEE and MANOVA. **RESULTS:** Ninety-five residents were included. Trained residents used more assessment (RR = 1.83;  $p < 0.001$ ), and more supportive utterances (RR = 1.58;  $p < 0.001$ ) than untrained residents. The simulated patient and simulated relative who interacted with trained resident used more psychological words (RR = 1.88;  $p < 0.001$  and RR = 1.80;  $p < 0.001$ ). Duration of the pre-delivery phase was longer for trained (1 min 6 s, at baseline and 2 min 9 s, after training) compared with untrained residents (1 min 22 s, at baseline and 52 s, eight months after baseline) ( $p < 0.001$ ). **CONCLUSIONS:** This study shows the efficacy of a training program designed to improve residents' breaking bad news skills in a three-person consultation. After training, residents' communication becomes more centred on the simulated patient and relative, and allows them to express more concerns. This type of training program should therefore be included in resident curriculum.

#### A-275

##### **A Large Scale Pragmatic Validation of the HADS for Major Depression in an Ethnically Diverse Cancer Population**

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**OBJECTIVES:** There is considerable interest in the accuracy of the Hospital Anxiety and Depression Scale in cancer. The HADS is the single most commonly applied tool for depression, tested to date in 22 analyses against major depressive disorder (MDD). However, only one previous study had a sample size over 300 (Walker *et al.* 2007 *J Psychosom Res* 63: 83–91). **METHOD:** We analysed data collected from Leicester Cancer Centre from 2007–2009 involving approximately 1000 people approached by a research nurse, research physician and two therapeutic radiographers. The researcher applied DSMIV criteria of major depressive disorder (MDD). We collated full data on 690 patient assessments of whom

12.9% had MDD, 121 were palliative and 115 (16.7%) were from ethnic minorities (largely British South Asian of India descent). RESULTS: Sensitivity and specificity were as follows HADS-A 87.6%/72.3; HADS-D 86.5%/80.1% and HADS-T 95.5%/76.3%. The AUC was highest for HADS-T > HADS-D > HADS-A. In ethnic minorities sensitivity and specificity were as follows HADS-A 93.1%/66.3%; HADS-D 86.2%/65.1% and HADS-T 96.6%/66.3%. AUC was poor for the HADS-D from the ethnic group and HADS-A/HADS-T were preferred. There was no difference by cancer stage. CONCLUSIONS: This is the largest validation study of the HADS in cancer and suggests that in an ethnically diverse population the HADS-T may be the optimal version based on accuracy alone; regardless of cancer stage. The HADS-D may have weaker validity in patients from ethnic minority populations.

#### A-276

##### **A Large Scale Validation of the Emotion Thermometers as a Screening Tool for Major Depression in an Ethnically Diverse Cancer Population**

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OBJECTIVES: We previously reported initial validation of the Emotion Thermometers a simple 5-domain visual analogue scale inspired by the Distress Thermometer (Psychooncology. 2009 Mar 18; Epub). We aimed to report more definitive validation in a large ethnically diverse sample against DSMIV criteria of major depressive disorder (MDD). METHOD: We analysed data collected from Leicester Cancer Centre from 2007–2009 involving approximately 1000 people approached by a research nurse, research physician and two therapeutic radiographers. The researcher applied criteria for MDD. We collated full data on 660 patient assessments of whom 12.9% had MDD and 14.8 were from ethnic minorities (largely British South Asian of India descent). RESULTS: Sensitivity, specificity and AUC were as follows DT - 82.4%; 68.6%, 0.811; AnxT - 85.9%; 56.2%, 0.774; DepT - 80.0%; 78.2%, 0.853; AngT - 83.5%; 66.1%, 0.782 and HelpT -68.2%; 79.1%, 0.799. In the ethnic minority DepT results were 80.0%; 69.4%; 0.770. Thus in the parent sample the DepT was the optimal thermometer for screening for depression. However the DepT lacked specificity in the BSA population and thus the DT was superior. CONCLUSIONS: This is the largest validation study of the ET in cancer and suggests that in most settings including ethnically diverse population the DepT may be the optimal thermometer stage.

However when screening exclusively in ethnic minorities additional care must be taken and increasing emphasis may be placed upon distress.

#### A-278

##### **The Role Of Primary Care In Cancer Care: The Views And Experiences Of Patients And Family Members**

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OBJECTIVES: In the UK the role of primary care in the provision of cancer care is poorly defined. Practices are offered a financial incentive to conduct a review with new patients within six months of diagnosis, but the extent to which these occur and the scope and perceived usefulness is unknown. The purpose of this study was to explore the role of primary care in caring for and supporting patients with cancer and their families. METHOD: Semi-structured interviews were conducted with 38 patients, diagnosed within the last three years, and 24 family members. Patients were stratified by time since diagnosis, and a maximum variation sampling strategy was employed to achieve heterogeneity in terms of cancer type and socio-demographic variables. We interviewed 19 males and 19 females, with a range of 14 different cancers. Patients were invited to ask their partner/relative if they would like to participate in the study. RESULTS: Most patients were unaware of having had a review of their cancer-related care, despite records indicating the contrary. Whilst some participants were satisfied with the care they had received, others felt isolated following treatment completion and most would have welcomed pro-active involvement from their GP practice and a formal review. Preferences varied regarding optimal timing, content and mode of delivery for this review. Some family members expressed a preference for greater inclusion. CONCLUSIONS: Although patients and family members can see an important role for primary care in providing cancer follow-up care this is not universally being delivered at present and there is real scope for improving practice in this area. Providing GPs with guidance on conducting a structured review, which

covers areas important to patients and families, may be a useful way forward.

#### A-280

##### **Soul Medicine In Cancer Treatment**

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**OBJECTIVES:** To present on the development, implementation and evaluation of a Spiritual Care support group providing 'Soul Medicine' to augment physical treatment. Soul Medicine draws on diverse spiritual/wisdom traditions for group and individual experiential processes that foster emotional/spiritual resilience. Participants' experiences of these right brain orientated processes reveal that the journey towards a sense of personal wholeness/inner wisdom has an ultimate value that even cure, in and of itself, does not guarantee. **METHOD:** Groups provide same gender peer support. Experiential processes include meditation, mindfulness practice, collaging, image work, dreamwork, story, poems, alongside more standard processes of group sharing, paired dialogue and readings. The multi-dimensional group process enhances right brain/spiritual resiliencies where individuals experience their innate wisdom/strengths that are untouched by cancer. The Patient Dignity Inventory [1] a standardized, peer-reviewed tool is used as a marker by individuals at the beginning and end to evaluate subjective changes. **RESULTS:** Outcomes will be presented through story, participant's collages and summary of evaluation data including analysis of PDI findings. Participants discover they can relate differently with fear, depression, hopelessness, anxiety, uncertainty and mortality actually turning those experiences into 'teachers' that compel them to live more full, enriching lives. Participants also report significant changes in their relationship with the cancer itself. **CONCLUSIONS:** Soul Medicine is critical to cancer treatment by integrating image and body orientated experiential processes to activate spiritual dynamics such as:

- body-mind awareness
- intuition
- non-dual wisdom
- mindfulness practise
- present moment awareness
- interconnectedness with life's web beyond separation/isolation

These change individual's capacity to live with emotional/spiritual challenges of cancer. Cancer becomes a catalyst for accessing inner strengths/wisdom fostering personal meaning/hope. 'Soul

medicine' is an invaluable component in cancer treatment and survivorship.

#### A-288

##### **Transforming the Experience of Cancer Care: Evaluation of a Hospital-Based Volunteer Psychosocial Support Service**

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**OBJECTIVES:** Volunteer support may help both cancer patients and their caregivers to better cope with the disease and its treatment. The present study was designed to evaluate an innovative hospital-based volunteer psychosocial support service, and to identify specific dimensions of volunteer support that patients and their informal caregivers find most helpful. **METHOD:** A patient survey evaluating the specialized volunteer service was conducted five months after its introduction into the Radiation Clinic. All patients attending the clinic were asked by a research assistant to complete a demographic questionnaire and a survey of satisfaction with care provided by volunteers in the clinic. In addition, daily shift logs were collected from clinic volunteers, in which they described their interactions with patients and caregivers during their shifts. **RESULTS:** Of 182 patients, 93 (51%) recalled meeting a volunteer, with whom most (54%) spent 10–30 minutes. Based on 1595 interactions documented by 33 volunteers, most interactions (88%) were initiated by volunteers and most included both patient and informal caregivers (52%). Over 85% of men and of women reported benefit from these interactions, although men placed more value on informational support and women on emotional support ( $p < 0.05$ ). **CONCLUSIONS:** Specialized psychosocial support provided by trained volunteers is equally valued by male and female cancer patients, although there are gender differences in the type of support received or identified. Further research is needed, but these findings suggest that psychosocial support provided by trained volunteers could be an effective component of best practice guidelines for psychosocial care in cancer treatment centers.

#### A-293

##### **Patients' Evaluation of Psycho-Oncological Care in Certified Breast Centers in Germany**

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**OBJECTIVES:** Current national guidelines require 'Certified Breast Centers' (CBCs) in Germany to offer psychological support during all stages of breast cancer treatment. Being part of a larger research project on the quality of psycho-oncological care, the present study intended to determine which sorts of psycho-oncological care are actually offered in these centers and how they are used and evaluated by their patients. **METHOD:** In 2008, 218 locations (clinics) constituting 174 different CBCs were listed as fulfilling the standards of the German Cancer Society and the certifying agency, OnkoZert. From 80 of these locations 975 breast cancer patients could be recruited to answer a questionnaire asking, e.g. whether they had been offered psycho-oncological support, how much support they had received, and how satisfied they had been with it. Data analysis used frequency counts, correlations, and comparisons of means. **RESULTS:** Patients' mean age was 55 years. 86% of them had been diagnosed with cancer for the first time. 80% had been informed about the possibility of receiving psycho-oncological support, with the psycho-oncologist being the main source of information (55%). Individual support aiming at emotional relieve proved to be the most frequent form of support (43%). Contact with members of self-help groups was rare, however (10%). Generally, patients were satisfied with the amount of support received. **CONCLUSIONS:** Results suggest that psycho-oncological care is being made available for a significant proportion of the patients of CBCs in Germany and that it is evaluated positively by those making use of it. At the same time, informing a higher percentage of patients about the option of psycho-oncological support, informing about the possibility to contact members of self-help groups, and expanding support options to include group and education formats appear to be tasks for the future.

#### A-299

##### **Patient Experience of Total Gastrectomy Surgery: Factors Involved in Decision-making, Treatment Impact and Quality of Life**

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**OBJECTIVES:** Surgical removal of the stomach, also called total gastrectomy (TG), is presently the only curative treatment available to patients with stomach cancer. Some individuals at high risk, or

with a genetic predisposition, are opting to undergo prophylactic TG to reduce their chance of developing cancer. Considering the impact such a procedure may have, very little is known about what factors influence an individual's decision-making, treatment outcomes and quality of life. **METHOD:** Participants included one 37 year-old male with multiple polyps in his stomach and a family history of stomach cancer, one 18 year-old male with a confirmed CDH1 mutation and a family history of stomach cancer, and one 33 year-old male with confirmed metastatic gastric adenocarcinoma. Patients were interviewed approximately 12.6 months post surgery. Semi-structured interviews were analyzed using content analysis, a qualitative analytic approach for reporting combined subject responses. **RESULTS:** Subjective patient experience was categorized into: 1. making the decision, 2. treatment impact and 3. life after TG. Prior to surgery, all patients carefully evaluated their perceived risk compared to the treatment consequences and indicated that a certain event triggered their decision. The largest treatment impacts were learning to eat again and adjusting to the physical changes. Each patient endorsed that their experience made them appreciate and make the most of life. **CONCLUSIONS:** This currently represents the only study to investigate the lived-experience of TG for prophylaxis or palliation in individuals with and without genetic risk for stomach cancer. Understanding this process will allow all members of the cancer care team, and the patients themselves, to better understand the factors involved in decision-making and post-operative adjustment. The experience of these three patients provides valuable information that can be used to direct further research and improve patient outcomes.

#### A-300

##### **Life-Events Synergistically Interact With Cortisol in Relation to the Prostate-Specific Antigen Tumor Marker in Men**

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**OBJECTIVES:** Objectives: Psychosocial factors are independently related to the onset of lung cancer and to prognosis of multiple cancers. However, we are far from understanding the neurobiological mechanisms of such relations in

depth and whether stress synergistically interacts with biological factors in relation to oncogenesis. This study tested whether life events (LE) interacted with cortisol, a major stress hormone, in relation to the tumor marker prostate specific antigen (PSA). **METHOD:** This study used a cross-sectional design.  $N = 142$  men underwent assessment of LE concerning the past 1–5 years and their levels of cortisol, PSA and other confounders were measured as well. **RESULTS:** LE were unrelated to PSA in the total sample. However, LE did interact with cortisol in relation to PSA, such that LE were inversely related to PSA in patients with low cortisol ( $r = -0.323$ ,  $p = 0.005$ ), while LE were positively related to PSA in patients with high cortisol ( $r = 0.362$ ,  $p = 0.002$ ), independent of age and body mass index. **CONCLUSIONS:** Stress and cortisol interact synergistically in relation to an important tumor marker of prostate cancer, namely PSA. This informs us that cortisol moderates the possible effects of psychosocial stress on cancer-related processes, and that both stress and cortisol need to be taken into account. We will offer some possible explanations for the observed pattern of results. Future studies must replicate these findings in a longitudinal design before its findings may be applied into practice.

#### A-301

##### **Effects of an Interactive Cancer Communication System on Lung Cancer Caregivers' Quality of Life and Negative Mood: A Randomized Clinical Trial**

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**OBJECTIVES:** To fully address cancer suffering, we must address the patient's social system, including family members and others who care about the person with cancer. We tested an Internet based Interactive Cancer Communication System that provided advanced lung cancer caregivers information, management tools and support, and connected them to the clinical team. This study reports findings from a randomized control trial examining the impact of this website on caregivers' negative mood and quality of life. **METHOD:** 285 caregivers were randomized into website intervention or Internet control groups. Computer and

Internet service was provided if needed. Written surveys were completed at pretest and 2 month intervals for up to 24 months. ANCOVA analyses examined treatment effects at 6 months on caregiver negative mood (POMS) and quality of life (Burden and Disruptiveness scales of CQOLC), controlling for caregiver gender, age, caregiver's rating of patient symptom status (ESAS), and pretest values of outcome variables. **RESULTS:** Study attention, including patient deaths, yielded only 105 completed 6-month surveys. Those receiving the website ( $N = 48$ ) had less caregiver burden ( $F(1,88) = 2.94$ ,  $p = 0.045$ , 1-tailed) and negative mood ( $F(1,90) = 3.82$ ,  $p = 0.027$ , 1-tailed) at 6 months than the Internet control ( $N = 57$ ). There was no effect for caregiver disruptiveness. **CONCLUSIONS:** The nature of caregiving for a loved one with terminal illness may likely disrupt the caregiver's lifestyle. However, Interactive Cancer Communication Systems offering information, management tools and support services, and a link to the clinical team may impact coping and understanding such that one's subjective sense of burden accompanying caregiving demands and negative mood is lessened.

#### A-303

##### **Heightened Distress and Quality of Life Concerns in Individuals with Head and Neck Cancer**

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**OBJECTIVES:** Both short- and long-term outcomes for those diagnosed with head and neck cancer (HNCa) are influenced by multiple factors. More specifically, identification of distress secondary to a diagnosis of HNCa may provide a critical dimension that influences perceived quality of life (QoL). Thus, the present investigation assessed perceived levels of distress and QoL using validated measures in those diagnosed with HNCa. **METHOD:** The study was a cross-sectional, self-report, survey design. Forty-eight adults (43 to 78 years) diagnosed with a primary malignancy (non-melanoma) of the head and neck were evaluated; all were treated with curative intent. At assessment, the period of time post-diagnosis ranged from 3 to 12 months. All participants completed a validated distress screening measure, the Brief Symptom Inventory 18 (BSI-18) and the EORTC general QoL assessment tools (EORTC-QLQ-C30) and the HNCa module (EORTC-QLQ-H&N35). **RESULTS:** Data revealed that approximately

one-fourth of participants (23%) demonstrated significant levels of distress based on the threshold established for the BSI-18. Additionally, distress was found to be significantly related to perceived QoL status. Further, the psychological dimension of QoL was identified as the area most significantly impacted by heightened levels of distress in this group. **CONCLUSIONS:** Screening for distress provides an important and valuable measure that permits early identification of problems that may influence QoL outcomes in those with HNCa. The ability to identify distress early also may facilitate timely intervention to reduce distress and optimize QoL outcomes. In doing so, long-term outcomes may be enhanced in this unique clinical population.

#### A-304

##### **Screening For Psychological Distress And Psychiatric Morbidity Among Patients With Advanced Cancer: Preliminary Findings From An Irish Validation Study**

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**OBJECTIVES:** Patients with cancer are at risk for experiencing severe distress. This risk can increase in advanced disease. Because cases of distress often go unrecognised and untreated in clinical settings, effective screening methods are a key component of comprehensive cancer care. This study examines the validity of two brief screening tools in identifying distress among patients with advanced cancer: the Distress Thermometer (DT) and a two-item depression screening tool with an additional 'help' question. **METHOD:** A consecutive sample of adult patients with advanced cancer were recruited from an acute hospital and a hospice. The study is ongoing (current  $N = 131$ ; target  $N = 205$ ). In a face-to-face interview participants completed the DT (single item; 0–10 scale), and depression screening items ('depressed, down or hopeless'; and 'little interest or pleasure') and help question. These were followed by an interview using selected modules from the SCID-I. **RESULTS:** There were 14 cases (10.7%) of Major Depression (MD), Adjustment Disorder (AD) or Panic Disorder (PD). The DT (sensitivity 100%, specificity 55%) performed better than the depression screen (sensitivity 86%, specificity of 59%). Combining the DT and help question gave a sensitivity of 50% and specificity of 93%. The post-test odds indicate that 4 in 5 patients who score above the DT cut-off and want help will have

a diagnosis of MD, AD and/or PD. **CONCLUSIONS:** Preliminary findings suggest that the DT is a highly sensitive instrument in detecting clinically significant distress among patients with advanced cancer. Its higher level of sensitivity in comparison with the two-item depression screen may reflect its use of non-stigmatizing language. Because of its low specificity, the DT could be used in combination with a help question. This combination may allow clinicians to identify patients who both need and want professional support.

#### A-305

##### **From Hospital To Community - Directing Cancer Patients Into A Seamless Service Network In Hong Kong**

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*The Hong Kong Professional Counselling Association, Hong Kong, Hong Kong<sup>1</sup>, Social Workers Registration Board, Hong Kong, Hong Kong<sup>2</sup>*

**OBJECTIVES:** There are more than 24,000 people diagnosed with cancer every year in Hong Kong. Patients and their family members enter the hospital system for medical treatment but the disease, its associated treatment side effects and anxiety of relapse often place these individuals and families into a state of turmoil. Their common understanding and perceived sense of security, manageability and meaningfulness of their perceived world are turned upside down. **METHOD:** Leaving hospital after treatment is another crisis point of loss and uncertainty. Their sense of security from intense care from hospital team loosened as they are finished scheduled treatment. With the advancement in medical treatment, cancer is no longer a deadly disease. Majority of the patients are cured and yet they have to live with long term consequences of the cancer treatment as well as emotional distresses such as fear, anxiety and depression. **RESULTS:** With an effective hospital and community service network, we ensure that no one faces cancer alone. In this presentation, the user's profile in our CancerLink (community-based support service centre) will be reviewed. The service user profile and the program profile will demonstrate a strategic focus of how to cater for needs of newly diagnosed patients and long term survivors in the community. **CONCLUSIONS:** Hong Kong Cancer Fund is the largest cancer support organization in Hong Kong. The team together with volunteers provides free information and professional support to people touch by cancer. Our community education unit, the two CancerLink Support Centers in the community as well as Cancer Patients' Resources Centers in the hospitals form a closely knitted

network to create a seamless community support system for cancer patients and their family members in Hong Kong.

#### A-307

##### **Repressive Coping Styles and Emotional Expression of Women with Metastatic Breast Cancer during the Trier Social Stress Task (TSST)**

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**OBJECTIVES:** Previous studies demonstrate that repressors exhibit high physiological arousal while consistently not reporting negative affect. This trait-like coping style is linked with rapid breast cancer progression and physiological markers indicative of poor prognosis. However, we know little about how repressors actually express and withhold their emotions in response to stressful situations. This study used Specific Affect for Cancer to code the emotional expression of repressors with metastatic breast cancer compared with others by using videotaped TSST sessions. **METHOD:** Based on Weinberger's Adjustment Inventory, 18 repressors, 16 low-anxious, 19 high-anxious, and 38 non-extreme women participated in the TSST. They performed a 5 minute job interview and a 5 minute mental math task in front of two non-responsive judges. Participants' verbal and facial expression were coded, and each coded tape passed above a 0.60 kappa before it was retained as data. We predicted that repressors and high-anxious groups would express more defensive hostility than the other groups. **RESULTS:** In a priori Kruskal-Wallis omnibus tests of hypotheses, repressors expressed greater defensive-hostility, in particular tension in planned comparisons, and neutral relative to non-extreme individuals. A combined repressor and high-anxious group expressed greater hostility and micromoment-contempt relative to the combined low-anxious and non-extreme group. However, groups did not differ on positive affect, constrained anger, or primary negative affect. **CONCLUSIONS:** In contrary to previously reported behavioral characteristics, the repressors in this study expressed high levels of defensive and hostile affect. The results of this study suggest that coding emotional expression may be particularly useful in understanding the concurrent emotional expression and the coping experience of repressors under stress.

#### A-309

##### **The Experiences of Cancer Nurses' Existential and Palliative End-of-life Care within the Culture of Cure**

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**OBJECTIVES:** Recent definitions of palliative end-of-life care encourage a philosophy that addresses existential concerns from the point of diagnosis of a life-threatening illness. However, research about the experience of clinicians working with patients in this circumstance is still scarce. The purpose of this first author's doctoral thesis was to explore nurses' experiences of being with cancer patients who faced the threat of mortality. **METHOD:** This qualitative study used Benner's interpretive phenomenology to analyze data from observations and interviews with 19 front-line nurses working on two inpatient bone marrow transplant units of one institution in Canada. The study was guided by Yalom's (1980) understanding of the threat of mortality, encompassing four existential domains: fear of death, isolation, freedom, and meaninglessness. This approach informed analysis of the data obtained from interviews with these nurses about their experience and nursing practice. **RESULTS:** Nurses experienced conflicting intentions about fighting cancer, while simultaneously preparing patients to let go. Letting go did not necessarily reflect giving up or abandoning life but more often represented nurses' intentions to release patients from the perceived requirements of the curative culture. In the context of responsive relationships (patients and their families and healthcare colleagues), nurses reported learning to accept and explore the threat of patients' mortality and the process of dying. **CONCLUSIONS:** Results indicate a potential to enhance nurses' supportive and basic palliative end-of-life practice in their responsibility to existential care. Moreover, this study paves the way for more attention not only to policy, education, and research that focuses on patients' existential well-being, but to the well-being of healthcare providers.

#### A-310

##### **Tracking the Outcomes and the Use of a Wellness Centre by Cancer Survivors: A Feasibility Study**

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**OBJECTIVES:** Wellness centres are a popular approach to providing lifestyle tools to assist in the recovery from a cancer diagnosis yet have not been well evaluated in the literature. This study explored effectiveness of providing healthy lifestyle activities (nutrition, physical activities such as strength training, yoga, tai chi, qi gong, etc.) and coping skills (support groups, cognitive training, and arts programming such as music, art therapy, and journaling, etc.) to participants in a wellness centre. **METHOD:** Shortly after the opening of the wellness centre in January 2007, 117 active participants were recruited over 18 months and interviewed four times over a year. A prospective non-randomized design was used and included the standardized measures of self-esteem, depression, functional assessment and life orientation. Demographics, clinical variables, outside resources used and qualitative information were also collected. Final interviews were completed in September 2009. **RESULTS:** Of the 117 sample, 74% completed four interviews with a total of 420 interviews. Final results are pending and will correlate measure outcomes over time in participants with frequency and kinds of services used. Preliminary information found that 66% of the sample were still active at the Centre eight months post registration. Twenty-seven % attended with a frequency of four times a month or more, higher than the average at this Centre and most others. **CONCLUSIONS:** The outcome information from this study will provide a baseline for subsequent research approaches to further validate the integration of wellness and cancer recovery programs as part of standard care in oncology. Implications and strategies will be discussed to promote the use of such programs - with both the health care team and with patients - and ensure as many patients as possible may benefit.

#### A-312

##### **Methodological Challenges In Assessing Levels Of Psychological Distress And Psychiatric Morbidity Among Patients With Advanced Cancer: What Does The Literature (Not) Tell Us?**

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**OBJECTIVES:** Research on levels of psychological distress among cancer patients is a key part of the knowledge base that guides the development of psychosocial oncology services. Conducting such research can be challenging among patients with advanced disease because of their poorer physical and cognitive status. This paper examines the key methodological challenges researchers face, and their reporting of such challenges, in conducting

studies of levels of psychological distress or psychiatric morbidity among patients with advanced cancer. **METHOD:** A systematic literature review was conducted of papers describing surveys in which a stated aim was the determination of levels of psychological distress or psychiatric morbidity among patients with advanced cancer. We also included papers that focused on the development of assessment tools, since such studies also strive to obtain accurate estimates of distress levels. Relevant English-language studies were identified through computerised (Medline and PsycINFO) and manual searches for the years 1995–2009. **RESULTS:** Nineteen papers met the inclusion criteria (prevalence studies  $n = 10$ , psychometric/validation studies  $n = 9$ ). They describe findings for a total of 3,142 patients. Sample sizes ranged from 45 to 422 ( $M = 165.4$ ,  $SD = 122.9$ ). The key methodological challenge in this body of research is obtaining representative samples (or adequate external validity). Significant portions of the advanced cancer population are excluded from distress studies or are refusing to take part. **CONCLUSIONS:** The evidence base on distress levels among advanced cancer patients is small and more representative of patients with higher levels of physical and cognitive functioning. Researchers need to broaden their focus from issues of internal validity (e.g. psychometric properties of scales) to developing more flexible methods of assessing distress among patients with advanced disease. Authors could improve our understanding of the challenges here by presenting more detailed accounts of the sampling and data collection processes.

#### A-313

##### **Differences in Health Related Quality of Life (QoL) Levels of Women with Gynecological Cancer - Implications for the Psycho-Oncological Care**

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**OBJECTIVES:** The health related QoL as well as the psycho-oncological care are important factors in the treatment of cancer patients. One-third of these patients displays psychological comorbidities and up to 50 percent suffer from subclinical psychological symptoms. The demands reflected in these figures are not equally met for all patient groups: while breast cancer patients can rely on a well established psycho-oncological support system, psychological problems of women with carcinoma of the uterus often go undetected. **METHOD:** The study investigates and compares the health related QoL of women with different gynecological carcinoma. In a multicenter

longitudinal study 95 women were interviewed (48 breast cancer patients, 47 cervical or endometrium carcinoma patients). Data was collected at three consecutive times: in the beginning of the treatment (1), at its end (2) and six months after discharge from the hospital (3). The health related QoL was measured using a standardized questionnaire (EORTC QLQ-C30). RESULTS: Time 1: Breast cancer patients show significantly lower scores on the 'emotional functionality' scale ( $Z = -1.976$ ;  $p = 0.048$ ). All other differences are non significant. Time 2: The uterus carcinoma group scores significantly higher on the pain-scale ( $Z = -2.193$ ;  $p = 0.028$ ) while all other differences between groups are non significant. Time 3: No significant differences between patient groups. In general, QoL scores drop during the hospital stay. Within 6 month after discharge scores improve, reaching the initial scores. CONCLUSIONS: While in hospital the QoL level of women with cancer decreases - independently of the type of cancer. Women with breast cancer display higher degrees of emotional burdens previous to the treatment while women with carcinoma of the uterus state higher pain levels after treatment. According to these findings, psycho-oncological care needs to be implemented as an integral part of oncological treatment plans for all patient groups with gynecological cancer.

#### A-316

##### **Analysis of Distress Indicators in an Academic Head and Neck Surgical Oncology Practice**

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OBJECTIVES: Depression decreases both the quality of life (QOL) and length of survival with head and neck cancer (HNC). The timely detection and treatment of depression are vital in the successful management of HNC patients. This study was undertaken to assess the prevalence of psychosocial distress in patients during the early stages of diagnosis and treatment for HNC, and the relationship of distress to depression and other psychosocial stressors potentially amenable to immediate intervention. METHOD: A retrospective chart review was undertaken to collect data from 89 new HNC patients who completed an Emotional Needs Questionnaire (ENQ). The ENQ contains both a distress thermometer used to self-report the level of emotional distress on a scale of 0–10, and a checklist of concerns across five

discrete problem domains: emotional, family, physical, practical and spiritual. Demographic and clinical information was also collected from each chart. RESULTS: Eighty-nine patients with HNC were studied. Males had a mean distress score of 3.53 ( $\pm 2.87$ ). Females had a mean distress score of 4.10 ( $\pm 2.33$ ). Depression was positively correlated with self-reported level of distress (0.404,  $p < 0.000$ ,  $n = 89$ ) and anti-depressant use (0.673,  $p < 0.000$ ,  $N = 89$ ). The mean distress score for patients with a history of depression was 5.52 ( $\pm 2.56$ ) compared to 3.18 ( $\pm 2.41$ ) in non-depressed patients. This difference was statistically reliable (Chi-Square = 6.25,  $df = 1$ ,  $p < 0.012$ ). CONCLUSIONS: Psychosocial distress is significantly higher in HNC patients with depression. Unfortunately, depression is underdiagnosed and untreated in most cancer patients. This is even more regrettable given the evidence that depression significantly decreases QOL and length of survival with cancer. Studies have shown that QOL predicts survival with HNC. Models describing the independent predictors of distress in HNC patients with and without depression will be presented.

#### A-321

##### **Getting Back on Track-Group: A Single-Session Psychoeducational Group Intervention for Women with Early Stage Breast Cancer Completing Adjuvant Treatment**

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OBJECTIVES: Women with breast cancer transitioning from primary cancer treatments to their follow-up period face a number of significant challenges including restoring and maintaining their health and overall well-being and confronting multiple adaptive tasks. To address this, a single-session psychoeducational intervention entitled Getting Back on Track-Group was developed and evaluated in a large randomized controlled trial. METHOD: Participating women ( $n = 441$ ) completed the baseline questionnaire package (T0) and were then randomized to either: (1) standard print material (CRL group  $n = 225$ ); or (2) standard print material and the Getting Back on Track-Group intervention (INT group  $n = 216$ ). Participants in both groups completed the questionnaire package again at 3 months (T1) and 6-months (T2). Primary endpoints were perceived preparedness for re-entry, knowledge regarding re-entry transition, and self-efficacy. Secondary end points were mood and health related distress. RESULTS: 86% of participants completed T1 and 86% completed T2 assessments. GEE and ANCOVA were used to evaluate whether the mean change in scores differed across the INT and CTL groups for

primary/secondary outcomes. The mean change from T0–T1 and T0–T2 in knowledge scores and perceived preparedness was significantly higher in the INT vs CTL groups ( $p < 0.001$  all). Mean change scores for self-efficacy, mood and health-related distress scores were not significant between groups during any time interval. **CONCLUSIONS:** The development of effective, relevant, and feasible psychosocial interventions that are evaluated and described in the cancer literature is a crucial component of any effective, holistic, oncology service. GBOT-G, a brief one-session psychoeducational session designed to support women transitioning from primary cancer treatment, was found to significantly improve women's knowledge regarding re-entry transition and their feelings of preparedness for re-entry compared to providing a booklet alone.

### A-323

#### Rural And Northern Families' Pediatric Cancer Journey

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**OBJECTIVES:** This presentation will reveal, from the perspective of rural and northern families, the human experience of childhood cancer. In this province, all children who receive a pre-diagnosis of cancer are referred to one of five Paediatric Tertiary Cancer Centers where they receive their treatments. This requires families to leave their home for an extended period of time and to travel great distances to access these specialized services. **METHOD:** Through the use of photovoice, parents and caregivers ( $n = 30$ ) are invited to participate in an interview where they present the photographs they have chosen to give voice to their family's cancer journey. The interview is semi-structured and flexible so that participants can take charge as the 'experts' and highlight their experiences. These participants are then invited to participate in a focus group where they meet one another and comment on the preliminary results. **RESULTS:** Using photographs and narratives from mothers, fathers and caregivers, a portrayal of rural and northern families' experiences, strengths, and challenges is created. Successes and challenges with recruitment and participation of families in the study and traveling in rural northern communities to do the data collection will be discussed. Preliminary results will focus on the families' experiences of participating in an interview. **CONCLUSIONS:** This study attests to the power of qualitative research to bring to 'life' through photographs sensitive and emotive human

experience. This methodology provides a rich tapestry from which insight is gained. It offers an opportunity to examine and reflect upon access to or the lack of health and psychosocial care and how it can add to or detract from the quality of families' lives as they care for and support their children.

### A-324

#### Changes in Close Relationships between Cancer Patients and their Partners

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**OBJECTIVES:** Stress is a threat to marital satisfaction and its longevity. Distress caused by cancer might reduce the quality of communication in a couple. Open spousal communication, problem solving skills and dyadic coping leads to positive progression in relationship. The present investigation examined individual and dyadic changes in close relationships in a sample of cancer patients and their partners, accounting for the aspects of gender and role. **METHOD:** 224 patients with different cancer types and stages and their partners completed questionnaires reflecting psychopathology (Hospital Anxiety and Depression scale, HADS), quality of life (EURO-HIS-QOL 8-item index) and questions about partnership. When the subjects declared that their relationship had changed, they were asked by 8 further items to indicate the nature of this change. These items were then attributed to the categories positive (3 items) or negative (5 items) dyadic changes. **RESULTS:** 71 patients (31.7%) and 66 partners (29.5%) reported that the diagnosis of cancer has changed their relationship. Perception of change was congruent in 68% of the couples. The nature of relationship changes (positive vs. negative) was unrelated to gender and role (patients vs. partner). In male patients and partners negative dyadic changes were strongly associated with low quality of life and high HADS values. This finding was replicated in female partners, but not in female patients. **CONCLUSIONS:** Our findings indicate that dyadic changes are common in couples facing cancer. Negative changes in relationships are strongly related to low quality of life and high levels of anxiety and depression in all participants, except for female patients. Our results underline the importance of couple interventions that enhance communication and problem solving skills in couples facing cancer.

## A-327

**National Initiatives in Cancer Rehabilitation in Denmark**

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**OBJECTIVES:** The survival rate of cancer is increasing due to a more successful treatment, and the number of cancer cases is increasing due to demographic factors. It is estimated that up to two thirds of cancer survivors have problems and late effects such as fatigue, lymphoedema, depression, sexual problems, incontinence etc. This leaves a huge rehabilitation burden on society. We investigated national efforts in Denmark at state as well as community level to meet this challenge. **METHOD:** We collected data from national authorities concerning planning activities as well as data and reports from counties and 11 cancer rehabilitation projects at community level. We collected original data on submission rates, demographic data as well as evaluation reports and qualitative data from a variety of projects. The data was analyzed in order to give a comprehensive picture of challenges in meeting rehabilitation needs of cancer survivors. **RESULTS:** The study showed obstacles in identifying and meeting rehabilitation needs in Denmark. Depending on diagnosis, only between 5% and 50% of cancer patients were admitted to a rehabilitation program. About 75% of patients referred were women and low income patients were rarely referred. Among health care professionals, no consensus was found concerning screening procedures. The rehabilitation programs were very diverse and it was difficult to evaluate if rehabilitation needs were met and coordination challenges were identified. **CONCLUSIONS:** Demands for cancer rehabilitation services will increase dramatically in the coming years. Experiences from Denmark show that procedures such as referral, screening, comprehensive rehabilitation programs and coordination are not in place in a high income country with a free public health care sector.

## A-329

**Hope at End of Life: Terminally Ill Patients' Experiences of Meaning, Uncertainty and Authentic Caring**

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**OBJECTIVES:** Although terminally ill patients and caregivers acknowledge the therapeutic value of hope in advancing disease, systematic frameworks for assessing hope remain under-developed. The purpose of this qualitative study was to explore patient experiences of hope in advanced cancer, using a hope assessment framework as a guide. This study

was an extension of a larger mixed-methods study that included the quantitative validation of this hope assessment framework. This presentation will focus on the qualitative findings. **METHOD:** A descriptive qualitative design and purposeful sampling approach were used to select participants with diverse hope experiences. Fifteen advanced cancer inpatients, in tertiary palliative care or hospice settings, completed a semi-structured interview, over one ( $n = 12$ ) to two ( $n = 3$ ) sessions. A Hope Assessment Framework, focusing on meaning, uncertainty and authentic caring, was used as an interview guide. Specific metaphors were incorporated to elicit patient experiences. Data were analyzed for common themes using the constant comparative method. **RESULTS:** The key themes of meaning, uncertainty and authentic caring, within the hope assessment framework, resonated with patient experiences. Sub themes emerging from their experiences included a dynamic process of waiting, watching and wondering. Patients further described perceptual changes between hope and suffering, pain and time, as well as a prioritization of different 'sizes' of hope. Practical examples for eliciting patients' hope experiences through metaphor, using stories, images and color, will also be presented. **CONCLUSIONS:** The progressive decline of advancing disease may impede patients from connecting with their experiences of hope, which are often closely tied to their experiences of suffering, pain and perceptual changes in time. As demonstrated in this study, the intentional use of a hope assessment framework, focusing on meaning, uncertainty and authentic caring, can facilitate patients' explorations of hope at end of life. The use of metaphor can further assist with this process.

## A-330

**Living With Dying: An Interpretative Phenomenological Analysis Of The Experiences Of Palliative Care Oncology Patients In A General Hospital**Louise Kinsella<sup>1</sup>, Paul D'Alton<sup>2</sup>, Michael Guilfoyle<sup>3</sup>  
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St. Vincent's University Hospital, Dublin, Ireland<sup>2</sup>,  
Trinity College, Dublin, Ireland<sup>3</sup>*

**OBJECTIVES:** The majority of palliative oncology patients are cared for and die within general hospitals (Grande, 2009; Kuebler, Lynn, & Von Rohen, 2005). Despite this there is a dearth of research evaluating the experience of palliative care patients particularly within a hospital setting (Addington-Hall & O'Callaghan, 2009). The purpose of this research was to explore the subjective experience of patients with terminal cancer receiving specialist palliative care in a general hospital. **METHOD:** Semi-structured interviews were conducted with 7 in-patients who were under the care of the oncology and palliative teams at a general hospital. Participants were required to be aware of

their status as terminally ill and to have an expected prognosis of no more than 6–9 months. Interviews were analysed using interpretative phenomenological analysis. **RESULTS:** Three inter-related themes described participants' experiences of living with terminal illness and included, making sense of one's experience as a dying person, the process of accepting one's prognosis, and a desire to live the remainder of one's life meaningfully. A final theme offered insights into participants' experiences of specialist palliative care and of being in a general hospital. **CONCLUSIONS:** The inter-connectedness of the findings highlights the dynamic and finely nuanced nature of participant's subjective experience. The research supports calls for a theoretical approach to death and dying which more fully allows for the complexity of experience described by patients. It is proposed that a narrative or dialogical framework is best placed to meet this need and should be forwarded by future theoretical efforts. Implications for future research and clinical practice are also elucidated.

#### A-331

##### **User Satisfaction And Needs Among Danish Cancer Survivors Seeking Psychosocial Counselling**

Bo Andreassen Rix

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**OBJECTIVES:** The Danish Cancer Society offers psychosocial counselling to cancer patients, survivors and relatives in 15 counselling centers nationwide. The counselling center have more than 75,000 contacts to users per year. We conducted a survey to evaluate satisfaction and needs among users in the centers. **METHOD:** A questionnaire was distributed to all users attending psychosocial counselling. The questionnaire included questions concerning the reason for seeking counselling, counselling needs, satisfaction with services and expectations to future services. 894 answered and the response rate was 76%. Data was analyzed using regression analysis. **RESULTS:** The descriptive data showed that respondents were primarily women (76%) and higher educated, reflecting the user profile in the counselling centers. 51% were patients and 46% were relatives. 71% came for psychosocial counselling, 39% came to meet peers and 23% came for information. 90% expressed satisfaction with the services provided and two thirds experienced better coping skills after counselling. Users with a low education were least satisfied. 50% of users were helped to contact other relevant services. **CONCLUSIONS:** The survey showed that a professional short time psychosocial counselling service can meet the needs of cancer patients, survivors and relatives and generate high user satisfaction and increase coping skills.

However most users recruited were middle class women. The needs of other users groups such as men and low income users must be explored further.

#### A-332

##### **Basic Body Awareness Therapy As A Physiotherapeutic Rehabilitation Method For Women Having Undergone Breast Cancer Treatment - A Pilot Study**

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**OBJECTIVES:** To study the influence of the physiotherapeutic rehabilitation method Basic Body Awareness Therapy (BBAT) on body awareness and quality of life in a group of women having undergone breast cancer surgery and adjuvant treatment. To explore if BBAT could act as an intermediary in the transition from post treatment fatigue and return to activity levels as before onset of illness. BBAT can be described as movements enhancing mindful presence in movement and rest. **METHOD:** Nine women aged 43–62 years having undergone breast cancer surgery within the last two years received ten sessions of BBAT led by a physical therapist. The patients were evaluated for body movement using the Movement Quality Body Awareness Scale (MQ-BAS) and answered a Quality of Life (QoL) questionnaire, the EORTC-C30 before and after the intervention. **RESULTS:** All patients showed a significant change in body functions and body awareness as measured with the MQ-BAS scale. There was a significant change in the overall QoL scoring as measured with the EORTC-C30. Global Health increased and there was also an increase in physical, emotional and cognitive functioning. Pain and dyspnoea decreased. Fatigue increased somewhat. **CONCLUSIONS:** There was a positive change on body functions, body awareness and QoL for the group. In a larger study a control group should be used and patients followed during a longer period with attention to connections between return to work and increasing fatigue. Using techniques of deep interview would increase the value of the study and further explain and penetrate the results and also study the impact on the patients of being in a peer-group.

#### A-334

##### **Personality, Appraisal, and Emotional Reaction to Cancer Diagnosis: A Systematic Review of Their Correlation with Psycho-social Outcome**

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**OBJECTIVES:** Models of illness adjustment frequently suggest a role for personality and both cognitive and emotional reaction in determining the likelihood of positive or negative adjustment. Those studies which have looked at correlational or predictive relationships frequently report inconsistent and sometime contradictory findings, and are criticised for poor methodology. A comprehensive review of the literature was carried out in 2006. This paper presents an update of that review to include literature up to end-2009. **METHOD:** The search strings used in the original review (pilot findings presented at IPOS 2006) were re-run in their entirety. Run through ten key psychological- and medically-based electronic databases these identified relevant literature published in the period 2006–2009. Search results are currently being independently assessed for relevance by two independent reviewers against the original pre-defined inclusion criteria. Whilst only a few additional studies are expected to be integrated, these will methodologically strengthen the review. **RESULTS:** The findings from the original review demonstrated inconsistency in findings on relationships between these psychosocial variables and various outcome, including anxiety, depression and quality of life. A number of research questions were highlighted as worthy of further research. Few findings were suitable for statistical meta-analysis. We expect this update to highlight further studies to enable more meta-analyses to be conducted in order for the findings to tell a more coherent and applicable story. **CONCLUSIONS:** Prior to submitting the review for publication, the research team felt that it was important that the data contained within it were as up-to-date as possible. The initial searches did not achieve this aim. This review update will ensure that the evidence base considered is fully up-to date and that the conclusions are an accurate representation of the current literature. Implications shall be drawn for both research development and clinical application.

#### A-335

##### **Expression of Primary Negative Affect during Supportive Expressive Group Therapy Sessions Reduces Trauma Symptoms in Metastatic Breast Cancer Patients**

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**OBJECTIVES:** A long history identifies both psychological and physiological risk associated with restrained or dysregulated affect expression for women with breast cancer. To examine whether

behaviorally coded emotional expression during group psychotherapy is related to these outcomes, we carefully coded emotional expression of group therapy sessions. The goal of the current analysis is to test whether expressing more fear, anger, and sadness (primary negative affect) over time will be related to decreasing trauma and depression symptoms. **METHOD:** We selected 16 sessions per woman for their first year in supportive-expressive group therapy and used Specific Affect for Cancer to code each woman's speaking time. We used the mean duration of a moment of 23 specific coded affects broken into 4 summary categories: primary negative, positive, constrained anger, and defensive-hostile affect. Slopes of change over time in each summary category were used as independent variables predicting the slope of trauma and depression symptoms. **RESULTS:** These initial results demonstrate that when the slope of primary negative affect increased over the year, trauma symptoms declined. When the slope of constrained anger increased over the year, trauma symptoms increased. Positive affect and defensive-hostile affect were unrelated to change. We did not find significant associations for depression change. **CONCLUSIONS:** As predicted, expressing more primary negative affect over time in supportive-expressive group therapy significantly predicted a decline in trauma symptoms. Expressing these vulnerable emotions may allow patients to process their distress effectively, express these emotions long enough for group members to intervene, and may increase cognitive processing of active plans to relieve their distress. By contrast, constraining anger had the opposite effect, increasing trauma symptoms over time. These insights can help improve group therapy effectiveness.

#### A-336

##### **Distress Screening and Psychosocial Referral in Patients with Head and Neck Cancer**

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**OBJECTIVES:** Patients with head and neck cancer frequently undergo disfiguring treatments and have high suicide and substance use rates. Rates of referral for psychosocial care are low in this population and the barriers to accessing such care are not well understood. The objective of this study is to evaluate the prevalence and nature of distress in this population, the acceptability of distress screening, and the presence of and desire for referral for specialized psychosocial care.

**METHOD:** Consecutive outpatients undergoing active treatment were recruited from radiation clinics in a comprehensive cancer centre. The assessment included measures of social difficulty (Social Difficulties Inventory-SDI), depression (Patient Health Questionnaire-PHQ-9) and anxiety (Generalized Anxiety Disorder Measure-GAD-7). Participants provided information about current professional psychosocial support and desire for psychosocial referral, and gave feedback on whether the battery of study questionnaires was acceptable to them (yes/no) and the impact it had on them (positive/negative/none). **RESULTS:** Of 152 patients approached, 78(51%) consented, and 62(41%) completed the distress screening. Scores were above the clinically significant cut-off in 22(35%) on the SDI, 13(21%) on the PHQ-9, and 9(15%) on the GAD-7. Scores were above the cut-off on at least one measure in 25/62(40%). Of these, 9/25(36%) had professional psychosocial support; 4/25(16%) desired referral. Of 47/62(76%) who provided feedback, 38/47(81%) found the questionnaires acceptable, 20/47(43%) reported positive impact from participating; none reported negative impact. **CONCLUSIONS:** These findings indicate that a substantial minority of patients with head and neck cancer report psychological distress or psychosocial difficulty. Although distress screening was generally acceptable to these patients, almost half of the distressed patients did not want psychosocial referral. Further research is needed to understand and maximize the clinical utility of distress screening, and to ascertain whether clinic-based or alternate methods of support would be more acceptable or beneficial to such patients.

#### A-340

##### **The Development and Pilot Testing of a Web-based Support Group for Women with Sexual Problems due to Gynecologic Cancer**

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**OBJECTIVES:** The psychosexual problems of gynecologic cancer patients are well documented but there have been few investigations of interventions for this population. An Internet-based support group may be especially efficacious for gynecologic cancer patients with psychosexual problems given its relative anonymity. This presentation describes the development and pilot testing of an online group for this population. This

presentation will describe: 1) the 12-week, web-based support group, 2) recruitment and retention efforts, and 3) preliminary findings. **METHOD:** Women were randomly assigned to immediate treatment or to a waitlist condition. The intervention was 12 weeks long and each week participants were provided with a new topic for discussion along with high quality health information. A bulletin board format was used enabling participation 24/7 and a chat session was offered in week 10. Participants completed outcome measures at baseline, 3-month and 6-month follow-ups, a program evaluation questionnaire to assess satisfaction, and a debriefing interview. **RESULTS:** At the time of submission, data collection is complete and data analysis is underway. We will describe the lessons learned in facilitating this online support group, including the challenge of engaging women in talking about their sexual concerns. Preliminary findings based on the Female Sexual Distress Scale-Revised, the Hospital Anxiety and Depression Scale, the Illness Intrusiveness Scale, and the Sexual Adjustment and Body Image Scale will be presented. Feedback regarding the intervention will be described. **CONCLUSIONS:** A professionally facilitated web-based support group that also provides high quality health information may be beneficial for women suffering from psychosexual concerns following treatment for gynecologic cancer. In considering such groups, it is important to be aware of the challenges in facilitating online groups on such sensitive topics.

#### A-341

##### **The Potential Utility of Acceptance and Commitment Therapy (ACT) in Psychosocial Oncology**

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**OBJECTIVES:** Being diagnosed with cancer is both physically and psychologically stressful, putting the patient at increased risk of distress and psychological comorbidity. Published research fails to demonstrate conclusive evidence of the long-term benefits of psychologically-based interventions. Acceptance and Commitment Therapy (ACT) is a relatively new third-wave cognitive behavioural therapy (CBT) that may add components not emphasized in traditional CBT approaches. This study aimed to review the current literature supportive of this proposal. **METHOD:** A systematic search for ACT literature within oncology revealed three intervention studies; all were methodologically weak. A wider searching strategy of the psychosocial oncology literature, in addition to a systematic search of the fighting spirit

literature, enabled a larger evidence-base to be gathered on studies relevant to each individual component of ACT. These are integrated into a discussion paper on the current state of evidence for this specific intervention within the cancer setting. **RESULTS:** Current findings from psychological interventions for cancer patients have produced mixed results. Theoretically based research demonstrates a clear link between some ACT components and improved psychosocial outcomes within this patient group, in particular the components of Acceptance, Mindfulness and Values-based living. The evidence to date of ACT interventions in cancer and other physical health conditions seems promising and worthy of future research. **CONCLUSIONS:** ACT-based interventions are worthy of further research attention within oncology settings. However, these need to be both more methodologically rigorous and designed to be more cost effective than those already published. The ACT philosophy and approach to intervention is somewhat at odds with fighting spirit models of adjustment which have been so prominent in the field and pilot research to establish the extent to which they are opposed would be worthwhile.

#### A-344

##### **Decrease in Depression Symptoms is Associated with Longer Survival in Metastatic Breast Cancer Patients**

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**OBJECTIVES:** Numerous studies have examined the co-morbidity of depression with cancer, and some have indicated that depression may be associated with cancer progression or survival. However, few have assessed whether changes in depression symptoms are associated with survival. In the current study, we hypothesized that a decrease in depression symptoms in metastatic breast cancer patients (MBC) over the course of the first year of a randomized clinical trial would be associated significantly with survival. **METHOD:** In a randomized trial of supportive-expressive group therapy, 125 women with MBC completed a depression symptom measure (CES-D) at baseline and were randomized to receive treatment or to a control group that received educational materials. At follow-up, 101 of these women completed a depression symptom measure and were available for a Cox Proportional Hazards analysis to examine whether decreasing depression symptoms

over the first year of the study would be associated with longer survival. **RESULTS:** Median survival time was 53.6 months for those decreasing on CES-D over one year and 25.1 months for those increasing. There was a significant effect of change in CES-D over the first year on survival out to 14 years ( $p = 0.007$ ), but no significant interaction between treatment condition and CES-D change on survival. We could not demonstrate that either demographic or medical variables explained this association. **CONCLUSIONS:** Decreasing depression symptoms appear to be associated with longer life for women with metastatic breast cancer in this sample. Further research would be necessary to confirm this hypothesis in other samples, and causation cannot be assumed based on this analysis. However, in the current study, we have evidence that the course of depression over one year predicts subsequent survival time, and that adjustment for co-morbid prognostic variables did not alter significance.

#### A-349

##### **Peer Counseling Improves Quality of Life for Women with Breast Cancer: A Randomized Trial**

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**OBJECTIVES:** In a community/research collaboration between WomenCARE in Santa Cruz and Stanford, we evaluated whether matching a woman newly diagnosed with breast cancer for 3 to 6 months after diagnosis with a trained (and supervised) volunteer who is herself a breast cancer survivor improves quality of life over the first year post-diagnosis. **METHOD:** We trained 36 peer counselors (Navigators) in training sessions emphasizing active listening skills and access to resources in the community for women with breast cancer. In addition 104 newly diagnosed women (within 2 months of dx) were randomized (52 receiving a match with a Navigator). We created slopes over baseline, and 3, 6, and 12 mo assessments and used multiple regressions to test whether group assignment affected outcome. **RESULTS:** We found women receiving a Navigator significantly increased on marital satisfaction ( $p = 0.02$ ), and breast-cancer-specific quality of life ( $p = 0.01$ ) while those in the control group decreased. Women receiving a Navigator who were highly distressed at study entry also experienced a significantly greater reduction in anxiety ( $p = 0.03$ ),

distress ( $p = 0.04$ ). However, those not matched with a Navigator who were low on Post-Traumatic Growth at baseline significantly increased to a greater extent than did those matched. **CONCLUSIONS:** This first randomized clinical trial of an extensive peer counseling program demonstrates that being matched with a Peer Navigator appears to mitigate the distress newly diagnosed women often experience as they are undergoing treatment for breast cancer. It is also clear that not having a peer counselor may stimulate women to perhaps put more thought and energy into self-motivated growth post-diagnosis.

#### A-351

##### **Persistence of Symptoms in Cancer Survivors**

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**OBJECTIVES:** Patients diagnosed with cancer typically experience symptoms from their disease and side effects associated with treatment. As cancer care evolves, newer treatments generally offer better survival or lower side effect profiles. In this study, we examined the persistence of symptoms reported by 367 cancer survivors over a one year period. **METHOD:** We sent the Memorial Symptom Assessment Survey (MSAS) to patients with the 5 most common cancer diagnoses in our cancer center (breast, colorectal, gynecologic, lung, and prostate cancers). 367 patients completed a baseline MSAS and a follow-up MSAS one year later. We examined the severity scores (range = 0–4) for the 10 most frequently reported symptoms at baseline and compared this to the severity scores for the same symptoms at one year follow up. **RESULTS:** The 10 most commonly reported symptoms at baseline were: problems with sexual interest/activity, numbness/tingling in the hands/feet, lack of energy, difficulty sleeping, sweats, pain, itching, lack of appetite, feeling drowsy, and dry mouth. We compared baseline severity scores for patients who completed follow-up and those who didn't, and the group completing follow-up demonstrated lower symptom severity. Comparison of baseline and follow-up severity scores demonstrated a small but statistically significant decline in severity ( $p = 0.04$ ). **CONCLUSIONS:** Patients reporting higher symptom severity at baseline were more likely to drop out of the study. This raises the question as to whether symptom studies with long follow-up periods retain representative samples. While symptoms persist over time, the severity of symptoms declines, suggesting that troublesome symptoms may resolve over time or may be reasonably addressed by the medical team.

#### A-357

##### **Making Hard Choices Easier: Fertility and Breast Cancer**

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**OBJECTIVES:** Patients diagnosed with cancer need to weigh up the benefits and side-effects of treatment. For many young women the effects of treatment on future fertility are of enormous importance, yet women are often not fully informed or fail to take in the potential adverse effects of treatment. The aim of this research was to develop a fertility-related decision aid, assess the understanding of fertility-related issues and evaluate the tool amongst younger women with breast cancer. **METHOD:** Stage 1: The decision aid (DA) was developed and pilot-tested retrospectively amongst 17 young breast cancer patients recruited through 2 tertiary hospitals. Stage 2: A prospective nationwide study was undertaken to assess the efficacy of the decision aid, compared to usual care. Women aged  $\leq 40$  years with early breast cancer were recruited prior to commencement of adjuvant therapy. Psychological and decision-related data was collected at recruitment, one and 12 months, via self-administered questionnaires. **RESULTS:** Participants prioritised fertility-related information around the time of diagnosis but had relatively poor knowledge. Information needs varied and women felt conflicted about fertility-related decisions. Those who were actively seeking information had better knowledge, lower decisional conflict and were more intent to pursue IVF. The DA was well-received by the retrospective sample. In women with high decisional conflict at diagnosis, the DA reduced decisional conflict and anxiety and increased informed choice, compared to usual care. **CONCLUSIONS:** This research resulted in the production of a high-quality and detailed DA that should be targeted at women with high levels of decisional conflict at the time of diagnosis. The study also demonstrated that assumptions about women's preferences for fertility information should not be based on socio-demographic

characteristics or family planning intentions. This research also highlights the importance of assessing the efficacy of educational tools in a clinical setting. Funding: Cancer Council of NSW.

#### A-358

##### **Psychosocial Healthcare for Cancer Patients and Their Families: Framework and Guideline**

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**OBJECTIVES:** Cancer patients and their families need psychosocial support but there are barriers to obtaining this care. Services are often fragmented; and care advocated in theoretical models is not always reflected in practice. In our province the need for an advice document to address these gaps was identified. The creation of a psychosocial care framework can direct improvements in service, and provide recommendations on specific strategies to meet psychosocial healthcare needs at the provider and system level. **METHOD:** The 2008 Institute of Medicine (IOM) standard Cancer Care for the Whole Patient: Meeting Psychosocial Health Needs was adapted to create the advice document for the province. A team of experts in psychosocial care and research methodologists collaborated within the Practice Guideline Development Cycle, using the ADAPTE process. The recommendations contained in the IOM document were adapted to generate the framework. The evidence contained in the IOM document was used to create specific recommendations. **RESULTS:** An 8-domain framework was created which included the following recommendations: a) raising awareness: understanding and defining psychosocial healthcare; b) standard of care; c) healthcare providers; d) patient and family education; e) quality oversight and monitoring progress; f) workforce competencies; g) standardized nomenclature; and h) research priorities. Within these domains, 36 actionable recommendations were identified to support high quality psychosocial services. **CONCLUSIONS:** The psychosocial care framework can be used to develop performance measures. These can be used to judge the quality of practice, and will render cancer care, in particular the psychosocial component, more homogeneous across the province. Promotion and uptake of these specific recommendations will

improve timely access to quality psychosocial care and help reduce psychosocial morbidity among patients and their families.

#### A-359

##### **Effects of a Group Education and Skills Intervention on Neurocognitive Functioning in People Treated for Cancer**

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**OBJECTIVES:** This project aimed to test the feasibility of a group psychological intervention that was designed to improve cognitive performance in people who have completed treatments for cancer. It was hypothesised that group cognitive rehabilitation would improve objective cognitive performance, subjective cognitive function and quality of life. **METHOD:** Eighteen adult cancer survivors who were at least 6 months post-treatment participated in a group cognitive behavioural intervention led by two psychologists. The manualised intervention, developed for this study, involved four 2-hour sessions and between session homework. Sessions involved education, skills training and skills practice on topics such as memory, attention, and fatigue. Participants completed neuropsychological assessments and self-report measures of subjective cognitive function, quality of life, and emotional distress at pre- and post-treatment. **RESULTS:** Preliminary results showed that participants significantly improved in their total score on the Repeatable Battery for Assessment of Neuropsychological Status, despite completing an alternate form at post-test. Improvements at retest were much greater for intervention group participants than for a comparison group of community participants who had not had cancer and who did not attend cognitive rehabilitation. Participants were highly satisfied with the intervention. **CONCLUSIONS:** These results support further testing of the intervention. For the first time, we have demonstrated that cognitive rehabilitation strategies which have previously been reported in the published literature only as individual interventions in this population also have promise when delivered in a group format.

#### A-361

##### **Melanoma Care Pathway Improves Psychosocial Care**

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**OBJECTIVES:** To discuss the development, implementation and evaluation of an interprofessional care pathway developed for patients with melanoma who are undergoing Interferon A treatment. **METHOD:** A care pathway for patients undergoing Interferon A treatment for melanoma was implemented within a Regional Cancer Program. All patients are screened and assessed by the social worker as per the care pathway. The Patient Dignity Inventory and the Distress Thermometer are screening tools utilized in the Social Worker's assessment. Screening for depression is of particular concern. The Social Worker may provide ongoing counseling or refer to other services including spiritual care or psychiatry. Physical concerns are communicated to the interdisciplinary team members. **RESULTS:** Proactive screening and assessment resulted in the early identification of patients with increased risk factors for depression, which led to pre-treatment assessment by Psychiatry. Patients were placed on prophylactic medications and monitored for the remainder of their treatment, as appropriate. The improved integration of psychosocial professionals into the melanoma team resulted in timely identification and resolution of patient's concerns. Enhanced interdisciplinary communication contributed to addressing psychosocial concerns and increasing the patient's ability to cope. **CONCLUSIONS:** The interprofessional care pathway helps to ensure that the appropriate professionals are involved in the patients' care at critical time points, including key decision making points. Key learnings from the implementation of the care pathway will be presented giving evidence that proactive interventions have proven to be an important aspect of patient care.

#### A-362

##### **Burnout, Demoralization, and Spiritual Well-Being of Physicians Who Had Cared Cancer Patients**

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**OBJECTIVES:** Previous studies expressed the severity about burnout among oncologists in different countries, but few cared the phenomenon of demoralization or spiritual well-being. To understand burnout, demoralization, and spiritual

well-being of physicians who had cared cancer patients, the survey was a pilot study for the development of continue medical education (CME). **METHOD:** The study was supported by National Science Council of Taiwan (NSC 98-2511-S-195-001-) and conducted in Mackay Memorial Hospital, over 600 physicians, from October to December 2009. Three hundred and twenty five physicians signed the informed consent after the invitation. Maslach Burnout Inventory-Human Service Survey (MBI-HSS), Demoralization Scale Mandarin Version (DS-MV), and Physician's Well-Being Scale (PWBS) were used as the instruments. All the data was analyzed using SPSS 18.0. **RESULTS:** The sample included 232 male. 31.7% physicians had experienced hospitalization(H), 83.7% had experienced important relatives died(RD), and 22.5% had cared relatives at end-of-life(RE). In MBI-HSS, 2 had significant difference among H, 4 among RD, and 2 among RE. In DS-MV, 1 item had significant difference among H, and 4 among RE. In PWBS, 2 had significant difference among H, 4 among RD, and 2 among RE. Female experienced more emotional distress and demoralized than male. **CONCLUSIONS:** The results of current study show different experiences and gender make physicians different among burnout, demoralization, and spiritual well-being. The CME for physicians to prevent burnout and to promote spiritual well-being is necessary.

#### A-366

##### **Validation of the Needs Assessment for Advanced Cancer Patients - Short Form (NA-ACP-SF38) in people with advanced lung cancer**

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**OBJECTIVES:** Psychometrically rigorous measures of unmet needs are required to assess the prevalence and impact of treatments design to improve patient outcomes. The Needs Assessment for Advanced Cancer Patients (NA-ACP) is a 142-item self-report questionnaire designed to assess the 7 needs domains of patients with advanced, incurable cancer: medical communication; psychological/emotional; daily living; financial; symptoms; spiritual and social. This study aimed to validate the short form (NA-ACP-SF38) in advanced lung cancer patients. **METHOD:** Item factor loadings, test-retest data and response distributions were factors that influenced the decision to retain or reject items from the original NA-ACP scale. This resulted in 38 items being maintained, preserving the original subscales. 108

people with inoperable lung cancer commencing a new treatment regimen completed the shortened NA-ACP-SF38 with measures of psychological distress (HADS, DT) and quality of life (EORTC QLQ-C30). A-priori predictions were made for divergent, convergent and discriminative validity. **RESULTS:** The survey was completed with little missing data (>0.01%). Internal consistency coefficients were satisfactory for 6 subscales (range 0.71 to 0.95); and marginal for the spirituality subscale (0.57). Correlations between NA-ACP-SF38 and HADS, DT and EORTC-QLQ-C30 provided support for 11 of the 22 divergent ( $r = 0.13-0.27$ ) and convergent predictions ( $r = 0.45-0.71$ ). Discriminative predictions were made for demographic and clinical variables (age, gender, ECOG, treatment) however only 4 of 16 predictions were supported. **CONCLUSIONS:** The NA-ACP-SF38 was found to have demonstrated internal reliability with subscales consistent with the original NA-ACP-SF. A priori predictions for divergent and convergent validity provided evidence for acceptable validity. However, few a priori predictions for discriminative validity were confirmed. This study provides evidence that the NA-ACP-SF38 psychometrically robust, easily understood and faster to administer than the original version in lung cancer patients.

#### A-368

##### **Screening for Distress in the Private Sector: Establishing a Screening Protocol and Referral Pathway**

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**OBJECTIVES:** The utility of screening for distress in oncology patients has been well documented. With the view of establishing screening for distress as part of routine clinical practice the feasibility and acceptability in chemotherapy patients at a private centre was established. **METHOD:** One hundred and twenty-three patients receiving chemotherapy completed a self report questionnaire between May and September 2009. The project utilised the National Comprehensive Cancer Networks Distress Thermometer (DT) and problem checklist, the Kessler Distress Scale (K10), questions relating to satisfaction with the distress measures and a series of medical and demographic items. Participants included those with a breast (29%), haematological (22%), bowel (20%), lung (12%) and gynaecological (10%) cancer diagnosis. **RESULTS:** Based on the clinical cut off scores for distress, 38% were classified as distressed using the

DT and 24% using the K10. Both the DT and K10 were seen as being 'easy' or 'very easy' to use by in excess of 80% of the sample. Results from the DT's problem checklist identified a range of physical concerns (fatigue 71%, constipation 41%), psychological problems (worry 41%, sadness 30%) and practical concerns (getting around 28%). **CONCLUSIONS:** Given the level of distress identified in patients undergoing chemotherapy at Cabrini Health and the satisfaction with and utility of the DT and problem checklist, the establishment of routine screening for distress in chemotherapy patients is seen as not only feasibility but acceptable to both patients and nursing staff.

#### A-370

##### **The Development of a Nurse-Led Psychosocial Intervention with Peer Support for Women Being Treated with Radiotherapy for Gynaecological Cancer (GC)**

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**OBJECTIVES:** Radiotherapy for GC has numerous potentially distressing side effects which impact on psychosocial functioning and intimate relationships. Distress associated with diagnosis and treatment can be ameliorated by comprehensive preparation for treatment and addressing informational, physical and psychosocial needs during treatment. The proposed intervention combines tailored specialist nursing consultations with peer support (GC survivor). The objective is to develop, refine and pre-test an intervention package to ensure its relevance and acceptability to patients and clinicians. **METHOD:** Drawing on extensive literature reviews and consumer input, a 3-stage process for developing complex interventions, based on UK Medical Research Council Framework, was used. This comprised: (1) Problem definition: the nature and extent of unmet supportive care needs. (2) Refining the intervention by iterative clinician, and consumer review: evidence-based content; complexity and tailoring; delivery and dose; and integrity. (3) Pre-testing the intervention with 10 women and conduct interviews to assist in finalizing the intervention **RESULTS:** The list of unmet needs was combined with best available evidence for self-care to draft two intervention manuals. The nurse manual specified the content of three nurse-led consultations at the pre-, mid- and end of treatment to provide tailored information, self-care coaching and MDT care-coordination. The peer manual specified the

content of five phone calls (pre-, mid-, end of treatment and twice post-treatment) to provide psychosocial support and encourage adherence to the self-care plan. **CONCLUSIONS:** The intervention package was well-received by consumers and clinicians. The consumer feedback provided indicates that access to accurate and timely medical and self-care information from nurses is critically important, and the unique perspective of a peer lends authenticity to support that facilitates sharing, practical, emotional and meaning-based coping. The next stage is to conduct a multi-site RCT to test the effectiveness of the intervention to reduce psychological distress, psychosocial needs, psychosexual difficulties and symptoms.

#### A-375

##### **Cancer Treatment Survey (CaTS): A New Instrument to Assess the Adequacy of Communication to Prepare Patients for Chemotherapy and Radiotherapy**

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**OBJECTIVES:** Cancer patients experience high levels of pre-treatment anxiety. Chemotherapy and radiotherapy are threatening medical procedures. Randomised controlled trials demonstrate that treatment preparation which includes the timely communication of sensory/procedural information and addressing fears reduces anxiety, pain and distress. This study aimed to develop a new and unique instrument, the Cancer Treatment Survey (CaTS) to assess the adequacy of communication to prepare cancer patients for chemotherapy and radiotherapy. **METHOD:** Items were generated by experts and piloted with cancer patients. The instrument, with 36 items, was administered to 192 cancer patients commencing chemotherapy for lymphoma, breast or colon cancer. Participants also completed the Hospital Anxiety and Depression Scale (HADS). Basic medical and demographic variables were collected. Statistical analysis involved the removal of items, the definition of factors, establishing internal reliability and divergent validity via correlation with HADS. **RESULTS:** Item selection removed 11 items. Factor analysis indicated a two-factor solution: 14 items representing sensory/psychological concerns and 11 items representing procedural concerns. Both subscales demonstrated a high degree of internal consistency (Cronbach's alpha >0.90). Weak correlations ( $r = 0.13$  to  $0.26$ ) between CaTS and HADS subscales provided clear support for the divergent validity of both subscales. Younger

participants (under 65 years of age) had significantly greater procedural concerns ( $p = 0.001$ ). **CONCLUSIONS:** The CaTS is a two factor, 25-item measure that assesses adequacy of communication relating to sensory/psychological and procedural concerns. The results indicate that this new measure is reliable and valid. Further investigation of psychometric properties, particularly validity, is warranted. It is critically important to communicate, educate and prepare patients for threatening procedures including new cancer treatments, especially in younger patients. This instrument provides a tool to investigate the adequacy of that preparation.

#### A-379

##### **Alerting Clinicians to Caregiver's Ratings of Cancer Patient Symptom Distress: A Randomized Comparison of the Clinician Report (CR) Service**

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**OBJECTIVES:** Caregivers play a key role in monitoring and managing patients' symptoms in advanced cancer. Clinicians could benefit from timely updates between clinical encounters on the clinical and psychosocial status of patients, and the caregiver's ability to support patient's needs. Such information exchange may trigger timely treatment adjustments and symptom management. This secondary analysis from a randomized clinical trial examined whether providing clinicians e-mail alerts of caregiver's ratings of patient symptom distress leads to symptom improvement. **METHOD:** 235 advanced lung, breast, and prostate cancer caregivers received access to an Internet-based Interactive Cancer Communication System (ICCS) either with or without Clinician Report. CR e-mailed the clinician when caregivers rated patients' symptom levels above preset threshold. Using web server data, threshold reports were coded as improved or not based on whether subsequent report had lower symptom rating. Percentage of improved threshold symptoms were calculated across 2-month intervals and compared between ICCS and ICCS+CR groups. **RESULTS:** Due to attrition, including patient death, 217 caregivers (107 ICCS versus 110 ICCS+CR) remained for 12 month intervention. Area under the curve analysis compared the proportional differences of improved threshold symptoms out of total threshold symptoms between the groups. Across all 2 month intervals, caregivers in ICCS+CR group report higher percentages of improved threshold symptoms (42.9%–55.4%) than those in ICCS group (23.6%–29.3%). The proportional differences of

AUCs is significant,  $t = 11.9$ ,  $p < 0.001$ . **CONCLUSIONS:** The clinician report alerted clinicians to areas where the caregiver perceived the patient had distress. While both groups showed some symptom improvement, the likelihood of symptoms improving was greater if the clinician had been notified. It is hypothesized that the clinicians responded to these alerts by adjusting treatments or managing symptoms, leading to greater proportion of improvement in the group with the clinician notification. While such mechanisms of effect warrant examination, results are promising.

#### A-381

##### **Predicting Distress in Cancer Survivors: Development of a Theoretical Model**

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**OBJECTIVES:** Many post-treatment cancer survivors experience significant distress due to physical and psychosocial consequences of treatment. For some, this distress does not decrease over time, hence there is a need to identify those at high risk of ongoing distress for targeted intervention. Theory can guide this process, however there is currently no established theoretical framework for survivorship researchers. This study aimed to develop a theoretical model that predicts patterns of distress in cancer survivors. **METHOD:** A thorough review of theoretical frameworks used in health and psychological research was undertaken, including stress and coping, crisis and transition, behaviour change and quality of life models, in addition to empirical evidence. Adopting a clinical pragmatist approach, predictor factors were included in the model if they were a) an individual factor (not social or environmental), b) quantitatively measurable using a validated instrument, c) amenable to change over time or with intervention. **RESULTS:** The developed model illustrates four pathways of distress experienced by cancer survivors. Predictors of higher distress include worse treatment side-effects, poor social support, poor coping/adjustment styles, lack of finding benefit/meaning in the experience and having more unmet needs. Coping strategies and adoption of health behaviours are likely to mediate these relationships. Each factor adopted in the model has been mapped to a validated outcome measure for pilot testing in a longitudinal study of survivor distress. **CONCLUSIONS:** Theory is vital for identifying factors which contribute to problems and developing interventions that are likely to be successful in practice. Reducing distress, the 6<sup>th</sup> vital sign, is an important endpoint because it emphasises survivors' experiences during this

phase. This model brings together several potentially modifiable factors which may predict survivor distress and inform intervention development. This model serves as a key step towards a theoretical foundation for considering survivorship outcomes and other psycho-oncology research.

#### A-383

##### **Unmet Needs, Psychological Distress and Quality of Life in Men Commencing Radiotherapy for Prostate Cancer**

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**OBJECTIVES:** Prostate cancer is the second most common cancer in men worldwide. Commencing radiotherapy is a particularly difficult time, when there is a high need for information and support to manage physical and psychosocial symptoms. However, these needs and concerns are often unreported by men and undetected by health professionals, potentially resulting in elevated distress. This project examined unmet needs, distress and quality of life in a large sample of men commencing radiotherapy for prostate cancer. **METHOD:** A consecutive sample of 330 men (response rate 70%) with prostate cancer commencing potentially curative radiotherapy for the first time participated in a randomised controlled trial testing the effectiveness of a psycho-educational intervention. Baseline data is reported. Questionnaires assessed unmet needs using Supportive Care Needs Survey (SCNS), anxiety and depression using Hospital Anxiety and Depression Scale (HADS), distress using the Distress Thermometer (DT) and quality of life using the Expanded Prostate Cancer Index Composite (EPIC). **RESULTS:** 20% reported probable anxiety and 8% reported probable caseness for depression on HADS. 19% reported clinically significant distress on the DT. 93% reported at least one unmet need (mean = 13 of total 34 needs). The highest unmet need was having a staff member to discuss all aspects of cancer and treatment (36%). High needs correlated with higher anxiety, depression and distress across all domains ( $p < 0.01$ ). 36% reported sexual functioning as a significant problem on the EPIC. **CONCLUSIONS:** This study indicates that many men with prostate cancer experience high levels of unmet needs, psychological distress and poor sexual functioning prior to commencing radiotherapy, despite an absence of treatment side-effects and a good prognosis. This is particularly evident in the psychological, health system information and sexuality domains. This study

highlights the need for better methods for detecting unmet needs at treatment commencement and tailored interventions to reduce needs and distress for this vulnerable group.

**A-385****Body Image Disturbance and the Impact of Surgery Amongst Patients with Colorectal Cancer**

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**OBJECTIVES:** Body image disturbance (BI) can be a significant difficulty among cancer patients, particularly when treatment requires invasive surgery or chemotherapy that can alter one's appearance, such as in the formation of a stoma in colorectal cancer (CRC). This study aims to investigate predictors of body image disturbance in CRC and the impact of on psychopathology following surgery and the changes in BI over time whilst evaluating White's model of body image (BI). **METHOD:** Patients with a primary diagnosis of CRC ( $N = 35$ , male = 15, female = 17, mean age = 58.4yrs) were recruited prior to surgery and completed a range of questionnaires associated with BI and pre-existing levels of psychopathology. Patients were followed up three months after surgery to examine the influence of surgery and stoma placement on BI. **RESULTS:** Baseline measures showed BI significantly contributed to anxiety and depression levels prior to surgery  $F(1, 32) = 5.68$ ,  $p < 0.05$ , (Adjusted  $R^2 = 0.124$ ,  $\beta = 0.334$ ,  $p < 0.05$ ) Repeated measures analysis revealed a significant change in BI over time following surgery  $F(1, 23) = 126.86$ ,  $p < 0.01$ ,  $\eta^2 = 0.847$  There was a significant interaction between BI and whether these patients had a stoma  $F(1, 23) = 11.508$ ,  $p = 0.003$ ,  $\eta^2 = 0.333$  independent of illness. Lastly, a significant interaction effect was demonstrated between self evaluation schema and stoma status  $F(1, 23) = 4.819$ ,  $p = 0.039$ ,  $\eta^2 = 0.173$ . **CONCLUSIONS:** The interaction between self-evaluation and stoma status demonstrated the objective change of stoma formation following surgery may indicate that pre-existing beliefs about the self are vulnerable to alteration following a physical change. This relationship suggests that patients maybe particularly vulnerable to poor self-worth during recovery. CRC patients demonstrated significant investment in their appearance which was significantly related to depression levels, suggesting pre-existing self perceptions which may be already maladaptive may worsen over time, potentially leading to poorer adjustment following stoma formation.

**A-390****Psychosocial Conditions of Cancer Patients When They Go Through the Public Healthcare System in Hong Kong**

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**OBJECTIVES:** The number of new cancer cases continued to rise at a rate of around 2% per annum in Hong Kong. (Hong Kong Cancer Registry 1983–2007). Patients have to deal with a wide variety of stressors at different stages of cancer. (Weisman AD, Worden JW) We conducted a quantitative survey to study cancer patients' psychosocial conditions when they go through the public hospitals in 2009. **METHOD:** We collected 1172 data from patients with cancer who participated in self help groups in Hong Kong with a response rate of 15%. It focused on 3 areas of concern of patients experiences when they go through the public health care system: 1. Emotional status in the waiting period of first diagnostic consultation; 2. Coping of Medical burden in treatment period; 3. Communication with medical practitioners. **RESULTS:** 70% of respondents were female while 30% are male. There is a positive relationship between the length of waiting time and negative emotions before first consultation. Over 50% respondents were distressed resulting from the financial burden. Some were terminated their medical follow up in public hospital and 17.3% respondent switched to private medical institutions due to long waiting time. Less than 50% respondents claimed they were satisfied on communication with medical professionals. **CONCLUSIONS:** The survey reflected the structural reality that cancer patients experience additional emotional stresses when they enter the public health care system in Hong Kong in which it should suppose to provide safety net to them. Only those can afford seek timely private health care. From ecological perspective, we are the supportive system which aims to minimize cancer patients' suffering through providing suitable community-based care psychosocial services to address the service gaps.

**A-394****Risk Factors for Distress: Predictors of Depression and Anxiety among Australian Head and Neck Cancer Patients at Diagnosis**

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**OBJECTIVES:** Patients with head and neck cancer (HNC) are known to be at increased risk of psychological distress. As symptoms of distress - including depression and anxiety - have a negative impact on patients' treatment outcomes and psychological well-being, early identification of at-risk patients may improve subsequent quality of life in HNC patients. Thus, the purpose of this study was to identify risk factors associated with depression and anxiety among Australian HNC patients at diagnosis. **METHOD:** An observational study of consecutive HNC outpatient referrals at a tertiary cancer centre in Australia. Eligibility criteria included a new HNC diagnosis where the patient agreed to undertake treatment with curative intent. Data were collected at diagnosis, prior to the commencement of treatment, ( $n = 109$ ). The association between 14 empirically-derived risk factors, and the primary outcome variable of distress - assessed on the Hospital Anxiety and Depression Scale (HADS) - was then explored. **RESULTS:** Four risk factors were significantly associated with distress at diagnosis: younger age, children aged <21, and two coping styles (helpless/hopeless, and anxious preoccupation). Coping style predicted 23% and 31% of the variance in depression and anxiety measures, respectively. After controlling for coping style, age accounted for an additional 7.5% of the variance in the HADS anxiety subscale. The presence of dependant children (<21 years) did not moderate the relationship between age and anxiety. **CONCLUSIONS:** Four risk factors were associated with depression and/or anxiety at diagnosis. However, younger age was considered to be the most clinically useful predictor. The presence of children <21 years old did not significantly increase the risk of anxiety-related distress among younger patients. Given these findings, it is suggested that younger HNC patients may benefit from early psychological support, in order to prevent further distress and enhance subsequent treatment outcomes.

#### A-396

##### **Caring Beyond Cancer: The Unmet Needs Of The Partners And Close Family Members of Long-term Cancer Survivors**

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**OBJECTIVES:** There are over 2 million cancer survivors in the UK. Cancer can have a profound effect on the well-being of the patient, but also a major impact on family members, an area relatively neglected in current research. This project aims to

assess the experiences and unmet supportive care needs of the partners or close family members of people who have survived breast, colorectal or prostate cancer for five years or more. **METHOD:** Cancer survivors recruited for a linked study nominated a partner or close relative to receive a questionnaire which assessed anxiety and depression (HADS), health status (EQ-5D), unmet needs (CaSPUN), post-traumatic growth, as well as opinions on discharge and primary care. Semi-structured interviews with a subset of respondents added depth, context and validation of questionnaire responses. **RESULTS:** To date, 230 survivors nominated a partner/relative to take part, and 149 carers have returned questionnaires. Responders generally recorded few current issues, but a considerable subset (~20%) did report significant levels of both anxiety and unmet needs. Fear of recurrence and concern about coordination between different medical professionals were the most reported issues. Interviews indicated general satisfaction with primary care, but complex family situations contributed to periods of stress and anxiety for family members. **CONCLUSIONS:** While a majority of partners/family members are able to return to normal lives, primary care has an important role to play in recognizing the role of family members and developing strategies to identify and support those with ongoing unmet needs.

#### A-397

##### **Service Review of Psychosocial-Oncology Community Services in Hong Kong**

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**OBJECTIVES:** As a pioneer in provide cancer patient community care service in Hong Kong since 1997, CancerLink Cancer Support Centres provide people-oriented as well as community-based psychosocial oncology care. CancerLink is a haven of community care where we help people adjust to living with cancer by a wide range of free professional support and rehabilitation programmes. Our professional carers help clients manage the physical, emotional, psychological and social challenges brought about by a cancer diagnosis. **METHOD:** 11 focus groups (77 participants in total) were held to gather information about the existing services quality. Potential participants were recruited randomly from cancer patients who had involved at least one of the 6 categorized services, classes or talks in CancerLink. If we failed to contact the target participant, a substitute would be found under the same randomization method. The target participants were cancer patients in all stages. **RESULTS:** The 11

focus groups highlighted a lot of strengths and some rooms for improvement. Most of them have received services from Cancerlink for years and experienced a big improvement. Discussions revealed their appreciations on the services of Cancerlink. The presentation will cover the details of comments collected for the service users in which we concluded that no doubt the participants satisfied on existing services especially the rehabilitation programs and psychotherapeutic service. **CONCLUSIONS:** CancerLink has become one of the most successful cancer support services in Hong Kong, leading 15 cancer patient support groups and serving thousands of patients. The data from this study warrant a more in-depth qualitative research should be conducted to explore the roles of different psychosocial-oncology community services. They tended to ask for more rather than complaint on what we were providing such as 'Need more venue for activities,' 'increase class quota' etc.

#### A-398

##### **The Investigation of Posttraumatic Growth and Effecting Factors in Cancer Patients**

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**OBJECTIVES:** The main aim of this study is to deal with positive transformations which occur after the diagnosis and experience of cancer in a definite period. Within this scope of investigation socio-demographic and illness related factors, coping and illness perceptions impact on posttraumatic growth were evaluated. **METHOD:** Data were collected by administering an interview form and 3 scales (Posttraumatic Growth Inventory, Ways of Coping Inventory and Illness Perception Scale-R) to 78 cancer outpatients in Istanbul University Oncology Institute. Data were evaluated with using one way ANOVA, independent sample *t*-test and regression analysis. **RESULTS:** Results showed that cancer patients in this sample have higher posttraumatic growth levels to the mean. Time since diagnosis and information sufficiency about illness and treatment variables are related with posttraumatic growth. As a result of stepwise regression analysis, it was found that self-controlling, accepting responsibility, escape-avoidance coping style, positive reappraisal, seeking social support, distancing and illness coherence were significant predictors of posttraumatic growth. **CONCLUSIONS:** Results showed that ways of coping and illness perceptions were important variables on posttraumatic growth. The results of the study will be discussed within the literature, shortcomings of the study and proposals for future research will be presented.

#### A-400

##### **Caregiving Ideals and Family Caregivers' Challenges when Caring for a Dying Family Member at Home**

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**OBJECTIVES:** It is well known that family caregivers are exposed to challenges in their daily lives with a dying family member. Examination of caregiving situations may provide additional insight on the impact these have on the caregivers self. The aim of this study was to explore situations in daily life that challenge caregivers' self-image when caring for a dying family member at home. **METHOD:** In designing the study, an interpretive description approach was chosen. The purpose was to reach a coherent conceptual description that draws from thematic patterns characterising the phenomenon, in this case challenging situations and family caregivers' self-image. Ten family caregivers who cared for a dying family member at home with support from an advanced homecare team were interviewed 6–12 months after the death of the family member. **RESULTS:** Situations that challenged the caregivers' self-image were connected to experiences such as not recognising themselves, specifically in terms of how they acted and felt in different situations. Thoughts raised by the situations could be characterized as 'forbidden' when there were a discrepancy between the caregivers experiences and their own ideals of a caregiver. This was understood to have an influence on the caregivers' self-image and identity. **CONCLUSIONS:** It is important to recognise the impact of caring for a dying family member at home. From a clinical perspective the present study emphasizes the significance of creating a climate, which allows family caregivers to express thoughts and experiences. Sharing experiences such as 'forbidden thoughts' can be one way of handling the profoundly changed every day life.

#### A-406

##### **What Influences HPV Vaccination? Underlying Cognitions of Vaccine Recipients and non-Recipients**

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**OBJECTIVES:** HPV is a common STI, causally associated with genital warts and cervical cancer. In 2007, school- and population-based HPV vaccination programs were introduced to prevent these conditions amongst women aged 12–26 years. Using the Social Cognitive Theory (SCT), this study aimed to investigate the knowledge, self-efficacy, perceived facilitators, perceived impediments, outcome expectations, and goals amongst HPV vaccine recipients and non-recipients. Post-vaccination cognitions (vaccination autonomy and risk compensation) amongst school-based versus population-based recipients were also explored. **METHOD:** 161 female university students (102 recipients and 59 non-recipients) under the age of 26 completed web-based purpose-designed questionnaires, informed by a pilot study ( $n = 20$ ) and literature. All scale had high internal consistency (Cronbach's Alpha  $>0.85$ ). **RESULTS:** HPV vaccine recipients scored significantly higher than non-recipients on self-efficacy, perceived facilitators, outcome expectations, and goals (all  $p < 0.001$ ); and significantly lower on perceived impediments ( $p < 0.001$ ). A relative lack of knowledge (mean = 52%) was evident amongst participants in both groups. Perceived facilitators ( $p = 0.010$ ) and impediments ( $p = 0.030$ ) were key predictors of uptake, with the SCT model explaining 41% of variability in vaccine uptake. School-based vaccine recipients were significantly less autonomous in their vaccination decision than population-based recipients ( $p = 0.001$ ). **CONCLUSIONS:** The current study explored cognitions underlying the uptake of the HPV vaccine among one of the first vaccinated cohorts in the world. The results suggest that health communicators/professionals need to focus on publicising the facilitating factors, whilst fostering self-efficacy in effectively overcoming HPV vaccination barriers. School-based initiative coordinators and health professionals should be aware of the lack of autonomy or active participation in the vaccination decision amongst many school-aged vaccine recipients.

#### A-407

**The Clinical Course of Hospice Patients with Cancer**  
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**OBJECTIVES:** Hospice services play an integral component in the management of terminal cancer. However, little is known about the clinical trajectories of cancer patients after hospice enrollment,

even though this information may help to optimize delivery of palliative care for future cancer patients. Our aims are to 1) describe patterns of referral, acute services utilization, and sites of death of hospice patients with cancer and 2) identify clinical factors associated with sub-optimal hospice use. **METHOD:** Using linked data from US Medicare and state cancer registry, we identified patients who were diagnosed with 1 of 4 common solid tumors (breast, lung, colorectal or prostate cancer) between 1997 and 2004, admitted to hospice at least once following their diagnosis, and died during the study period. Multivariate logistic regression models were constructed to determine predictors for 1) the use of and death in acute care and 2) late hospice enrollment. **RESULTS:** We identified 3,840 patients. They were commonly referred to hospice from home (67%) and less likely from acute care hospitals (ACH) (24%), nursing homes (7%) or emergency departments (ED) (2%). Use of ACH and ED, and death in acute care settings were infrequent (6, 10, and 2%, respectively). Approximately 24% of patients were admitted  $\leq 7$  days before death. Patients from ACH were more likely to enroll late, but had decreased odds of using and dying in acute care. **CONCLUSIONS:** Hospice care appears well integrated into the management of end-of-life cancer patients. Use of acute care services after hospice enrollment was minimal, but timing of referrals can be further optimized.

#### A-409

##### **Psychosocial Consequences of Working with Dying Patients**

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**OBJECTIVES:** It is hard to work with cancer patients and to deal with their relatives. To investigate the psychosocial reactions of the staff working with dying patients gains importance. The purpose of this study was to determine the levels of anxiety, depression, burnout, work satisfaction, quality of life and attitudes about death of the staff working at palliative care unit and to compare with staff working at medical oncology and psychiatry clinics. **METHOD:** This study was carried out on three groups; staff working at palliative care unit, medical oncology clinic and psychiatry clinic in Ankara Oncology Training and Research Hospital. Nurses and health technicians were included.

Socio-demographic information form, Beck Depression Inventory, Beck Anxiety Inventory, Maslach Burnout Inventory, Minnesota Work Satisfaction Measurement, the Attitude Scale about Euthanasia, Death and Dying Patient and WHO Quality of Life Scale were administered to the sample. **RESULTS:** Three groups are comparable in terms of age, gender, marital status, education and years in the occupation. Levels of depression, quality of life, burn out, work satisfaction were statistically different when we compared three groups by using one way ANOVA. Working at palliative care unit and medical oncology clinic has prominent disadvantages in work satisfaction and quality of life when compared with working at psychiatry clinic by using post hoc scheffé tests. **CONCLUSIONS:** Further studies should evaluate the organizational and personal factors which could improve the psychosocial sources of the health staff that are face to face with dying patients.

#### A-410

##### **Impact Of Risk Perception And Emotion Regulation Strategies on Cancer Screening Practices of Young Unaffected Non-carriers Women Within BRCA1/2 Mutation-Positive Families**

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**OBJECTIVES:** About 5 to 10% of breast/ovarian cancers are linked with mutations on BRCA1/2 genes. Recent Anglo-Saxon epidemiological studies showed that young unaffected non-carrier women belonging to BRCA1/2-mutation-positive families have overscreening practices for breast/ovarian cancer. This study aims at evaluating the influence of risk perception, in terms of comparative pessimism related to the fact of developing a breast/ovarian cancer, and emotion regulation strategies on these screening practices. **METHOD:** One hundred and four unaffected non-carrier women, aged under 50 and who had received their negative mutation result at least one year before the beginning of the study completed a

self-administrated questionnaire. Besides sociodemographic data, the questionnaire assessed 1) the screening practices adopted since the disclosure of the genetic testing result, 2) the risk perception of events related to illness, and 3) emotion regulation strategies. **RESULTS:** Most participants report overscreening practices and express comparative pessimism. They especially consider having higher risks of experiencing negative illness-related events (e.g. having breast or ovarian cancer during their life) than a woman from the general population. Comparative pessimism is an explaining factor of overscreening practices by mammography and breast ultrasound. Links also appear between emotion regulation strategies and screening practices. Expressive suppression is associated with ovarian ultrasound, and cognitive reappraisal with breast self-examination. **CONCLUSIONS:** These preliminary data suggest that participation to genetic testing has a significant impact, even on non-carrier women. Far from being reassured by their genetic test result, these women adopt non recommended screening practices. Since this reasoning is based on their uncertainties and pessimism regarding the future, a monitoring following the genetic test disclosure would permit to ensure that women correctly perceive their cancer risks and adopt recommended screening practices.

#### A-411

##### **Sexuality, Communication and Emotions: Exploratory Study with Women Affected by Gynaecological Cancer**

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**OBJECTIVES:** Sexuality, as a natural expression of quality of life, has become a topic of concern for psycho-oncology in the last years. Surprisingly, only a few studies have directly approached sexual dysfunction after gynaecological cancer (GC). Our study identifies sexual dysfunction symptoms, mediating factors and rehabilitative needs for women affected by ovarian, endometrial and cervical cancer. No such study has been previously carried out in Spain. **METHOD:** We interviewed 202 women with GC. 105 had quitted sexual relationships before cancer diagnosis, 33 for cancer-related reasons. Sixty-four sexually active women (SA) answered a) HADS and b) FSM (Woman Sexual Functioning Questionnaire, validated in Spanish population, yielding a global

score of sexual functioning (SF)). Any type of sexual activity was included, not only penetration. Retest was conducted in 4 months. Group support on sexuality was offered to all women. SPSS was used for analysis. RESULTS: Symptoms among SA women are: decreased lubrication, frequency of relations and desire (62%, 58%, 52% respectively); difficulties with excitation, orgasm and penetration (47%, 49%, 33% respectively). SF diminishes with depression ( $p = 0.002$ ) (trend for anxiety  $p = 0.087$ ). Longer time free of treatment tends to improve SF. No differences were observed depending on cancer site, disease stage and menopause status. Having a partner and age influence whether a woman remains sexually active ( $p = 0.017$ ). CONCLUSIONS: Despite caution because of small sample, results show that GC and its treatments affect sexuality. Not surprisingly, 94% of interviewed women expressed their desire for more information regarding sexual consequences of illness and treatment. Further research should clarify the role of specific treatments. Psychological issues such as distress, quality of previous sexual and partner relationship, feeling of loss of femininity and interruption of maternity also play a role, and should be therapeutically dealt with.

#### A-414

##### **Role of Cancer Survivorship Discussions in Affecting Patient and Physician Expectations and Receipt of Follow-Up Care**

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OBJECTIVES: Because of heavy emphasis on the primary cancer diagnosis, significant attention may be shifted away from other essential aspects of general medical care. Prior studies suggest that there is a wide disconnect between patients and physicians, and among physicians themselves about their roles during the cancer survivorship care process. Our aims are to explore the impact of cancer survivorship discussions on patient-physician expectations and receipt of follow-up care among cancer survivors. METHOD: We surveyed cancer survivors about their care, including (1) expectations of their providers' roles (2) whether discussions with a physician had occurred and (3) follow-up patterns. Primary care providers (PCPs) and oncologists were also surveyed for their own perceived roles. We developed a scoring system to evaluate the agreement in expectations between patients and physicians and between physicians themselves (0 = most discordant and 4 = most concordant). Regression analyses were conducted to examine the relation-

ships among discussions, expectations, and follow-up. RESULTS: In total, 535 (54%) patients and 378 (62%) physicians responded. Survivorship expectations were most discrepant between PCPs and oncologists (mean score 1.78), moderate between patients and oncologists (mean score 1.97), and most similar between patients and PCPs (mean score 2.82). Having a conversation about cancer follow-up was associated with better agreement. Higher concordance in patient-oncologist expectations also correlated with greater odds of receiving certain aspects of follow-up, but only if a discussion about cancer survivorship care had occurred. CONCLUSIONS: A discussion about cancer follow-up may affect survivorship care through its primary influence on patient-oncologist expectations. Further work is required to clarify the aspects of survivorship discussions that are important for optimal cancer survivorship care planning.

#### A-415

##### **Goals and Goal Attainment in Inpatient Rehabilitation of Breast Cancer Patients**

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OBJECTIVES: Mutual agreement between doctors and patients on rehabilitation goals is considered to be important in cancer rehabilitation. In addition to somatic and educative objectives, the definition of goals in terms of psychosocial adaptation is also necessary. Main objective of the study was assessing rehabilitation goals at the beginning of the inpatient stay and investigating whether these goals were attained at the end. Patients' and doctors' perception of goals and goal attainment was also compared. METHOD: 172 breast cancer patients (36–56, no metastases) were examined during their three-week inpatient rehabilitation stay. The patients received a 20-item list of possible goals and rated their relevance at the beginning of their stay, and attainment at the end of rehabilitation (3-point scale each). The spectrum included somatic, informational and psychosocial goals. For every single patient, the doctors also gave a rating for relevance and attainment of each goal at the beginning and end of rehabilitation, respectively. RESULTS: On average, the patients rated 8 of the 20 goals to be relevant at the beginning and attained at the end (lower ratings by the doctors for relevance and attainment). The highest correlation between doctors' and patients' ratings was found with respect to the relevance of the goal 'better coping with anxiety' ( $r = 0.44$ ) and the attainment of 'better physical fitness' ( $r = 0.37$ ). The average goal attainment shows substantial negative correlation with anxiety and depression. CONCLUSIONS: The limited correlation between doctors' and patients' ratings of the relevance and

attainment of goals speaks in favour of a greater exchange and common definition of goals by doctors and cancer patients in rehabilitation. In addition, the process of goal attainment should receive much more attention in the course of rehabilitation and play a more important role in doctor-patient communication.

#### A-416

##### **Illness Perceptions, Coping and Psychological Adjustment in Informed and non-Informed Indian Cancer Patients**

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**OBJECTIVES:** Disclosure of cancer diagnosis has been found to increase patients' levels of hope and quality of life. Yet non-disclosure of cancer diagnosis continues to be a common practice in some Asian cultures. Moreover, little is known about the impact of non-disclosure (versus disclosure) on patients' illness beliefs, coping behaviour and psychological adjustment. **METHOD:** Indian patients who had been informed ( $n = 151$ ) or non-informed ( $n = 178$ ) of a cancer diagnosis completed the Brief Illness Perception Questionnaire, the Ways of Coping (Revised) and the Hospital Anxiety and Depression Scale. **RESULTS:** Discriminant function analysis indicated these variables significantly distinguished between the informed and non-informed patients,  $2(14) = 116.94$ ,  $p < 0.001$ . Correlations between the predictor variables and the discriminant function revealed that non-informed patients reported having poorer illness understanding, and were less likely to engage in problem-focused coping, self-blame and positive reappraisal. Regression analyses indicated that illness perceptions and coping explained large amounts of variance in anxiety and depression in both groups ( $R^2s = 0.62, 0.63$ ). **CONCLUSIONS:** Informed and non-informed Indian cancer patients have different reactions to their illness which, in turn, can lead to poor illness adjustment. In order to overcome the long-term repercussions of non-disclosure and improve quality of care for patients, healthcare professionals in Asian cultures should be trained in cancer disclosure and communication skills.

#### A-418

##### **Severe Fatigue In Patients With Advanced Cancer, Preliminary Data**

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**OBJECTIVES:** Many cancer patients experience severe fatigue as the most distressing symptom with a profound, not seldom invalidating effect on their daily life. Research, with fatigue severity as main topic in patients with advanced, non curable cancer has seldom been done. Besides investigating prevalence and severity of fatigue, we hypothesized that patients receiving 1st line palliative cancer directed therapy experience less fatigue compared to patients in 2nd and further line treatments. **METHOD:** During 12 months, patients with non curable cancer (and their Informal Care Givers) from the department of Medical Oncology of a University Hospital and a regional Hospital were asked to complete questionnaires with fatigue as main topic. Fatigue was measured by the subscale fatigue severity of the Checklist Individual Strength (7–56). The validated cutoff score of 35 was used to determine severe fatigue. Analysis were done by non parametric tests (MW U test) **RESULTS:** Based on the first results of this ongoing study, 114/140 patients returned the questionnaires. Over 60% of the patients had 1st line treatment for non curable cancer. Severe fatigue was experienced in 50% of all patients. Patients in 1st line treatment were significantly less fatigued ( $p = < 0.025$ ) than patients in further line treatment. In 1st line treatment 43% of the patients experienced severe fatigue, in further line treatment 68% of the patients. **CONCLUSIONS:** Half of the patients during systemic palliative interventions for incurable cancer suffer from severe fatigue. The severity of fatigue increases significantly with further line treatments. The clinical implications of this finding should be included in decision making when patients choose for systemic therapy in the palliative stage of their disease. More preliminary results of this ongoing study will be presented.

#### A-421

##### **An Evaluation of the Effectiveness of Psychosocial Group Programmes for Treating Insomnia in Chinese Cancer Patients**

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**OBJECTIVES:** Insomnia has been reported more frequently by cancer patients than the general population. Cancer patients with insomnia have hesitation to adopt pharmacological means for improving sleep as they are concerned about the side-effects of the drug on their cancer treatment and general health. Psychological intervention seems to be a viable alternative. The objective of this study was to assess the efficacy of a six session psychosocial group programme for Chinese cancer patients with insomnia. **METHOD:** Sixty four

participants were recruited (from May 2007 to March 2009) in seven groups with multimodal psychosocial intervention which included sleep hygiene education, relaxation training, cognitive restructuring and emotional-stress reduction. A multiple-baseline experimental design was used to evaluate the efficacy of treatment. Pre- and post-treatment measures consisted of the Insomnia Severity Index (ISI), the Dysfunctional Beliefs and Attitudes about Sleep Scale (DBAS), Beck Anxiety Inventory (BAI), and the General Health Questionnaire - 12 items (GHQ-12). **RESULTS:** Results showed significant improvements in all measures. **CONCLUSIONS:** This study suggests that the integrative psychosocial group intervention is of clinical benefit for improvement of insomnia among Chinese cancer patients in Hong Kong. Further qualitative studies are recommended for evaluating the relationship of perceived group effects and the characteristics of cancer patients from the Chinese culture.

#### A-422

##### **Screening for Anxiety and Depression in Australian Head and Neck Cancer Patients: Comparison of the HADS and DASS21**

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**OBJECTIVES:** Head and neck cancer (HNC) patients experience elevated psychological distress, including symptoms of depression and anxiety. Accurately identifying distressed patients is important, so that they can be linked with appropriate services. Doctors can underestimate patient distress during routine medical consultations; therefore screening is useful in assisting with the accurate identification of distressed patients. The purpose of the current study is to validate and compare two screening tools for depression and anxiety, in Australian HNC patients. **METHOD:** Observational study of consecutive HNC outpatients in a tertiary cancer centre in Australia. Eligibility included a new diagnosis of a cancer in the head and neck region, where the patient agreed to undertake cancer treatment with curative intent. Data were collected around diagnosis, prior to commencement of treatment, from 102 HNC patients. Screening tools examined for validity and reliability were: Hospital Anxiety and Distress Scale (HADS) and Depression Anxiety and Stress Scale, short form (DASS21). **RESULTS:** The

Psychometric properties of the HADS and DASS21 in this study population include: Acceptable internal consistency (Cronbach's alpha  $\leq 0.7$ ) for HADS and DASS subscales; Strong positive relationships between the HADS and DASS21 measurement of depression and anxiety, ( $r = 0.65$  and  $r = 0.55$  respectively); Factor analysis confirmed a two-factor structure of the HADS (Anxiety and Depression) and also suggested an alternative three-factor solution for DASS21. **CONCLUSIONS:** HADS and DASS21 are reliable and effective screening tools for identifying probable 'caseness' of depression and anxiety in Australian HNC patients. Results of the current study suggest that routine use of these screening tools, particularly the HADS, will assist with identification of patients experiencing symptoms of depression and/or anxiety and would enable appropriate referrals to mental health services.

#### A-425

##### **Finding Meanings in Coping with Cancer in Old Age and Self-Reported Benefits of Participation in Online Cancer Support Groups**

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**OBJECTIVES:** To examine whether there are significant associations between participation in online cancer support groups and a) positive appraisals of cancer experience b) finding meaning in illness experience and c) post-traumatic growth outcomes in old age. **METHOD:** This paper examines self-reported benefits of online psychological support among a sample ( $N = 189$ ) of middle aged and older ( $M = 58.1$ ,  $SD = 6.6$ ) cancer patients. Online survey was employed to collect research data. The outcome variables include appraisal of coping with cancer, finding a meaning in cancer experience, and self-reported post-traumatic growth outcomes. Bivariate and hierarchical multiple regression analyses were performed to examine the data. The conceptual model of the research was tested using a path model. **RESULTS:** The study shows that there are significant associations between participation in online patient support groups, finding meanings in coping with cancer, positive appraisal of illness experience and post-traumatic growth in old age. The research results also indicate that the negative impact of cancer-related stressors can coexist with positive cognitive appraisals of cancer and post-traumatic growth. Perceived contributions of online patient support groups to find a meaning in illness experience were commonly reported among the respondents. **CONCLUSIONS:** With availability of Internet technology, online patient groups

have become an additional resource to find affective support for cancer patients. Longitudinal research may prove particularly fruitful in understanding how Internet technology can be targeted a strategic tool to improve health related quality of life and psychological well-being among older individuals over time when coping with chronic illness stressors.

#### A-430

##### **Direct and Indirect Effect of General and Specific Social Support on Quality of Life After Breast Cancer: A Longitudinal Study**

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**OBJECTIVES:** Most investigations have concentrated on general perceived support but only a few studies have dealt with social support from particular individual relations. The objectives are (1) to evidence the way in which general social support, specific relationship support may influence the quality of life in patients with first breast cancer and (2) to investigate the mediational pathways by which general social support, relationship specific as contributors to variability in patients' quality of life. **METHOD:** A total of 115 breast cancer patients were included. Social support was measured by the Social Support Questionnaire (SSQ-6), the specific relationship by the quality relationship Inventory (QRI) and quality of life by the QLQ-C30. All these variables were assessed one month after surgery (diagnosis), and every three months during the first year (6 times of measure). Separate hierarchical regression analyses were conducted and to test the multiple mediation hypotheses, we used a bootstrapping approach. **RESULTS:** Women high in intensity specific relationship were predicted to have lower fatigue and higher emotional quality of life 4 months after diagnosis. We founded a direct effect of general social support on emotional. An indirect effect was found: quality relationship was mediator of satisfaction of general social support and quality of life. The conflict relationship is the only significant mediator. **CONCLUSIONS:** Our findings suggest that women unsatisfied about general social support relying on an appraisal of conflict in their close relationship are at risk for poorer emotional quality of life after treatment for a first breast cancer. Interventions could aim at educating relevant support providers. If they know how to suit the patients' needs for social support in terms of quantity and quality, an additional promoting effect should be achieved, on patients' emotional quality of life.

#### A-431

##### **Changing The Culture And Experience Of Cancer Patients In An Acute Hospital: The Distress Education And Management Programme**

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**OBJECTIVES:** The benefits of early identification and intervention for psychological distress are recognised as an integral part of best-practice cancer treatment. The Distress Education and Management Programme (DEMP) was designed to test out a model of service delivery that would improve identification, management and treatment of psychological distress in cancer patients ( $n = 228$ ) in an acute hospital setting. **METHOD:** There are four phases to the DEMP project. Firstly, a series of focus groups were undertaken with cancer nursing staff. Secondly, a distress management training programme for nursing staff was developed and implemented. Following this, the self-assessment Distress Thermometer (DT) was introduced to patients at the point of initial presentation, over a period of three months. Finally, interviews were conducted with the patients and medical staff. **RESULTS:** 34% of assessed patients required intervention from a specialist service. The biggest predictors of high distress levels were emotional problems. Younger patients were found more likely to rate their distress as higher than older patients. The most common concerns highlighted in the interviews were a lack of understanding of psychosocial services available within the hospital. Participating nursing staff, medical staff and patients unanimously reported the DT as a successful way to highlight psychological distress. **CONCLUSIONS:** The DEMP proved a successful way to identify psychological distress in a busy acute hospital. The results of the DEMP reflect international findings concerning the rate of typical distress among cancer patients. It impacted on the hospital system in terms of providing nursing and medical staff with an infrastructure to manage patient distress. Furthermore it provided a different experience of hospital care for patients where they reported feeling more holistically cared for.

#### A-432

##### **Planting Something Special: Developing A Vegetable Garden (Allotment) Project For Men Living with Cancer**

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**OBJECTIVES:** The international literature refers frequently to the challenges of engaging male cancer patients in the psychosocial support services. The benefits of accessing psychosocial services are well documented, reportedly leading to improvements in mental health, less psychological distress and even prolonged survival. The allotment project is intended to provide a meaningful and engaging community based psychosocial service for men living with cancer. Allotment involves planning and maintaining a vegetable garden while providing peer and clinical support. **METHOD:** An Action-Based research strategy was adopted to design, implement and evaluate a project that would provide psychosocial support for men living with cancer. Participants gathered weekly, over a seven-month period, at the allotment. Here, they engaged in informal group support, over morning tea. This was followed by a mindfulness exercise, and work on the allotment. The evaluation of the project involved semi-structured interviews, measurements of anxiety, depression, and quality of life. **RESULTS:** Qualitative analysis has identified impacts of the intervention in a number of key areas, including feelings of peer support, willingness to discuss illness, feelings of worth and newfound enthusiasm for learning and development. Problems identified included feelings of uselessness, feeling a burden, low energy levels and feelings of isolation. Benefits of the intervention included the impact of social support, physical and existential benefits; a focus on learning and living with cancer; relaxation, perspective and acceptance. **CONCLUSIONS:** The action research model provided a framework to design, implement and evaluate a project that met the psychosocial needs of men living with cancer. Horticultural therapy and mindfulness, a combined intervention, merits consideration as a form of psychosocial intervention. Participation in an energetic and supportive work environment, combined with mindfulness activities can successfully shift patient's focus from illness to achievement and personal development due to increased social contact, increased feelings of importance, optimism and usefulness.

#### A-435

##### **The Impact of Children's Illness Perceptions on Paediatric Cancer Patients' Quality of Life**

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**OBJECTIVES:** The study of children's illness perceptions has been widely developed over the last

decade (Chateaux, 2005). More recently research has focussed on the impact of illness perceptions on Quality of Life (QoL). The present communication aims to analyse the impact of illness perceptions of children with cancer on Generic and Modular QoL. Authors put forward the hypothesis that the several dimensions of children's illness perceptions may influence QoL in different ways. **METHOD:** The *Brief Illness Perception Questionnaire* (Broadbent *et al.*, 2006) and the *Quality of Life Systemic Inventory for Children - Module for Cancer* (Missotten *et al.*, 2008) were administered to 40 children with cancer, aged from 8 to 12 years, at a paediatric hospital. Specifically developed for children from these ages, the QoL measure is a self-assessment questionnaire that provides a general and a modular score (general domains of QoL and domains of QoL related with cancer). **RESULTS:** Multiple regressions highlighted that five dimensions of children's cancer perceptions are significant predictors of QoL, namely *illness consequences, identity, concerns, coherence and timeline*. The most predictable dimension of both general and modular QoL is cancer consequences: it explains 36% (Beta = 0.51;  $p = 0.01$ ) of the general and 47% (Beta = 0.70;  $p = 0.01$ ) of the modular QoL variance. Children reporting a less threatening view about the consequences of cancer in their lives reveal a better QoL. **CONCLUSIONS:** The framework of the present study has its fundamentals on recent literature developments by presenting a modular approach to QoL assessment. Results revealed that illness perceptions of children with cancer play an important role both on general QoL and QoL more directly related with cancer and treatments. Through the analysis of the influence of cancer perceptions on QoL, findings provide information to design intervention to promote QoL among paediatric cancer patients.

#### A-439

##### **Innovative Ways to Inform Women About Breast Health & Breast Cancer: The Successes of Bridges to Better Breast Health Project**

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**OBJECTIVES:** Educating women about breast health and supporting the information needs of women diagnosed with breast cancer can be challenging when a population of 600, 000 people is spread across 310, 000 kilometres. We will illustrate through this presentation some of the

strategies applied to the project Bridges to Better Breast Health that proved to be successful in providing women of all ages with access to accurate and timely information about breast health and breast cancer. **METHOD:** Members of a breast cancer coalition collaborated with health care professionals in a cancer centre to write a proposal and successfully secure funding for the project. A steering committee was formed with the participation of breast cancer survivors, health care professionals and researchers from the cancer centre, and collaborators from the community and region. Conducting focus groups, consulting media experts and working with a plain language consultant were part of the overall working plan. **RESULTS:** <Results: Four objectives were accomplished: (1) A breast health awareness campaign reaching over 3 million adults; (2) Development of a new breast health passport distributed to over 14, 000 women in the region; (3) Revising a breast cancer guide distributed yearly to over 300 women diagnosed with breast cancer and; (4) A newly redesigned website going from 2, 200 hits to 381, 000 hits. All four initiatives were pulled together with a branded look and feel. **CONCLUSIONS:** A strong community partnership is attributed to the success of this project with over 100 volunteers involved. Women living in this large geographical area have improved access to information about breast health and breast cancer due to the commitment of many women and men who contributed to the success of this project. **Acknowledgement:** This project was funded by the Canadian Breast Cancer Foundation-Ontario Region.

#### A-440

##### **Mindfulness-based Cognitive Therapy (MBCT) in Psycho-oncology: A Mixed Methods Study**

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**OBJECTIVES:** The number of people diagnosed with and surviving from Cancer is rising (National Cancer Registry, 2006, 2008). Much research has highlighted the potential benefit of adopting Mindfulness-based approaches in psycho-oncology settings (Ott, Norris, & Bauer-Wu, 2006; Smith, Richardson, Hoffman, & Pilkington, 2005). There is an apparent absence of qualitative and mixed methods research within mindfulness studies (Mace, 2008). **METHOD:** The current study employed a mixed methods concurrent triangulation design. The design aimed to deepen understanding of changes in psychological well-being and the general change processes underlying the eight-week Mindfulness-based Cognitive Therapy (MBCT) program. A combination of pre-, mid-, and post-quantitative measures and weekly

qualitative measures of helpful events of ten participants (M Age = 54.3 years) and semi-structured interviews (M time = 112.67 minutes) for three participants were analyzed. **RESULTS:** An integrated interpretation of findings suggests changes over the course of MBCT occurred. Changes in levels of mindfulness, psychological well-being, depression, and anxiety, in addition to participant's subjective experiences are explored. Participants reported more accepting relationships with oneself, others, and a shift in perspective, or improved ability for self-regulation, in relation to negative events. **CONCLUSIONS:** It appears that MBCT provides a cost effective program, which has a positive impact on psychological well-being within a Psycho-oncology setting. This study provides insight into the experiences of MBCT on perceptions of personal growth and purpose in life post-cancer treatment. Through weekly measures, this is the first known study to qualitatively explore helpful events over the course of the eight-week program.

#### A-446

##### **Being Ashamed Of a Cancer Diagnosis: A Determinant of Coping Style & Quality Of Life**

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**OBJECTIVES:** The study aims to identify the most preferred coping mechanisms of cancer patients, to identify the relationship between being ashamed of a cancer diagnosis and coping styles adopted by cancer patients and to determine if there is a significant difference in the functional wellbeing, emotional wellbeing, and social/family wellbeing of cancer patients that are ashamed of having cancer and those that are not. **METHOD:** This is an exploratory study involving the selection of convenience sample comprised of 213 cancer patients suffering from different types of cancer. The assessment instrument used was the brief COPE questionnaire by Carver, C. S. (1997) and the quality of life questionnaire developed by the world health organization. **RESULTS:** Most cancer patients relied heavily on Religion (9.33%), followed by The Use of Emotional Support (8.70%) and Active coping (8.20%), and a significant linear relationship was found between coping styles and being ashamed of cancer diagnosis. While no significant difference was found in the functional wellbeing, emotional wellbeing, and social/family wellbeing of cancer patients that are ashamed of cancer diagnosis and those that are not (with  $p > 0.05$ ). **CONCLUSIONS:** Patients that are ashamed of their diagnosis, who come for

treatment without much social support due to their fear of discrimination by an unenlightened society can now be rest assured that their situation is not hopeless. The fear has been that these few people may not adjust properly to life with cancer because of their shyness, but the result of this study show that they can have hope of surviving, living an adjusted life.

#### A-448

##### **Developing a Successful Oncology Clinical Practice Leader Role**

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**OBJECTIVES:** The Oncology Clinical Practice Leader role has existed for several years in our Academic Health Science Centre. Recently, its mandate was aligned with the goal of increased continuity of care through the standardization of practice to ensure a quality patient-centred collaborative approach along the full continuum of care among in-patient, out-patient and palliative care social workers. The purpose of this presentation is to share the processes, strategies, and tools developed to achieve this goal. **METHOD:** The goal of increased continuity of care was achieved through the collaborative standardization of processes and clinical tools and the development of procedural guidelines. Examples of these concrete and transferable tools and strategies, which will be shared, are formal supervision with the aid of social work core competencies document, chart audits, team practice guidelines and cross training. **RESULTS:** We have achieved higher levels of team cohesion and trust among the Social Workers. There has been an increased satisfaction with our processes and this in turn has enhanced the seamless transition of care from one team member to another as the patients move forward on the continuum of care. **CONCLUSIONS:** Several of these tools and processes are easily transferable and could be decidedly useful to other leaders of psychosocial oncology teams to improve the seamlessness of transitions for our patients, to enhance collaborative practice amongst professionals and to achieve a consistently high level of quality in the care delivered.

#### A-450

##### **Breast Cancer Young Women' Involvement In Treatment Decisions: Is It Treatment Related?**

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**OBJECTIVES:** To investigate the patients' involvement in the decisions possibly involved in breast cancer care, ie. surgery, chemotherapy, and endocrine adjuvant treatment (EAT). **METHOD:** Since July 2005, all women included in the registry of the French Health Insurance Fund for breast cancer, <41 years and living in South-Eastern France have been asked to participate in a 5 years follow-up. In January 2010, 353 women answered a self-administrated questionnaire in the month following diagnosis and a phone interview 10 months later. Logistic regressions were used to assess the impact of different factors on self-reported involvement in decision-making about treatments. **RESULTS:** All women had surgery, 75.1% chemotherapy and 55.2% EAT. At enrollment, 20.9% of the women preferred a physician-based treatment decision-making. 32.6%, 64.0%, and 75.6% experienced passive involvement in decision about surgery, chemotherapy, and EAT, respectively. Multivariate analyses showed that satisfaction with the information provided by physicians involved in decision-making was more likely to be associated with active involvement in decision. Other factors explaining involvement in treatment decisions differed depending on treatments (surgery, chemotherapy or EAT). **CONCLUSIONS:** Patients' actual involvement in surgery decision-making was associated with their desired involvement. Experienced involvement in initial treatment decision-making was a main predictor of the level of involvement in further treatment decision-making (chemotherapy and EAT), as well as depression score (CES-D). Cancer severity, as well as socio-demographic characteristics were not related to involvement in decision-making. Physicians should be aware that paternalistic relationships in the first treatment decision-making is likely to determine further involvement in decision-making.

#### A-451

##### **The Parenting Concerns Questionnaire: Scale Development, Properties and Utility**

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**OBJECTIVES:** Clinicians and researchers routinely assess the impact of cancer on daily functioning, work, marriage, finances and spirituality. Clinical experience and data suggest that patients also have concerns about cancer affecting their dependent children. No instrument exists to identify such concerns, so we developed, refined and empirically tested a new Parenting Concerns

Questionnaire (PCQ). The development and psychometric properties of the PCQ, and its clinical and research utility for identifying and addressing parental concerns are discussed. **METHOD:** An 11 item version of the PCQ piloted with 30 patients demonstrated face validity. Transcripts from three focus groups of patients were analyzed using content analysis to develop major and minor themes of concerns about parenting with cancer. Items were refined and created to capture emerging thematic content, resulting in 38 items rated on a 5-point Likert-type scale. 194 outpatients anonymously completed the revised questionnaire, and factor analysis was conducted with Varimax rotation. **RESULTS:** Participants were 194 outpatients, at 2 urban cancer centers, with a range of cancers, mean age 46 years, 73% female, 95% white, and 89% married. Alpha factoring yielded a three factor solution with interpretable factors that captured themes found in the qualitative analyses. Items with low communalities ( $<0.40$ ), items that loaded onto more than one factor, or had no loading of at least 0.32 were dropped, yielding a 14-item scale with Cronbach's alpha of 0.82. **CONCLUSIONS:** Little is documented about cancer patients' concerns about their dependent children, making it more difficult to adequately meet patients' needs in this arena. Given that approximately of adults with cancer have school-age children (NCI, 1992), parenting concerns should be better understood. The PCQ is a new, 14-item measure with good psychometric properties and three clinically relevant subscales. Clinicians and researchers are encouraged to use the PCQ to aid in assessing patients' concerns about parenting.

#### A-455

##### **The Effectiveness of Patient Reported Outcomes (PRO's) in Pediatric Oncology Practice: Results from the QLIC-ON Study**

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**OBJECTIVES:** Several studies have shown that children with cancer can experience health related quality of life (HRQOL) problems. These problems are not always systematically discussed or known by their pediatric oncologist (PO). Aim of this study is to develop an intervention to make POs aware of these problems and study the effectiveness in terms of increased referrals and advices, satisfaction and identification and discussion of QoL topics. **METHOD:** In multicenter sequential cohort study (QLIC-ON) children with cancer immediately after end of treatment participated. Shortly before the first three follow-up

consultations with the physician, the child (8–18 years) or parent (about child aged 0–8 years) completes a digital HRQOL questionnaire. The QLIC-ON PROfile is presented to the physician as a PRO in the intervention group, to help identify and discuss HRQOL problems. To maximize the effect of the QLIC-ON PRO POs received a training. **RESULTS:** In total  $n = 275$  patients (four centres) were approached,  $n = 190$  participated (response 69%) of which  $n = 80$  completed the control and  $n = 85$  completed the intervention period. Most of the parents (74%) and POs (63%) considered the PROfile useful. First analysis showed POs to be more satisfied in the intervention period ( $p < 0.05$ ), to be able to provide more information to parents ( $p < 0.05$ ) and to pay more attention to desires of parents ( $p < 0.05$ ) and child ( $p < 0.01$ ) **CONCLUSIONS:** The results are promising. Parents and pediatricians are positive about the use of the PROfile. In the future the PROfile can be used for different patient groups and also by different users (e.g. psychologists, nurses or social workers) in clinical practice. With adaptations for internet the PROfile will be easy to implement in clinical practice and helpful in facilitating communication about QoL.

#### A-458

##### **Dyadic Effects Of Social Support On Quality Of Life Of Patients With Prostate Cancer And Their Spouse**

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**OBJECTIVES:** Several studies showed that during treatment of prostate cancer and the following months, social support is beneficial, both patients and spouses. Although evidence suggests that social support received by patients and spouses improves their own quality of life, the degree to which each person's social support has an effect on their partner's quality of life, is unknown. This study aimed to examine the dyadic effects of social support on quality of life of couples. **METHOD:** A longitudinal study was carried on 100 French couples with men with first prostate cancer. Social support (QSS, Segrestan *et al.*, 2007), physical and mental quality of life (SF-12, Gandek *et al.*, 1998) were assessed at the beginning (T1), middle (T2) and end of treatment (T3), and four months after (T4). Statistical analyses were performed with dyadic analysis proposed by Kenny *et al.* (2006) showing actor and partner effects. **RESULTS:** Actors' effects: High patients' perceived negative social support decreases their physical and mental quality of life. Spouses' perceived informative social support reaches their mental quality of life. Spouses' perceived negative social support decreases their mental quality of life. Partners'

effects: Patients' perceived emotional social support increases spouses' physical and mental quality of life. Spouses' perceived informative social support decreases patients' physical quality of life although negative social support increases patients' physical quality of life. **CONCLUSIONS:** The main result of this research is the negative effect of spouses' perceived informative social support on patients' quality of life. So, it seems that an active behavior for obtain information on the illness by spouses harms patients. Health caregivers would help patients for being more active in seeking information on illness. It needs furthermore researches to grasp better spouses' seeking informations need, in studying for example the role of anxiety and depression.

#### A-461

##### **The Power of Global Collaboration in the Fight Against Cancer**

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**OBJECTIVES:** Cancer is a challenging emotional experience for all whom it touches. Persons engaged in the fight against this disease at all levels- as a patient, an advocate, or a practitioner, need support to persevere. By empowering people around the world to make a commitment to reducing the burden of cancer, collaborate across cultural barriers, and actively engage as part of a global community, we can dispel misconceptions, reduce stigma and increase awareness about this disease. **METHOD:** After 18 months of research illustrating a global event's potential, a two day Summit on cancer was convened, bringing together leaders, corporations, organizations and survivors from 65 countries. Workshops demonstrated the value of cross-cultural collaboration and the power of media in the mobilization of global action in the fight against cancer. To assess participant experience, both paper and electronic surveys were administered at the Summit's conclusion measuring satisfaction with logistics, content, and psychosocial impact. **RESULTS:** Of the 108 responses collected, 84% indicated that they felt supported to achieve their goals to change the way cancer is addressed, while 86% of respondents felt empowered with new ways of engaging others. Perhaps most importantly, 77.1% said that they would characterize attending the Summit as a strong, positive emotional experience. **CONCLUSIONS:** The challenges associated with working to address cancer on a global level have a profound emotional impact, and an event like the Summit serves to support and empower stakeholders by providing

them with a deep, personal experience of connection with others sharing in that challenging environment. It is our hope that delegates will build upon their experience to continue mobilizing in this cross-cultural movement by sharing their commitment to addressing cancer in their respective countries.

#### A-462

##### **A Safe and Comprehensive Community-Based Cancer Exercise Model**

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**OBJECTIVES:** To present a safe, effective and comprehensive intervention model for exercise during treatment or survivorship phases. This model was developed from emerging literature on the multiple benefits of exercise, such as symptom management, secondary prevention and enhanced sense of well-being. The program uses highly qualified professional leadership, additional cancer rehab leadership training, personalized assessment, built-in safety protocols, and delivery within a cost-effective group format. **METHOD:** Research indicates that exercise is one of the most important ways that patients can improve overall health, reduce symptoms, manage side-effects and, for some cancers, reduce the risk of recurrence. However, many patients can lack knowledge, confidence or motivation to undertake exercise at a difficult time of their lives. The Cancer Exercise program was developed and piloted to an inclusive group of patients (all cancers, and at any stage) in a community-based setting. **RESULTS:** The success of the Cancer Exercise program was outstanding. All key elements of the program design were implemented effectively, and demand was high. Evaluation data indicated impressive capacity for program intake and completion, as well as indicators of improved wellness, confidence and self-esteem. In this presentation, the profile of program users (e.g. age, gender, diagnosis, etc.) will be presented. Challenges of program implementation and oversight, and how they were overcome, will also be described. **CONCLUSIONS:** A diverse group of cancer patients benefited from a professionally-led, comprehensive cancer exercise program offered in a community-based setting. Sustainability for customized programming delivered within a group model was a key outcome of the pilot. Satisfaction was high, and demand even higher. The program could be a model for other organizations for effective, safe and sustainable delivery that actualizes the benefits of exercise that are emerging from the research literature.

## A-464

**Screening For Anxiety And Depression In An Unselected Population Of Oncology Patients**

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**OBJECTIVES:** The aim of the study was to evaluate feasibility of systematic screening oncology patients for anxiety and depression with HADS in a clinical setting. Another aim was to compare patients with potential initial anxiety or depression to patients with no initial anxiety or depression with regard to changes from baseline to 6 months. **METHOD:** All patients, regardless of diagnosis, stage of disease or time since diagnosis were asked to participate in the study at their first visit to the oncology clinic between September 2005 and June 2006. HADS were completed at baseline and at 1, 3 and 6 months. A score >7 on any of the HADS subscales was regarded as potential anxiety or depression. **RESULTS:** A total number of 547 (85% of 644) patients accepted participation in the study, 495 answered baseline assessments (52 discontinued before answering baseline assessment) and 337 (68%) patients answered 6-months follow-up assessments. One-hundred and seventy-seven (36%) patients were identified with potential or clinical anxiety or depression. Changes from baseline to 6 months and comparison between patients with potential initial anxiety or depression and patients with no initial anxiety or depression will be presented. **CONCLUSIONS:** A large amount of patients agreed to complete the HADS at their first visit to an oncology clinic. Systematic screening for anxiety and depression is feasible in clinical settings with oncology patients and may increase the possibility for staff to recommend clinical assessment and psychosocial support.

## A-465

**Communication to Children about Mother Breast Cancer: How Can Physicians Help?**

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**OBJECTIVES:** A quarter of French breast cancer cases are diagnosed in women <50 years old. A majority of them have got children living at home. Communication about illness is known to be associated with more favourable outcomes in children of parents with cancer. Our objectives were to determine timing of first communication to

children about the mother's breast cancer, frequency of further discussions about mother illness, and factors that may influence communication to the children. **METHOD:** Since July 2005 all women included in the registry of the French Health Insurance Fund for a breast cancer, <41 years and living in South-Eastern France have been asked to participate in a 5 years follow-up. Until December 2009, 274 women with one child or more have been included. 10 months after diagnosis, frequency of discussions with children about illness was studied in relation to socio-demographic factors, clinical variables, and children's characteristics using logistic models. **RESULTS:** 65% of children were told about mother disease at diagnosis, 30% after treatment and 5% never. 51% of women reported frequent discussions with children, 40% few discussions and 9% no discussion at all. In multivariate analysis communication with children was more frequent in women highly educated, with a family history of breast cancer, with chemotherapy and adjuvant endocrine therapy and who had the opportunity to ask questions about their disease at the time of diagnosis. **CONCLUSIONS:** Our results suggest that maternal factors, but also physician's factors strongly influence communication with the children. Physicians and psychologists on charge of cancer announcement should be aware of the importance of the information they provide to women to help them to better communicate with their children.

## A-469

**Patients and Their Family's Priorities for Indicators of Quality End-of-Life Care: Communication, Communication, Communication**

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**OBJECTIVES:** Measuring quality of care at end-of-life (EOL) has been identified as essential to improve and monitor EOL care. We explored the perspectives of patients at EOL and bereaved family caregivers to identify important indicators of quality EOL cancer care. **METHOD:** Six focus groups were held in Nova Scotia and Ontario, Canada, with patients with metastatic breast cancer (2 groups/province) and with bereaved family caregivers (1 group/province) to obtain their views on indicators of quality EOL care. A thematic analysis was conducted, and five communication domains important to EOL care emerged. A literature review was completed to identify patient, family member, and health professional-reported questionnaires to measure these specific

communication domains. **RESULTS:** Five communication domains relevant to quality EOL care were identified as important to EOL care: 1) communicating information, 2) interpersonal communication, 3) communicating available supportive care services, 4) communicating transitions in care, and 5) interprofessional communication. Based on specific criteria, including validity and evidence base, ten questionnaires were located that have the potential to measure and monitor the quality of communication during EOL cancer care. No single questionnaire measured all five communication domains. **CONCLUSIONS:** Cancer patients and their family caregivers consider communication to be an important indicator of quality EOL care. The development of tools with the potential to measure communication domains that are important to cancer patients and their families at EOL should be a priority as we move towards a well-defined and accepted system of quality indicators for EOL cancer care.

#### A-470

##### **Psychosocial Distress and Parenting Concerns among Adults with Cancer**

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**OBJECTIVES:** A significant number of adults with cancer are parenting children under 18 years old, and yet psycho-oncology clinicians and researchers do not routinely ask about concerns that patients may have about their children. A new Parenting Concerns Questionnaire (PCQ) has been developed to assess for a range of concerns that can be useful to researchers and addressed clinically. External validity and correlates for the scale scores are presented. **METHOD:** Qualitative and quantitative scale development methods were used to create a 14-item instrument with 3 subscales: practical impact of the illness on child, emotional impact of the illness, and concerns about co-parent. The PCQ is scored on a 5-point Likert scale; higher scores indicate greater concern. Outpatients with a range of cancers at two urban cancer centers anonymously completed the PCQ, demographics and standardized measures: Distress Thermometer, Hospital Anxiety and Depression Scale, and FACT-G. **RESULTS:** 173 subjects; mean-age 46 years, 72% female, 97% white, and 93% married. Mean PCQ score: 2.35 (range 1–4.54, *sd* = 0.69). Scores correlated significantly in expected directions with all standardized measures. *T*-tests

indicated that recurrent or metastatic disease, current mental health treatment, female gender, living alone, diagnosis within one year, and medical therapy within one month were associated with significantly higher scores. Scores were not significantly correlated with education, income, or frequency of clinic visits. **CONCLUSIONS:** This mostly white, socio-economically stable subject pool demonstrated mild to moderate concerns about their children, with higher PCQ scores associated with female gender, recent diagnosis, severity of disease, and mental health co-morbidity. Further research is indicated to assess concerns in a diverse population. Psycho-oncology researchers and clinicians may use this tool to assess parenting concerns and potentially identify the subset of more vulnerable families coping with parental cancer that could benefit from targeted intervention.

#### A-474

##### **The Course-of-Life of Young Adult Survivors of Childhood Cancer**

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**OBJECTIVES:** Although several studies have been made, the psychosocial consequences in adult survivors of childhood cancer are not fully understood. The objective of this study is the evaluation of the course-of-life of young adult survivors of childhood cancer, with ages ranging from 18 to 30 years, in regard to peers with no history of cancer. **METHOD:** Survivors were selected from an Oncological Institute. The course-of-life questionnaire (Stam, Grootenhius, Last, 2005) was applied to 58 survivors of childhood cancer as well as to 58 peers in the comparison group with no history of cancer, paired by gender, age and area of residency. **RESULTS:** The results of this study indicate that the course-of-life of survivors is hampered. Survivors achieved less, or at a later stage, developmental milestones than their peers in respect to autonomy, psychosexual and social development. Survivors also participated in less risk behaviors than their peers. **CONCLUSIONS:** The knowledge that the course-of-life of young adult survivors of childhood cancer is hindered draws special attention to the developmental flaws they present. This fact stresses the need for health services to contribute more for the survivor's favorable course-of-life during and after treatment. In particular, the need to stimulate children with cancer to socialize, participate in activities

alongside their peers as well as to help parents in promoting the autonomy of their offspring.

#### A-475

##### **Biased Symptom Attribution and Radiation Therapy for Breast Cancer: Prevalence, Changes over Time and Impact on Distress.**

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**OBJECTIVES:** Attribution of symptoms appearing in the context of radiation therapy (RT) has not been studied sufficiently. The first aim of this study is to assess the frequency of biased symptom attributions (symptoms unrelated to RT and attributed to RT) and to describe their evolution over time. The second aim is to assess the impact of making biased attributions at the beginning of RT on distress at the end of treatment. **METHOD:** Women with primary breast cancer were assessed during the first (T1) and the last (T2) week of their RT treatment. Symptom attribution was assessed at both assessment times with a Symptom and Attribution Questionnaire especially developed for this study. Patients were invited to report whether they attributed perceived symptoms to RT or not. RT unrelated symptoms that were attributed by patients to RT were considered as biased attributions. **RESULTS:** First, the number of patients reporting at least one biased symptom attributions (BSA) increased over time,  $p = 0.007$ . Among the 246 patients 37% made at least one BSA at T1 and 48% at T2. The mean number of BA increased over time (respectively 2.10 ( $SD = 1.4$ ) and 2.54 ( $SD = 1.9$ );  $p < 0.001$ ). Second, patients making at least one BSA at T1 were more distressed at T2,  $p = 0.007$ . **CONCLUSIONS:** Making biased symptom attributions is frequent among patients and increases during RT. Biased symptom attributions are associated with distress at the end of treatment. Special attention should be paid to patients reporting biased attributions at the beginning of treatment. Correcting their biased symptom attribution may thus prevent development of distress.

#### A-476

##### **Africa's Standards For Providing Quality Palliative Care Services**

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**OBJECTIVES:** Palliative care provision across Africa is inconsistent, often provided from isolated centres of excellence rather than integrated into the mainstream healthcare system. To address this challenge, African palliative care standards have been developed. This abstract outlines their development process, key underpinnings, structure, content outline and plans for implementation of the standards at different levels of service delivery across the continent. **METHOD:** The standards were developed through wide consultation with committee-based service beneficiaries and providers, national policy and professional bodies, as well as regional and international palliative care and home-based care experts. The standards, based on research undertaken in African countries, a review of existing standards and other relevant documents worldwide and existing experience based-evidence, were developed through consensus-based drafting and review meetings. The detailed process will be shared at the conference. **RESULTS:** Standards for the provision of quality palliative care services in Africa have been developed. These suit different levels of service delivery, from primary to tertiary and are applicable to everyone with a life-threatening illness and their families. They cover the whole continuum of care, including prevention, care and support, and treatment and end-of life care within the context of palliative care. **CONCLUSIONS:** Standards for the provision of quality palliative care services are new in Africa and are designed to meet the quality needs of all service providers. They provide a clear pathway for service providers to progress along a continuum as they strive for quality improvement. African countries will be supported to adopt and adapt the standards and lessons will be shared with other parts of the world.

#### A-479

##### **Development of the Lacom, a French Medical Communication Analysis Software: A Study Assessing its Sensitivity to Change**

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**OBJECTIVES:** To assess the efficacy of communication skills training programs, there is a growing demand for communication analysis systems sensitive to change. This study aims to compare the sensitivity to change of a French medical communication analysis software (Lacom) to the

sensitivity to change of the Cancer Research Campaign Workshop Evaluation Manual (CRCWEM) in the context of a training program designed for nurses. **METHOD:** Nurses were randomly assigned to a 105-hour communication skills training program or to a waiting list. The assessment included the recording of a two-person simulated consultation at baseline and after training for the training group, and 3 months after baseline for the waiting list group. Transcripts were analysed with the LaComm and with the CRCWEM. The respective sensitivity to change of the LaComm and the CRCWEM was assessed using Generalized Estimating Equations. **RESULTS:** One hundred and nine nurses were included. The LaComm detected several group-by-time changes: open directive questions ( $p < 0.001$ ), acknowledgements ( $p = 0.029$ ), and empathy ( $p = 0.026$ ) for utterances types, negative emotion ( $p = 0.047$ ), positive emotion ( $p = 0.011$ ) and secondary process words ( $p = 0.021$ ) for utterances contents. The CRCWEM detected several group-by-time changes: open, open directive and screening questions ( $p < 0.001$ ) for utterances forms, eliciting information, clarification and checking ( $p = 0.045$ ), information before investigation ( $p = 0.002$ ), and premature reassurance ( $p = 0.006$ ) for utterances functions. **CONCLUSIONS:** This study shows that the LaComm has a good sensitivity to change. It is thus a precise and reliable alternative to the CRCWEM for the assessment of the efficacy of communication skills training programs. As opposed to a tool that uses an observer rating system, such as the CRCWEM, LaComm is easier to use (less time consuming interrater reliability training and assessment procedures) and less expensive. For further information please visit [www.lacomm.be](http://www.lacomm.be).

#### A-480

##### **Body Image Among Breast Cancer Survivors: Theoretical and Methodological Considerations in an Oncology Context**

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**OBJECTIVES:** Although breast cancer-specific measures of body image are emerging, they are rarely theoretically-based and are often unidimensional. The purpose of this study was twofold: (1) present a theoretical perspective on the concept of body image in an oncology context, and (2) test the psychometric properties of the Multidimensional Body Self-Relations Questionnaire - Appearance

Scale (MBSRQ-AS) within a sample of breast cancer survivors. **METHOD:** A sample of breast cancer survivors ( $N = 470$ ,  $M$  age = 57.1 years,  $SD = 7.95$ ) completed a self-report questionnaire which included the 34-item MBSRQ-AS, a measure that assesses several dimensions of body image. Participants were a mean of 5.91 years ( $SD = 4.97$ ) post treatment. **RESULTS:** Following a review of the literature, White's (2000) heuristic model of body image in oncology appears appropriate to examine the multidimensional nature of body image. In terms of body image measurement, the MBSRQ-AS subscales demonstrated acceptable reliability ( $= 0.76-0.85$ ), except for the overweight preoccupation subscale ( $= 0.66$ ). Confirmatory factor analysis supported the five factors corresponding to the scale: appearance evaluation, appearance orientation, body areas satisfaction, overweight preoccupation, and self-classified weight ( $\chi^2(517) = 1620.94$ , CFI = 0.93, NNFI = 0.93, RMSEA = 0.07). **CONCLUSIONS:** From the presented framework, researchers need to recognize that body image is multidimensional construct and should be measured using multidimensional measures that are theoretically-grounded. Findings suggest the MBSRQ-AS serves this purpose. Adopting a universal definition and measure of body image will permit meaningful comparisons across studies and help advance conceptually-driven research.

#### A-481

##### **Prevalence of Mental Health Conditions in Cancer Patients in Acute Care - A Meta-analysis**

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**OBJECTIVES:** To what extent is professional psychosocial care of cancer patients in acute hospitals necessary? In a previous meta-analysis, prevalence of psychological sequelae was found to be the same as in the general population. New studies with advanced methodology have been published since; therefore, an updated meta-analysis was needed. **METHOD:** We systematically reviewed studies assessing the prevalence of mental health conditions in acute care hospitals with comprehensive structured clinical interviews. **RESULTS:** Of 46 retrieved manuscripts, 8 were deemed eligible for this meta-analysis. Within the studies, 1448 cancer patients had been assessed, whereby 456 were diagnosed having a mental health disorder. The prevalence rates ranged from 23% (breast cancer patients in Turkey) to 53% (elderly cancer patients in Uganda). The combined prevalence estimate is 32% (95% CI 27%–37%). **CONCLUSIONS:** A third of the

cancer patients in acute care hospitals are suffering from mental health disorders and need appropriate treatment.

#### A-483

##### **Quality of Care and Emotional Support from the Inpatient Cancer Patient's Perspective**

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**OBJECTIVES:** Patient satisfaction and emotional support are crucial elements of cancer care. Little is known however about which areas of care are important from the patient's perspective and the roles emotional distress and support play in this context. **METHOD:** Multi-center prospective study ( $n = 396$  cancer patients;  $t_1 =$  after admission to hospital,  $t_2 =$  before discharge). Quality of care was measured with the 'Quality of Care from the Patient's Perspective' questionnaire and emotional distress with the 'Hospital Anxiety and Depression Scale'. Additional questions regarding emotional support wished (at  $t_1$ ) and provided (at  $t_2$ ) were administered. **RESULTS:** Domains of care most important to the patients were: respect and commitment of the physicians, information before procedures, care equipment, and medical care. The areas where improvements are most obviously needed were: nutrition, participation, clarity about who is responsible, and having the possibility of speaking in private with nurses and psycho-oncologists. 56% of the patients were highly emotionally distressed, 84% wanted support from physicians, 76% from nurses, 33% from psychologists, 7% from a pastor. **CONCLUSIONS:** Emotional support is a crucial part of patient satisfaction and should be provided by several members of the oncological team, especially patients' physicians. In turn, it is crucial that medical professionals be equipped with good communication skills.

#### A-488

##### **Life and Death at Bedside: An Interpretative Phenomenological Analysis of Death Attitudes and Caring Experience of Palliative Care Nurses**

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**OBJECTIVES:** The Québec policy on end-of-life palliative care underlines the importance of increasing caregiver's awareness of inevitability of death, considering that death attitudes challenge palliative care development. However, no study

explored in details death attitudes and caring experience in nurses who provide palliative care (PC). This study aims at better understanding (a) death attitudes and (b) caring experience in PC nurses. It also aims at (c) exploring potential links between death attitudes and caring experience. **METHOD:** Eleven nurses who provide PC in different settings (PC unit, oncology unit, hospice, home care delivery) were invited to participate in semi-structured interviews in which they were asked to discuss the way they see death, both at a personal and professional level. They were also invited to share significant caring experience in relationship to death perception. Interviews were recorded, transcribed and imported into N'vivo for codification. Data were analysed using interpretative phenomenological analysis (Smith, 2004). **RESULTS:** Interpretative phenomenological analysis allows different level of interpretation. The first level analysis allowed a description of the emerging themes of nurses' attitudes towards death and caring attitudes. The second level analysis led to the emergence of a typology, that accounts for three different patterns of death attitudes (integrating death, fighting death and suffering death) in relationship to three different caring experience (empathic resonance, dissonance and consonance). **CONCLUSIONS:** This exploratory study provided a better understanding of death attitudes and caring experience in PC nurses. Although the qualitative design doesn't allow deriving correlations, the findings suggest that personal death attitudes may be related to caring experience in PC nurses. Those findings should eventually be tested empirically. Nevertheless, the present work has heuristic value. It may also lead to design interventions for nurses in order improve their level of comfort in caring for dying patients.

#### A-490

##### **Older Women and Home Death in Botswana**

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**OBJECTIVES:** To ascertain place of death (home or hospital) and potential influencing factors in Botswana. **METHOD:** Death records for years 2005 and 2006 were obtained from the Registry of Births and Deaths in Botswana for adults (> 18 yrs.) with non-traumatic deaths. Fields collected were cause of death, age, gender, occupation, and district of residence. Cause of death was taken from the death records as listed, some of which was not an ICD-9 diagnosis. **RESULTS:** Home deaths accounted for 36% of all 18, 869 evaluable death records. The cause of death for home deaths was listed as 'unknown' 82% of the time. Mean

age: 53.2 years (*SD* 20.9). Home deaths were associated with 61 years (*SD* 22.5). Logistic regression revealed unknown cause of death, female, >80 years of age, and residing in either a city or rural area predicted home death ( $p < 0.05$ ). **CONCLUSIONS:** Unlike other research in western countries that found that gender did not play a significant role in determining place of death and older age predicted hospital death, being female and >80 years of age at the time of death predicted home death in Botswana. The lack of documented cause of death for home deaths is a study limitation. However, the findings merits further study to determine their needs, including cancer care, at the end of life.

#### A-491

##### **Fruit and Vegetable Consumption, Diet-related Stress, and Healthcare Practitioner Involvement Among Breast Cancer Survivors**

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**OBJECTIVES:** Breast cancer survivors (BCS) consume an average of 4.1–4.3 servings/day of fruits and vegetables (FV), considerably less than the 7–8 servings/day recommended by Canada's Food Guide (CFG). Furthermore, diet-related stress is recognized as an important stressor for many BCS. The purpose of this study was to examine the proportion of BCS who meet the CFG recommendations for FV and to identify associations with diet-related stressors. Healthcare practitioner involvement in providing dietary advice was also assessed. **METHOD:** Fifty BCS who have recently completed treatment were recruited for this study. Mean ( $\pm$  *SD*) age and body mass index (BMI) were  $52.0 \pm 9.5$  years and  $27.4 \pm 6.8$  kg/m<sup>2</sup>, respectively. Diet-related stressors were assessed using self-report questionnaires. Fruit and vegetable consumption was assessed using validated questions from the Behavior Risk Factor Surveillance System. Height and weight were measured using a stadiometer and balance beam scale and were used to calculate BMI. **RESULTS:** Average FV consumption was  $6.0 \pm 2.5$  servings/day, with 68% of BCS failing to meet CFG recommendations. Concerns for making healthy dietary choices and meeting dietary recommendations were reported stressors for 85% and 83% of BCS, respectively. In addition, 75% of those concerned about meeting recommendations actually failed to meet them. Forty-two percent of BCS reported not receiving dietary advice from their healthcare practitioners. **CONCLUSIONS:** Despite BCS concerns for eating a healthy diet, mean FV intake was lower than CFG's recommendations. The finding that the majority of BCS failed to meet FV recommendations, coupled with their frequent

concern for making the right dietary choices and meeting recommendations highlights the need for nutrition education among BCS. Healthcare practitioners may need to place additional emphasis on nutrition to educate patients and reduce diet-related stress.

#### A-493

##### **Presentation of a Explicative Model of Quality of Life and Distress in Portuguese Women with Breast Cancer and in Their Partners**

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**OBJECTIVES:** The aims of this report is to identify the distress and quality of life predictors in women with breast cancer and their partners. **METHOD:** Using predictive statistical analysis the authors tested a explicative model of Quality of Life and distress in Portuguese women with confirmed diagnosis of breast cancer, residing and being followed up in health care services in the northern area of Portugal, and their partners. **Instruments:** 23 QVS, Brief-Cope R, BSI, GHQ12, WHOQOL and IESSD. **RESULTS:** From 208 participants, 46, 6% are vulnerable to stress, 25% present emotional disorders criteria, the majority with low Quality of Life perception. The general conceptual model shows that psychological and existential suffering are predictors of the stress vulnerability, being explained by the development of emotional disorders and low quality of life perception. **CONCLUSIONS:** Physical suffering doesn't explain stress vulnerability. The build of meaning about the disease experience is crucial for the stress coping resources. A positive appraisal of the situation protects and facilitates personal development. The stress vulnerability explains the distress in the female population, but not in the male population. The stress vulnerability explaining in the partners, in contrast with ill women, a negative evaluation of environmental and social relations domains of quality of life.

#### A-494

##### **The Beneficial Role of Attachment Security in Children in Promoting Healthy Eating**

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**OBJECTIVES:** This paper investigates how attachment styles impact healthy eating in children, and particularly how attachment security contributes in bridging the consumption gap between boys and girls. The Canadian Cancer Society recommends maintaining a healthy weight by reducing fat intake, among others, to prevent cancer. Secure attachment, as opposed to avoidant and anxious

attachment, has been linked with eating competency in infancy, better self-control, and the adoption of health prevention and promotion behaviors. **METHOD:** 235 children (155 girls; 79 boys) aged between 8–12 years old ( $M_{\text{age}} = 10.15$ ) filled out an online questionnaire. Children had normal BMI's ( $M = 25.48$ ,  $SD = 0.48$ ) and their mother tongue was primarily French ( $N = 207$ ). Participants filled out an adapted version of the Attachment Style Measure which yields two attachment indexes namely, avoidant/secure and anxious/nonanxious. Measures of high caloric meal (HCM) and snack (HCS) consumption were also collected. **RESULTS:** Children who scored high on security and low on anxiety, respectively, consumed less HCS and HCM,  $ps < 0.0001$ . Moreover, avoidance/secure index by gender interactions were significant for HCS consumption,  $p < 0.05$ , and marginally significant for HCM consumption,  $p = 0.08$ . As such, secure boys consumed less HCM and HCS than avoidant boys, while there was no difference in HCS and HCM consumption between secure and avoidant attached girls. **CONCLUSIONS:** This paper shows the importance of considering attachment security as a protector factor against cancer risk to maintain a healthy weight. Attachment security and low anxiety were both associated with lower consumption of high caloric meals and snacks in children. Moreover, a secure attachment style benefitted more boys than girls by lowering their caloric intake of fatty snacks and meals and bringing it closer to the girls' consumption of such foods.

#### A-495

##### **Reducing the Burden of Breast Cancer among African American and Latina American Survivors**

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**OBJECTIVES:** The less favorable survivorship outcomes of ethnic minorities and paucity of literature documenting culturally and linguistically responsive intervention studies add to the urgency of this research. This study investigates the effectiveness of a clinically responsive psycho-educational intervention with African-American and Latina-American breast cancer survivors (BCS). **METHOD:** Participants were recruited from the California Cancer Surveillance Program, hospitals, community health clinics, and BCS support groups. Eligible participants included women 18 years of age and older, within 1–6 years of a breast cancer diagnosis, and diagnosed with stages 0-III. Participants were assigned to the low intensity (LiTx) or high intensity (HiTx) condition based on level of psychological burden. LiTx participants received survivorship materials only and HiTx participants received 8 telephone sessions and

survivorship materials. **RESULTS:** Results based on 312 (88 African American, 224 Latinas) BCS are described. Significant differences in demographic characteristics include: Latinas reported lower education, income and were less likely to work outside the home. Repeated measure analyses revealed significant differences in HRQOL by condition. HRQOL scores improved from baseline to follow up for the HiTx group ( $p < 0.01$ ) while scores were generally unchanged for the LiTx condition. The intervention did not show significant differential effects based on ethnicity. **CONCLUSIONS:** Findings on the efficacy of the psychosocial intervention reveal significant improvements in HRQOL as measured by the FACT-B. Findings suggest that long-term and late effects persist among BCS, but symptoms are responsive to intervention. Results provide evidence that culturally and clinically responsive interventions are effective for improving QOL outcomes and reducing life burden among low-income and minority populations. Similar interventions if implemented early may alleviate and prevent some negative outcomes among survivors at greatest risk.

#### A-497

##### **Pain Narratives Among Breast Cancer Survivors**

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**OBJECTIVES:** First, we documented breast cancer survivors' experience of chronic pain and we compared in-depth interviews and answers to the WHOQOL-BREF questionnaire regarding chronic pain and its impact on everyday activities. Secondly, in order to understand the discrepancies revealed by this comparison, we focused on respondents' attitudes toward pain, and especially how they gave meaning to pain and how they dealt with it in their daily life. **METHOD:** In-depth interviews were conducted with 25 women recruited among a regional cohort of breast cancer survivors (ELIPPSE), and analyzed with an inductive approach based on grounded theory. Interviews were conducted in participants' homes and lasted between 1 and 4 hours. All participants also completed the WHOQOL-BREF questionnaire. We focused on items related to self-rated quality of life, activity limitation due to pain and satisfaction in everyday activities. **RESULTS:** Among interviewed women, iatrogenic pain was not systematic but very frequent even several months after cancer treatment had been completed. Its impact on everyday life was not captured by a standard quality-of-life scale, probably because participants put pain into perspective (by comparing themselves

to other patients) and normalized it (for example, as a necessary step to cure). Most of the time, this pain was not treated by health care professionals, but self-managed by participants. **CONCLUSIONS:** Our results point out the necessity to better inform breast cancer patients' on iatrogenic pain and the ways to deal with it, and to undermine some common beliefs related to the meaning of such pain, as such beliefs may prevent pain treatment. Health professionals should be specifically trained on these issues. Moreover, pain management should combine pharmacological and non-pharmacological approaches, including the promotion of patients' self-management techniques.

#### A-499

##### **Challenges in the Psychological Support of Palliative Patients in a Pain Clinic - Walking on Thin Ice**

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**OBJECTIVES:** The major goal of palliative care is the achievement of the best quality of life for patients and their families. Considering that there is an expanding appreciation for the sensitivity and professionalism with which issues of death and dying need to be approached, this study focuses on the difficulties felt by psychologists in a Pain Clinic of a Major Cancer Hospital, who are dealing with palliative patients that are unaware of their deteriorating health condition. **METHOD:** By means of various clinical cases we will try to illustrate the difficulties encountered and how we have strived to address the psychosocial and existential distress among these patients; there is a need to elicit, understand, empathize, and respond to the complex manifestations of these patients; what is the reality of the patient's clinical situation and how do we deal with their expectations? How can we help these patients achieve or maintain a sense of meaning and dignity? **RESULTS:** Although the palliative care movement has become a reality and is being regulated, numerous barriers persist. The most notorious of these being, the difficulty encountered by health-care professionals in the referral procedure since palliative care continues to be seen by health-care professionals, particularly, by medical doctors, as a failure in their healing capacities. These patients are continuously referred to the Pain Clinic on false assumptions; namely to keep hope alive and avoid psychological suffering and the patient's inability to understand the news. **CONCLUSIONS:** We believe that palliative interventions must reach beyond the realm of pain and symptom management to be fully responsive to a broad and complex range of expressed needs. For this to be possible,

the psychologist should incorporate the cancer patient's health-care team from the time of diagnosis to the end of life phase. This will enhance the patient's psychosocial adjustments during the course of the disease, as well as, a sense of meaning and purpose in the final stages of the disease.

#### A-500

##### **Men Talking To Men About Prostate Cancer: An Educational DVD**

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**OBJECTIVES:** The Men talking to Men project was undertaken in response to an identified gap in patient education in psychosocial oncology. The primary aim of this project was to design an educational tool reflective of the needs of men diagnosed with prostate cancer. The purpose of this presentation is to report on the issues identified and to introduce the educational tool currently in development. **METHOD:** Focus groups were conducted with men diagnosed with prostate cancer. Participants were recruited through a local cancer center and through patient support groups. A total of 5 focus groups which included the voices of 31 men were conducted. Men were asked specifically about information they found useful or wish they had been told prior to, or during, their cancer journey. **RESULTS:** Men living with prostate cancer expressed that they wish that they had been more informed about a number of issues, both physical and emotional, at various points along the cancer trajectory. It also was clear that such information was best delivered by other men who had been through diagnosis and treatment themselves. These identified issues were then used to script and develop an educational DVD by men for men with prostate cancer. **CONCLUSIONS:** The DVD 'Men Talking to Men About Prostate Cancer' will serve to disseminate knowledge and information to men who have been diagnosed with prostate cancer. The information conveyed will benefit men at any point in their cancer journey and will be available to a broad audience that otherwise may not have access to this information. Production is expected to finish Summer 2010. Funding for this project is gratefully acknowledged from Canada's Motorcycle Ride for Dad.

#### A-501

##### **The Secrets Of Success: How Couples Maintain Sexual Intimacy After Prostate Cancer Treatment**

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**OBJECTIVES:** This qualitative study aimed to understand the processes by which heterosexual couples adapt to the side effects of localized prostate cancer (PrCa) treatments in an attempt to maintain sexual intimacy. The goal was to develop a theory to explain how some couples manage to successfully maintain sexual intimacy after treatment while others do not. **METHOD:** Ten couples (20 individuals) who successfully maintained sexual intimacy after PrCa treatment and seven couples (14 individuals) who did not participated in semi-structured interviews. Each individual participated in one interview with their partner followed by one interview alone (i.e. 3 interviews per couple, 51 interviews total). Interviews focused on the challenges faced and strategies used in the couples' attempts to maintain sexual intimacy. Interviews were audio recorded, transcribed, and analyzed using grounded theory qualitative methods. **RESULTS:** The common and unique challenges experienced by men and women after PrCa treatment, such as changes in libido, the redefinition of sex, and changes in sexual identity, will be presented. In addition, a theory explaining how some couples were able to successfully adapt to the side effects of PrCa treatments and maintain sexual intimacy while other couples were not will be presented, along with supporting quotes and case examples from the interviews themselves. **CONCLUSIONS:** Previous research has documented that most couples are unsuccessful in their efforts to maintain sexual intimacy even when erectile aids work. No theories currently exist to guide clinical interventions for improving success rates. This research provides an understanding of the key factors that enable couples to maintain sexual intimacy and will help clinicians appreciate the specific challenges faced by couples and better assist struggling couples to maintain sexual intimacy after PrCa treatments.

#### A-502

##### **The Utility of the Hopelessness Assessment in Illness (HAI) as a Psychotherapy Intervention Outcome Measure in Advanced Cancer**

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**OBJECTIVES:** The HAI is a new brief measure specifically developed to measure hopelessness in advanced cancer. It was recently validated for this purpose and demonstrated considerable, unique explanatory power in predicting important psychosocial outcome variables such as desire for hastened death and suicidal ideation (Rosenfeld *et al.*, under review), yet it has never been utilized in an

intervention study. We sought to use the HAI as a primary outcome measure in a group psychotherapy intervention. **METHOD:** As part of a larger NIH R01 funded intervention trial, 43 participants who had advanced cancer completed an 8-week group psychotherapy treatment. Patients were randomly assigned to an existential meaning based treatment, Meaning Centered Group Psychotherapy (MCGP,  $n = 24$ ) or Supportive Group Psychotherapy (SGP,  $n = 19$ ). Participants completed the Hopelessness Assessment in Illness (HAI, 8-items) as part of a larger pre/post assessment battery. Within group differences in pre/post changes on the HAI were analyzed using One-Sample *T*-tests. **RESULTS:** Preliminary results showed significant pre/post changes on the HAI for MCGP ( $p = 0.009$ ) but not SEP ( $p = 0.399$ ). At the item level, MCGP participants endorsed significant improvements on 3 of the 8 items: discouragement about the future, ability to think about things besides their illness, and sense of control over their life, whereas SGP showed no significant changes on any of the items. Pre/post change on the HAI was significantly correlated with change in desire for death (SAHD,  $r = 0.46$ ). **CONCLUSIONS:** The HAI is sensitive to changes in hopelessness and can be used effectively as an outcome measure in intervention studies with advanced cancer patients. On the item level, the HAI was able to distinguish between the specific aspects of hopelessness that were impacted by treatment and may be suggestive of the potential mechanisms of action targeted in MCGP. Preliminary results suggest that a meaning based therapy (MCGP) is an effective intervention for symptoms hopelessness.

#### A-504

##### **Impact of the Yoga Bali Method on Quality of Life and Depressive Symptoms among Women Diagnosed with Breast Cancer Undergoing Chemotherapy**

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**OBJECTIVES:** The use of yoga as an intervention in psycho-oncology to improve quality of life (QL) has considerably increased in the last decade. The purpose of this research is to evaluate the efficiency of a yoga program (Bali method) on the QL and depressive symptoms of women diagnosed with breast cancer undergoing chemotherapy. **METHOD:** 101 women diagnosed with stage 1–3 breast cancer randomly assigned to a yoga group ( $n = 58$ ) or to a waiting list control group ( $n = 43$ ). Yoga program was taught by accredited teachers in Bali method. The method includes: postures, visualisation, relaxation, meditation, breathing exercises.

Sessions (1:30 hr) were given weekly over a period of eight weeks. A video was given for daily home practice. Instruments used: the Quality of life systemic inventory; the Beck depression inventory. RESULTS: Repeated measures Anovas: improvements for QL global score ( $p = 0, 005$ ), emotional and cognitive subscales ( $p = 0, 006$ ;  $0, 005$ ) and a decrease in depressive symptoms ( $p = 0, 10$ ) for yoga group. Waiting list : depressive symptoms increased ( $p = 0, 006$ ), no change on global QL score and on emotional subscale, and deterioration ( $p = 0, 029$ ) on cognitive subscale. Post treatment Ancovas: waiting list group showed more depressive symptoms ( $p = 0, 034$ ) than yoga group and a poorer QL on the three scores ( $p = 0, 12$ ;  $0, 026$ ;  $0, 07$ ) CONCLUSIONS: Yoga Bali method improves QL and diminishes depressive symptoms in women diagnosed with breast cancer undergoing chemotherapy. Implementation of this 8 week yoga program in hospital settings should be considered as a complementary intervention for women with breast cancer. Further research could evaluate the impact of this program on physiological measures as well as on other types of cancer.

#### A-505

##### **Registered Dietitians are Essential in an Interprofessional Psychosocial Oncology Program (PSOP)**

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OBJECTIVES: Research indicates that cancer has a profound impact on patients' metabolic, physical, functional, psychological & social status (Marin Caro *et al.* 2007). Up to 60% of people receiving cancer treatments have at least one symptom that can make eating more difficult (Dixon. 2005). This presentation will describe the role of the Dietitian within a newly formed Psychosocial Oncology Program. Referral indicators & improvements in the service following integration in an interprofessional team will be discussed. METHOD: A literature review was conducted to evaluate the need and the role of the Dietitian. Referrals to Dietitians are made through a program referral process. Interventions are provided in individual or group sessions by dietitians with expertise in oncology. RESULTS: Nutrition support by a Dietitian improves patient care, quality of life, and cost to the health care system.(Isenring *et al.*, 2007; Ravasco P *et al.*, 2005, 2007; Marin Caro *et al.*, 2007). Studies have shown that management of cancer patients is complex and individuals need to have access to the full range of psychosocial specialists, including Dietitians. CONCLUSIONS: Following the integration of Dietitians within a Psychosocial Oncology Program, Dietitian FTEs were increased from 0.8 to 2.4 FTE. As a result,

1042 new referrals were received in 2009. Dietitians now collaborate closely with other team members, and patient care and wait times have improved.

#### A-506

##### **Oncology Patient Navigation: The Current State of the Science**

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OBJECTIVES: The complex labyrinth of care that greets many patients diagnosed with cancer has become the impetus behind the development of oncology patient navigation programs. As these programs have become popular, program managers have been challenged to create both cost effective and efficient patient navigation approaches to care. This presentation will review the rationale behind the development of patient navigation programs, and the current state of the scientific literature surrounding the oncology patient navigator role. METHOD: A thorough review of the scientific literature pertaining to patient navigation was performed to highlight the numerous programs, models and rationale available to support the development of an oncology patient navigator role. A review of the recent literature pertaining to program development and training was also performed. RESULTS: Patient navigation programs remain context specific and the role of the navigator continues to be filled by a variety of individuals including nurses, social workers and other trained personnel. Recent developments in oncology patient navigation include initiatives by the Canadian Partnership Against Cancer to promote and develop national navigation programs, the establishment of The Harold Freeman Patient Navigation Institute in the United States, and the creation of the National Coalition of Oncology Nurse Navigators. CONCLUSIONS: Patient navigation programs will continue to develop and receive attention as many health care program goals include ameliorating patient outcomes and streamlining programs of care. Notwithstanding the developments within the domain of oncology patient navigation, further research is required in measuring the success and feasibility of these programs within the area of cancer care.

#### A-508

##### **Self-Rated Health in the Context of Oncology: Understanding the Individual's Holistic Experience and Relationship to 'Health'**

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**OBJECTIVES:** An individual's global assessment of health using a single-item question – called self-rated health (SRH) – is strongly predictive of all cause and cancer mortality in the general population. Despite extensive research, an understanding of the mechanisms explaining the longitudinal association between SRH and mortality remains poor. This abyss results most likely from the inadequacy of current conceptual and theoretical frameworks, and from the poor integration of knowledge into practice (i.e. knowledge synthesis and translation). **METHOD:** A growing body of literature outlines the need for integrative transdisciplinary approaches to understand the complexities of health processes beyond the limitations imposed by academic disciplines in isolation. In this work, we compiled quantitative and qualitative evidence from the study of SRH and integrated it using a transdisciplinary global perspective. **RESULTS:** 'Health' emerges as a concept closely related to an individual's subjective experience, transcending the classical biological, psychosocial, behavioral, and spiritual classifications of experience. The rating of 'health' appears to be an independent, individualized process; therefore, health should be seen as a personal phenomenon. In this theoretical presentation, we present findings from published work on SRH, terminal cancer, and other chronic diseases to support our results. **CONCLUSIONS:** Self-rated health, which represents an individual's holistic and personal experience, is closely linked to health outcomes. This conclusion outlines the need for individualized methods of assessment and intervention valuing individual experiences, in both research and clinical practice.

#### A-509

##### **Mothers' Uncertainty about their Daughters' Breast Cancer Risk and Prevention Strategies**

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**OBJECTIVES:** The inherent uncertainties of life are often increased significantly in light of a genetic diagnosis or genetic risk information. Uncertainty Management Theory highlights types of uncertainty and different ways in which individuals and families may choose to respond to these. Using this approach, the objective of this study is to describe how women considering genetic testing communicate with clinicians about uncertainty regarding

their adolescent daughters' cancer risk and prevention strategies. **METHOD:** We video-recorded 14 consultations of genetic healthcare practitioners and women considering genetic testing for the BRCA1 or BRCA2 mutation due to their own breast cancer diagnosis or family history. Eligible participants had at least one biological daughter 12–20 years old. All consultations were transcribed and analyzed using the constant comparative for sources of uncertainty about daughters' breast cancer risk. Sources of uncertainty were analyzed from the mothers' talk and the genetic healthcare practitioners' talk. **RESULTS:** Sources of mothers' uncertainty included: uncertainty about communication with their daughters (when, how much and what to tell); the likelihood of daughters' risk; and age appropriateness for cancer screening for daughters. Themes of genetic healthcare practitioners' communication mirrored the mothers' sources - they gave mothers information about each of the three categories. In addition, genetic healthcare practitioners also spoke about the uncertainty of present and future scientific and genetic knowledge. **CONCLUSIONS:** Women considering genetic testing discussed multiple issues of uncertainty with genetic healthcare practitioners about their daughters' risk, screening, and how to communicate with them. This study is the first to apply Uncertainty Management Theory to genetic counseling consultations. Future work will examine how genetic healthcare practitioners work with mothers to help them manage the uncertainty they face about their daughters' cancer risk.

#### A-510

##### **The Development and Implementation of an Institution-based Communication Skills Training Program for Oncologists**

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**OBJECTIVES:** Communication skills training (CST) has been shown to improve clinical communication. However, advanced CST programs in oncology have lacked institutional integration, and have not attended to institutional norms and cultures, the 'hidden curriculum,' that may counteract explicit communication skills training. The goals of this project were to develop an evidenced-based CST curriculum; address the 'hidden curriculum' through faculty development; implement the program for the institution's fellows, residents and faculty; and assess the program's effectiveness.

**METHOD:** We developed an advanced CST program, made up of nine teaching modules. Training included didactic presentations and experiential small group work. Key faculty were identified to serve as facilitators and role models in the implementation phase. Trainees included residents, fellows, and faculty. Anonymous course evaluations and pre-post self-efficacy were completed at the end of each module. Skills uptake and behavior change were evaluated through coding of pre-post video recordings of actual and simulated patient encounters. **RESULTS:** Since 2006, 473 clinicians have participated in this training program. Course satisfaction was rated as Agree/Strongly agree in a range of 92%–97% for all modules. Pre-post self-efficacy significantly increased ( $p < 0.01$ ) across modules for both attending physicians and trainees. The use of Establish the Consultation Framework and Checking communication skills were shown to significantly increase from baseline ( $p < 0.01$ ). **CONCLUSIONS:** Our initial work in this area demonstrates the implementation of such a program at a major cancer center to be feasible, acceptable, and beneficial.

#### A-512

##### **A Qualitative Study of Diagnostic Delay in Recently Diagnosed Colorectal Cancer Patients**

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**OBJECTIVES:** To examine factors associated with diagnostic delay, defined as the time between a patient's first medical visit and diagnosis or as the time between and individual's recognition of symptoms and diagnosis. **METHOD:** Individuals from Virginia and northeast Ohio diagnosed with colorectal cancer (CRC) in the past 6 months who experienced symptoms prior to diagnosis are recruited for an on-going qualitative research study. All participants are administered a semi-structured, cognitive interview about the events leading up to their diagnosis and complete numerous questionnaires. The qualitative interview data is themed and coded. Self-report information is verified via chart review. Data from 50 coded interviews (of 200 conducted) were analyzed. **RESULTS:** Longer diagnostic delay was significantly associated with: not seeking medical attention for initial symptoms ( $p < 0.05$ ), behavioral delay in acting on a decision to seek medical attention (e.g. due to procrastination and interfering life events) ( $p < 0.05$ ), having a HCP believe that the symptoms were not serious ( $p < 0.01$ ), and/or having a HCP who failed to fully explore patient symptoms ( $p < 0.05$ ). Patients whose physicians

attributed symptoms to a non-cancer cause tended to have longer diagnostic delay ( $p = 0.06$ ). **CONCLUSIONS:** In this sample, both patient and physician factors contributed to diagnostic delay, while system-level factors did not. Patient-centered factors included not appraising initial symptoms as serious or requiring medical attention and behavioral delay scheduling an appointment. Physician-centered factors included not thoroughly investigating patient complaints nor deeming symptoms as serious and possibly indicative of cancer. Findings suggest that we need to have a more nuanced understanding of how individuals use and access the health care system.

#### A-517

##### **The Effectiveness of Cybercounseling: A Comparison Study**

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**OBJECTIVES:** Research makes plain that many people with psychological needs do not seek counselling. Reasons range from anxiety and discomfort over disclosing issues to another person to physical or medical challenges that prevent travel. In all cases e-mail counselling represents a viable and economical solution. But first the basic question must be answered: does it work? This study seeks to answer that question by comparing face to face and online clients in terms of counselling outcomes. **METHOD:** Two groups of clients, one receiving face to face counselling and the other receiving online counselling, were compared on GAF outcome scores and client satisfaction surveys. Both groups were drawn from a pool of clients who sought counselling through a major Canadian Employee Assistance Program. Counselling was provided by two non-overlapping groups of therapists with equivalent levels of training and experience. Analyses of variance were conducted to examine differences between the two counselling modalities. **RESULTS:** Global Assessment of Functioning (GAF) is a generally accepted means of assessing change in counselling. Both modalities evidenced positive change in GAF indicating that both were effective in engendering change. Analysis showed no statistically significant difference in the amount of change between the two modalities. In addition, analysis of the responses to the client satisfaction survey showed no statistically significant differences for the questions focusing on the therapeutic alliance; the connection between client and counsellor. **CONCLUSIONS:** This research provides compelling evidence that online counselling has the potential to be the equal of face to

face counselling. Clients connect with their counsellors, discuss their problems, plan solutions and experience change. And it all happens via e-mail online. The implications for working with cancer patients and their families is clear. Challenges due to geographic location, health, stage of treatment and a host of other issues can be easily overcome.

#### A-518

##### The Stress-Deflecting Effects of Relationship Quality in Cancer Patients and their Partners

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**OBJECTIVES:** Relationship quality has been demonstrated to buffer cancer patients' stress reactions. Although investigations of distress among partners of cancer patients show promise, these studies commonly employed individual rather than dyadic designs. This is problematic because individual conceptualizations of distress do not account for the influence of relational and patient-partner interactions. Using a dyadic framework, this study examined relationship quality as a moderator of traumatic and secondary traumatic stress responses in cancer patients and their partners. **METHOD:** Participants ( $N = 85$  dyads) were recruited through the British Columbia Cancer Agency using direct mail, advertisements and referrals. Participants were over eighteen years old ( $M = 59$ ), diagnosed with breast (64%), lymphoma (7%), gynecological (9%), head and neck (10%) or gastrointestinal (10%) cancer within the past two years and involved in a committed relationship (e.g. dating, married, common law) of at least one year. Data were collected online, using psychometrically sound self-report survey instruments. **RESULTS:** Regression analyses revealed a trend for the moderating effect of relationship quality on the association between patients' and partners' stress reactions ( $\Delta R^2 = 11$ ,  $p = 0.14$ ). Direct effects confirmed the importance of patients' stress levels and couples' relationship quality on intimate partners' stress ( $R^2 = 0.25$ ,  $p < 0.001$ ;  $\Delta R^2 = 0.10$ ,  $p < 0.05$ ). Relationship quality became a significant moderator when predictors not contributing to the main effects were excluded ( $\Delta R^2 = 0.04$ ,  $p < 0.05$ ). **CONCLUSIONS:** This study was the first to investigate secondary traumatic stress reactions in partners of cancer patients, expanding our understanding of the type and degree of distress experienced. The trend toward moderation suggests that it is beneficial for practitioners to attend to relationship quality

factors when treating couples coping with cancer. The dyadic analysis implemented here also contributes to the refinement of empirical methods and conceptual models needed to strengthen developing systemic health care models.

#### A-521

##### Efficacy of a Self-Help Treatment for Acute Insomnia Comorbid with Cancer

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**OBJECTIVES:** Approximately 60% of cancer patients report insomnia symptoms. Numerous negative consequences are associated with insomnia, especially when chronic. Thus, it appears clinically important to offer effective sleep management strategies before the difficulties become chronic. This study's goal was to evaluate the effect of a minimal cognitive-behavioral therapy (CBT) for acute insomnia on subjective sleep indices, utilization of hypnotic medications, psychological distress, fatigue, quality of life, subjective cognitive functioning and dysfunctional beliefs and attitudes about sleep. **METHOD:** Thirty-eight cancer patients with insomnia symptoms for less than 6 months were randomly assigned to CBT ( $n = 20$ ), or to a no-treatment control group ( $n = 18$ ). The treatment consisted of 6 booklets to read at the rate of one/week combined with 3 brief phone contacts (30 min.), twice/month. A battery of self-report scales and daily sleep diaries were completed before and after the treatment. Follow-up evaluations were carried out at 3–6 months after the completion of the treatment. **RESULTS:** CBT patients had significantly greater improvements of sleep indices on the sleep diary and the Insomnia Severity Index (ISI) at post-treatment compared with control patients (ISI scores: CBT group from 12.1 to 5.3; control group: from 12.1 to 11.3;  $F(3, 94) = 6.39$ ,  $p = 0.001$ ). Moreover, CBT patients had significantly greater decreases in scores of anxiety, depression and dysfunctional beliefs about sleep, and greater improvements of cognitive functioning. Treatment effects were well maintained up to 6 months after the treatment. **CONCLUSIONS:** These findings suggest that a minimal cognitive-behavioral therapy is effective to treat acute insomnia comorbid with cancer. Hence, it appears highly beneficial to treat insomnia symptoms in their acute phase to prevent the incidence of chronic insomnia and its negative consequences.

## A-525

**BRCA1/2+ Parents' Disclosure of Cancer Risk to Offspring: A 'Teachable Moment?'**

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**OBJECTIVES:** Many BRCA mutation carriers (BRCA+) report discussing their genetic test results with offspring <25YO. Mediators of disclosure and content have potential to inform interventions to facilitate adaptive response to genetic risk for adult onset cancers. **METHOD:** 61 BRCA+ parents completed a survey of communication of genetic risk to offspring (73 female; 61 male). Parents reported general disclosure (DIS/NONDIS) of their BRCA1/2 result, and 25 content specific questions. Response proportions describe content disclosed. Regression analyses identified predictors of disclosure and content. **RESULTS:** 79(59%) offspring learning (DIS), & 55(41%) not learning parent's BRCA+ status (NONDIS) learned parent (DIS = 97%; NONDIS = 31%) and offspring (DIS = 77%; NONDIS = 13%) cancer risk. Offspring learned parent risk reduction strategies (PRR) (DIS = 76%; NONDIS = 36%) and offspring risk reduction recommendations (ORR) (DIS = 63%; NONDIS = 35%). Older offspring age predicted DIS (OOA) ( $p < 0.01$ ). OOA ( $p < 0.01$ ), offspring gender (FOGp = 0.03), CADX ( $p = 0.004$ ) and >education ( $p = 0.03$ ) predicted offspring cancer risk. OOA ( $p = 0.003$ ), FOG ( $p = 0.01$ ) and FPG ( $p = 0.007$ ) predicted PRR. OOA ( $p = 0.03$ ), FOG ( $p = 0.06$ ), CADX ( $p = 0.06$ ) and nonwhite ethnicity ( $p = 0.07$ ) predicted ORR. Frequent ORR recommendations: diet (80; 60%), nonsmoking (63;47%) and exercise (60;45%). **CONCLUSIONS:** What BRCA+ parents share, with whom, about hereditary cancer risk, appears mediated by parent (gender, cancer history, education) and offspring (age, gender) factors. BRCA+parents who disclose, frequently share offspring's cancer risk, but less frequently, risk reduction options. Many parents who don't disclose BRCA1/2 results do make risk reduction recommendations, suggesting that parent BRCA1/2 testing, independent of result disclosure, may provide a 'teachable moment' to foster offspring health behaviors. Further analyses will inform interventions to optimize offspring's responses to genetic risk.

## A-528

**Assessing Patients' Representations of Cancer-Related Fatigue: Implications for Practice**

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**OBJECTIVES:** A considerable number of patients experience prolonged fatigue after their cancer treatment has been completed. Such chronic fatigue can have a significant negative impact on their quality of life. The aim of this study was to develop and validate a measure for assessing patients' beliefs about the nature and causes of their cancer-related fatigue (CRF) and to explore the relationships between patients' beliefs, coping, and fatigue severity. **METHOD:** Patients with treatment-related and post-treatment cancer fatigue were recruited through hospital referral and cancer support groups. Participants completed the Brief COPE, a fatigue coping strategies questionnaire, the FACT-F fatigue scale, and the 'Fatigue Symptom Perception Questionnaire' (FSPQ), a newly developed measure based on Leventhal's Self-regulation model. **RESULTS:** The reliability and validity of the FSPQ were supported. Overall, patients perceived their fatigue to be serious and uncontrollable, and they felt that they had a poor understanding of this symptom. Fatigue symptom representations were associated with fatigue severity, coping styles, and type of coping strategy used. **CONCLUSIONS:** The findings suggest that the FSPQ is an appropriate and effective method for eliciting patients' fatigue representations and for screening for maladaptive cognitions in both clinical and research settings. The idea that patients' own beliefs play a key role in their fatigue outcomes, either directly or through coping behaviours, was supported. Patients' representations of their fatigue should be assessed and incorporated into interventions that challenge maladaptive beliefs in order to enhance psychological and functional outcomes.

## A-530

**Psychosocial Functioning in Women With Mastectomy, With or Without Breast Reconstruction**

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**OBJECTIVES:** To assess pre and post surgical psychosocial functioning in women undergoing mastectomy with or without breast reconstruction, and to compare changes in psychosocial functioning on year post surgery between women with

mastectomy alone, mastectomy with immediate breast reconstruction, or mastectomy with delayed reconstruction. **METHOD:** Eligible participants were approached at their pre-operative appointment by the study coordinator for participation in the research study. Each participant completed several standardized questionnaires at baseline and at one year following surgery. These included the Quality of Life Index, Body Image after Breast Cancer, Impact of Event Scale, Decisional Conflict Scale, Miller Behavioural Style Scale, Brief Symptom Inventory, and Sexual Activity Questionnaire. **RESULTS:** *Data collection is complete with preliminary results. The full analysis will be completed and presented at the conference.* 190 women completed the baseline questionnaires. 107 subjects had mastectomy, 24 underwent immediate reconstruction, and 59 underwent delayed reconstruction. The mean age of the subjects was 52.5 years. 81% of the subjects completed the one year follow-up. Baseline and follow-up psychosocial scores, and changes in scores, will be presented and compared between the three groups of subjects. **CONCLUSIONS:** This is the largest prospective study comparing psychosocial functioning in women with mastectomy alone, those with mastectomy plus immediate reconstruction, and those with delayed reconstruction. This information will be useful for health care providers who counsel women regarding surgical decisions related to breast cancer surgery. In addition, it will provide insight to women who are making surgical decisions related to mastectomy and/or breast reconstruction.

#### A-531

##### **Phenomenological Study on the Experience of Women Who Were Victims of Incest as Children and Are Diagnosed with Cervical Cancer as Adults**

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**OBJECTIVES:** Certain women encountered in oncology demonstrate that the onset of cervical cancer seems to be a symbolic life event that awakens old memories of incest and initiates an effort to understand the tie between the two experiences. A phenomenological study conducted on women who experienced cervical cancer in adulthood and were victims of incest in childhood or adolescence has shed new light on the psychoemotional aspects of their experience. **METHOD:** This phenomenological study was conducted on five women who have experienced these two events. Data was collected through written descriptions and clarification interviews. The women's

statements were analyzed using Amedeo Giorgi's phenomenological analysis method. **RESULTS:** The results highlight the way these women experience and understand these two experiences. They relate feeling overcome with fear, imprisoned by feelings of guilt, dispossessed of their identity as women, abandoned in unspeakable distress, and alienated. However, this same experience awakens a feeling of hope in them, as well as the desire and will to reconcile with their own humanity. **CONCLUSIONS:** This phenomenological study reveals how the trauma surrounding the onset of cervical cancer is experienced as violence suffered in the wake of the past incest experience. It also provides new insight on the nature of the existential shift in positioning these women experience as they seek to understand past and present experiences, as well as their own identity. It also points to potentially useful methods for supporting them in their search for meaning.

#### A-534

##### **Partnering with Cancer Registries to Measure and Understand the Unmet Needs of Survivors**

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**OBJECTIVES:** Providing appropriate psychosocial care for the growing population of cancer survivors requires accurate and reliable information about the level and type of unmet needs. Identifying, at a population level, those with the highest unmet needs is critical for planning for care. The purpose of our research was to recruit represent sample of the survivor population and create a method for identifying those who have the highest unmet needs. **METHOD:** Cancer survivors diagnosed 12 to 60 months earlier were randomly selected from three provincial, population-based cancer registries. Deceased, in-situ and those not wanting to be contacted were removed and sample representativeness was compared to the survivor population before mailing pre-notification letters, survey packages, and two follow-up reminders. Unmet needs were scored from none to very high. An algorithm was applied to the scores for classifying respondents' level of unmet services as low, moderate and high. **RESULTS:** Survivor respondents ( $n = 550$ ) were representative of the population in the province for type of cancer and gender but not age. Most survivors had some level

of unmet need. However, when we analyzed the data using the Unmet Needs Algorithm to classify respondents' level of unmet need, a small percentage had very high unmet needs. Follow-up data provides information on the relationship between highest unmet needs and quality of life, distress, anxiety, depression and stress. **CONCLUSIONS:** Understanding the prevalence of survivors with the highest unmet needs is critical for evidence-based health care planning and resource allocation. Partnering with population-based cancer registries enabled the development of methodology for measuring problems common to all survivors, and for identifying those who desire a high degree of help in managing those problems. This study offers promising results for addressing the increasing prevalence of cancer survivorship.

#### A-536

##### **Current Status of Work and Cancer Patients/ Survivors: Implications for Canada**

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**OBJECTIVES:** The purpose of the presentation is to summarize and discuss the findings of a Canadian Association of Psychosocial Oncology (CAPO) commissioned review of the international literature and research on the impact of cancer on work. This includes a survey of factors that facilitate or impede successful return to work or job maintenance and a review of interventions, practices, programs and recommendations related to vocational rehabilitation and cancer survivors. **METHOD:** Literature and research were reviewed using a scoping procedure framework (Arksey, O'Malley, 2005). Over 100 article and papers were reviewed from 13 countries. In order to update the information on oncology based vocational programs and services available in Canada, an e-mail inquiry was sent to over 300 members of the Canadian Association of Psychosocial Oncology. **RESULTS:** To date most of the literature on work and cancer is related to the impact of cancer on work, positive and negative outcomes and predictors, with sparse attention to intervention and clinical practice. An integrative biopsychosocial conceptual model of the relationship between cancer and work outcomes has been proposed to guide future research and program development. **CONCLUSIONS:** Conclusion: There needs to be greater emphasis on intervention studies and the development of evidenced based clinical practice guidelines for vocational rehabilitation in cancer care.

#### A-538

##### **Predictors of the Unmet Needs of Persons Supporting People with Cancer**

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**OBJECTIVES:** The impact of cancer on those caring for someone undergoing treatment is growing but very little is known about those who are the primary support persons for cancer survivors after their initial treatment is complete. The purpose of our research was to understand who cancer survivors identified as their primary support person, what problems and issues the support persons experience, and the level of help they desire to manage those problems. **METHOD:** A representative sample of cancer survivors ( $n = 550$ ) participating in a population based survey of unmet needs invited their primary support person to complete the Support Persons' Unmet Needs Survey. Support persons ( $n = 382$ ) provided data on their level of need for assistance with 78 specific concerns/problems covering six domains of need. Information about their own and the survivors' health and recent use of health services, as well as demographic characteristics were provided. **RESULTS:** Not all survivors had support persons but among those who do, spouse and family member are the majority. Most of those who support a cancer survivor report they have unmet needs (i.e. needed help with at least one issue but could not get that help). A small percentage of support persons have very high unmet needs. We will report on the characteristics and predictors for those support persons with the highest unmet needs. **CONCLUSIONS:** The psychosocial impact of cancer is not only experienced by the survivor, but also their primary support person. This study provides data on the characteristics of those supporting survivors and the types of concerns / problems they need help managing. Additional studies are underway to determine the relationship between unmet needs and related constructs like distress, quality of life and depression, anxiety and stress.

#### A-539

##### **Spirituality and End of Life Issues: Viewpoints of 24 Persons, Gathered by a Team in Home Palliative Care**

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**OBJECTIVES:** To gain better knowledge of the spiritual and religious needs of persons receiving palliative care at home.

- To set priorities among the various emerging spiritual and religious needs.
- To find the spiritual and religious resources of persons.

**METHOD:** Twenty-four patients in home palliative care accepted to participate in a research project and were interviewed on the basis of a semi-structured questionnaire. A qualitative approach was taken for this research. Then an in depth study of interviews made it possible to identify the content of the various themes dealt with. Finally, the usual procedures were followed in analyzing the thematic contents of all the material gathered. **RESULTS:** We classified our results under three (3) general categories. The spiritual needs emerged in connection with: 1. the past (search for meaning, revisiting one's life, etc.), 2. the present (relationships, need for understanding, etc.), 3. the future (fears, existential questions, etc.). **CONCLUSIONS:** - Better understanding of the spiritual and religious needs of persons in home palliative care.

- Better understanding of the various spiritual resources claimed as needs by the persons themselves.
- Identification of needs linked to the past, the present and the future of persons accompanied in home palliative care.

#### A-540

##### **Acceptability and Applicability of a Multi-Faceted Intervention to Improve Continuity of Care for Patients with Cancer**

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**OBJECTIVES:** Many authors have recognized the lack of continuity in the services needed by cancer patients to fulfill their global needs, physical and psychosocial. At the treatment phase, communication and collaboration between family physicians (FP) and oncologists appear limited, also contributing to fragmented cancer care. A multi-faceted intervention was developed to overcome this difficulty. This study assessed the acceptability and applicability of this intervention for FP and members of a pulmonary oncology team (OT). **METHOD:** The intervention includes: 1) systematic appointments with FP; 2) transmission to FP of

standardized summaries of patients' medical and psychological condition; 3) systematic transmission to the OT of patients' information resulting from FP visits; 4) development of a priority access to FP. Two rounds of focus groups were conducted with 10 members of the OT and 18 FP to present the intervention, adapt it according to their comments and reach agreement for its implementation. **RESULTS:** Focus groups with the different health professionals were useful to clarify and adapt the content of standardized summaries for FP and OT, in order to mutually respond to their respective needs in the follow-up of cancer patients. Some aspects of the intervention were dropped or modified to better suit FP and OT respective practice. Discussion with FPs resulted in identification of strategies to facilitate contact and access of patients to them whenever needed. **CONCLUSIONS:** The long-standing nature of FP-patient relationship and FPs' usual familiarity with their patients' social context put them in a strategic position to contribute to patient's adjustment to cancer, reinforcing the importance of keeping them in the loop at all phases of cancer management. Prior to implementation, any intervention to improve communication and collaboration between FP and OT needs to be accepted and endorsed by involved health professionals.

#### A-544

##### **Delivering Cancer Transitions in Maggie's Centres: A Pilot Study**

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**OBJECTIVES:** Maggie's Centres provides innovative evidence-based programme of psycho-educational support for all stages of the cancer experience using a multi-professional team including cancer support specialists, welfare rights experts, and clinical psychologists. The present study sought to investigate the feasibility of implementing Cancer Transitions, a workshops programme aimed at helping people take an active role in their physical and emotional well-being following cancer treatment. **METHOD:** Cancer Transitions, a 6-week workshop programme of the Wellness Community and Lance Armstrong Foundation, was piloted in four Maggie's Centres (Dundee, Edinburgh, Fife, London). Nine men and 24 women who completed cancer treatment within the past two years participated in the programme. Each week participants engaged in 30 minutes of physical activity followed by an information and group discussion session on post-treatment topics including exercise, nutrition, emotional well-being, and medical management. **RESULTS:** Participants reported finding the

support and encouragement; and direct advice, suggestions, and education to be the most valuable of their experiences of the group. At the end of the group, participants felt more connected with others with cancer and confident they could make positive health changes in their life. Participants also reported feeling a greater sense of understanding of their follow-up care and what they need to do to stay healthy. **CONCLUSIONS:** Maggie's main purpose is to help people help themselves and gain confidence in their ability to manage their physical and emotional well-being throughout their cancer experience. This pilot study demonstrates that workshop programmes such as Cancer Transitions can be delivered effectively within a Maggie's Centres setting and existing programme of cancer support.

#### A-546

##### **Depressive Symptoms are More Strongly Associated with Cortisol Levels than Bioavailable Testosterone Levels in Men with Prostate Cancer**

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**OBJECTIVES:** Studies of healthy individuals have found a relationship between depression and hormonal levels such as testosterone and cortisol. Prostate cancer and its treatment may lead to hormonal alterations, which may be related to depression. This study conducted in men with prostate cancer treated by radiation therapy (RTH) with or without androgen deprivation therapy (ADT) aims at investigating whether the changes in bioavailable testosterone and cortisol levels are linked to changes in depressive symptoms. **METHOD:** Sixty men with prostate cancer composed the sample, divided into two groups: RTH ( $n = 32$ ) and RTH-ADT ( $n = 28$ ). Participants were evaluated before initiating treatment and at repeated intervals during 16 months, using the Structured Interview Guide for the Hamilton Depression Rating Scale (SIGH-D), the Hospital Anxiety and Depression Scale (HADS) and the Beck Depression Inventory-II (BDI-II). Blood samples of hormone levels were taken at each assessment. **RESULTS:** Greater scores on all depression measures were significantly related to higher cortisol levels in both groups, (rs ranging between 0.14 and 0.43,  $ps < 0.05$ ). Greater depressive symptoms were significantly associated with lower testosterone levels in the RTH group but not in the RTH-ADT group. Testosterone levels were significantly related to somatic BDI-II items in both groups (rs ranging between 0.22 and 0.33,  $ps < 0.01$ ), but not to cognitive-affective items. **CONCLUSIONS:** These

findings suggest that depression is more importantly related to changes in cortisol than to changes in testosterone levels. In addition, somatic symptoms of depression are more strongly related with testosterone levels than are cognitive-affective symptoms. Future investigations are needed to shed some light on distinct hormonal mechanisms underlying the development of depressive symptoms in men with prostate cancer.

#### A-552

##### **Gender Differences in Self-Reported Late Effects, Quality of Life and Satisfaction with Consultations in Survivors of Lymphoma**

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**OBJECTIVES:** Gender differences in perceived vulnerability to late effects and views about follow up among cancer survivors have rarely been considered. Since prevalence of lymphoma is relatively equal between genders, we compared the consequences of cancer (late effects, perceived vulnerability and quality of life), and satisfaction with clinic visits between men and women. **METHOD:** A cohort of 115 younger adults (18–45 years, >5 years disease-free survival) who had been treated for lymphoma participated. 91 completed questionnaires before and 62 after routine consultant-led appointments. 24 survivors were recruited by post. Questionnaires included measures of quality of life (QoL), late effects, perceived vulnerability, issues survivors wanted to discuss and reported discussing in clinic, time waiting to see the doctor and satisfaction with the consultation. **RESULTS:** There were no gender differences in number of late effects or perceived vulnerability. More late effects were associated with worse psychological QoL in men only ( $r = 0.50$ ,  $p < 0.001$ ). While men wanted to discuss more topics than they discussed, women were able to discuss the topics they wanted (ANOVA,  $p = 0.01$ ). Multiple regression demonstrated a shorter wait in clinic ( $r = -0.46$ ,  $p = 0.009$ ) and discussing more topics ( $r = 0.34$ ,  $p = 0.06$ ) explained 30.6% of the variance in consultation satisfaction for men. **CONCLUSIONS:** Issues surrounding follow-up provisions are increasingly important given the length of survival in young adults following treatment for lymphoma. Men may experience poor psychological well-being due to distress about unanswered concerns.

Consideration to their concerns needs to be prioritized, given satisfaction and ultimately continued attendance at clinic and quality of life may be dependent on the extent to which follow-up meets survivors' expectations.

#### A-555

##### **Post-Treatment Regret among Young Breast Cancer Survivors**

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**OBJECTIVES:** The study addresses: (1) what women regret about their breast cancer treatment five years later, and (2) what characteristics of disease and treatment predict post-treatment regret. **METHOD:** Interviews were conducted with breast cancer survivors in the San Francisco Bay Area. Participants were interviewed following diagnosis. Five years later, women were asked whether they had any regrets about their cancer treatment ( $N = 449$ ). Qualitative analysis was used to identify regret content, and logistic regression was used to determine what characteristics of treatment predicted regret. **RESULTS:** 42.5% of women regretted some aspect of treatment. Common regrets were primary surgery (24.1%), chemotherapy and/or radiation (21.5%), reconstruction (17.8%), and problems with providers (13.1%). Logistic regression revealed that women who were anxious about the future ( $OR = 1.32$ ;  $p = 0.03$ ) or had problems communicating with physicians ( $OR = 1.26$ ;  $p = 0.02$ ) during treatment were more likely to express regret 5 years later. Additionally, women with new/recurrent cancers were more likely to regret some aspect of their primary treatment ( $OR = 5.81$ ;  $p < 0.001$ ). **CONCLUSIONS:** This research supports addressing the psychosocial aspects of cancer care and improving physician-patient communication. Evidence is also provided for addressing the unique emotional needs of women with recurrent cancers, who may experience an undue burden of regret.

#### A-556

##### **The Acceptability and Usability of the Support, Education and Advocacy (SEA) Intervention for Women with New Diagnosis - Metastatic Breast Cancer (NDMBC)**

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**OBJECTIVES:** To: 1) Develop theoretically congruent intervention materials according to sensory (what will this feel like) and coping (evidenced

based strategies for self care) needs for women newly diagnosed with metastatic breast cancer and 2) Utilize key patient informants to evaluate the acceptability and usability of the Sensory and Coping Intervention for Women with Newly Diagnosed Metastatic Breast Cancer. **METHOD:** Descriptive pilot study, twenty women with a diagnosis of metastatic breast cancer recruited from a large urban, NCI designated breast cancer center. Sampling included women with known MBC (regardless of time since diagnosis), both white and black race, and high and low income ranges. Race and income were determined by patient self report. Women with MBC evaluated the intervention using a Likert scale and semi structured interviews grading acceptability and potential usability at MBC diagnosis. **RESULTS:** Content analysis of interviews identified two themes: 1) Positive and concrete information met needs 2) Discomfort with expressions of uncertainty or negative emotion. Participants agreed through a 7 point Likert scale that the intervention provided sensory (Mean 6.1,  $SD$  0.8) and coping information (Mean 5.8,  $SD$  1.1) and the intervention felt like it was 'designed for me,' (mean 5.4,  $SD$  1.9). Patients felt any mention of sadness or uncertainty may negatively impact their cancer course. **CONCLUSIONS:** Women with metastatic breast cancer require preparatory information to reduce distress. The Sensory and Coping Intervention was rated favorably by key patient informants. This evaluation informed intervention modification. The revised Sensory and Coping Intervention expands on the favorably rated material while softening the potentially negative content.

#### A-567

##### **Using Strength-Based Clinical Approaches to Promote Resiliency**

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**OBJECTIVES:** Elevated levels of disabling distress in cancer patients have been well documented nationally and internationally. Though statistics are robust and have important implications for patients, families, health care professionals and society at large, the majority of patients and their families will adapt to the many vicissitudes of the cancer experience. The purpose of this presentation is to share three practical strength-based clinical approaches to promote resiliency. **METHOD:** Using a highly interactive group exercise model, the presenter will focus on three practical areas where strength-based approaches are evident and for which there is supporting data. Gender-based couples support, the COPE Model of problem solving and social support will be discussed within integrated case narratives outlining the connection

to the foundations of resiliency. **RESULTS:** Both the literature and clinical experience supports the importance of focusing on the inherent strengths of people confronting serious illness. Regardless of the number, severity and etiology of the problems and distress that patients and families confront, ultimately it is necessary to develop approaches that encourage a sense of control, predictability, connection and meaning. **CONCLUSIONS:** In practical terms, helping the patient, family and health care team to cognitively integrate complex and ambiguous information, support emotional regulation, stabilize or enhance social support, and promote problem-solving through shared decision-making. This process connects the present situation to a life narrative that alchemizes into healthy meaning-making. This is the therapeutic milieu that heals wounds, encourages meaningful action and creates fertile opportunities for personal growth.

#### A-568

##### **SupportScreen-Automated Screening for Identifying and Triaging Problem-Related Distress in Cancer Settings**

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**OBJECTIVES:** City of Hope (COH) has developed and implemented an automated touch screen system called SupportScreen. SupportScreen identifies and triages patient biopsychosocial problems in real-time. SupportScreen refers to the entire process—from initiation of patient responses to the generation of referrals and provision of resource and educational information. The purpose of this presentation is to describe the features, process, hardware, compatibility, reporting and implementation of SupportScreen. **METHOD:** The clinic staff administers SupportScreen to the patient. SupportScreen takes approximately 12 minutes to complete. A Summary Report (both printed and e-mail) is generated in real-time listing all problems triggering referrals or requests to talk with the team. Requested educational materials are also printed and handed to the patient prior to their consultation with the physician. Simultaneously, the raw data is sent to a flat file easily available for reporting and analysis. **RESULTS:** Partnering with our in-house ITS team, we successfully developed and implemented a patient-friendly touch screen standalone program that integrates screening, triage, data management and reporting. Program content, triage criteria, tailored educational materials were built into the automated system. Patient's and Staff's overall evaluation of the process, time spent, clarity, readability and navigation of SupportScreen was extremely

favorable. SupportScreen has been implemented in medical oncology, HEM/HCT and Surgery clinics. **CONCLUSIONS:** Touch screen technology is an easy and efficient way to screen patients and triage referrals. SupportScreen has national and international implications for the enhancement of clinical encounters in real-time by creating a model for other institutions.

#### A-571

##### **Tobacco and Breast Cancer Messaging for Younger Women: A Gender Analysis**

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**OBJECTIVES:** Evidence linking both active smoking and secondhand smoke exposure to premenopausal breast cancer means the development of health messages specific to younger women is a pressing priority. The aims of this study were to determine how cancer education and prevention initiatives targeting adolescent girls and young women construct and present breast cancer risks, and to offer direction in designing effective messaging regarding breast cancer and tobacco exposure. **METHOD:** This qualitative study involved two methods of data collection. To determine how to communicate information about this modifiable breast cancer risk to young women, a selection of 32 recent English-language breast cancer campaigns (in print, internet, video, and pamphlet formats) that targeted young women was analyzed. In addition, we obtained young women's responses to three breast cancer campaign images during focus group discussions. **RESULTS:** A critical analysis of campaign images points to an explicitly gendered discourse that can entail conflicting messages regarding breast cancer, health, feminine beauty and risk. Although the intent may be to educate and empower young women, paradoxically some messages employ imagery that objectifies young women's breasts and bodies. Focus group findings also pointed to young women's awareness of gender stereotyping and feminine appearance imperatives present in some breast cancer messaging. **CONCLUSIONS:** Recommendations are made for messaging about tobacco and breast cancer risk to avoid reproducing one dimensional or stereotypical presentations of gender and femininity. Indeed, some of the 'tried and true' strategies used in health messaging may need to be revised so that we are more mindful of their gendered implications for the young women who

are the target audience for the emerging breast cancer and tobacco message.

#### A-577

##### **New Reflections on Spousal Bereavement Following Cancer: A Critical Update of the Literature**

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**OBJECTIVES:** Although bereaved spouses are considered by public authorities as vulnerable persons, there have been few empirical studies exploring their daily widow life and process of adjustment to loss. Heterogeneity of studies could be problematic for professionals trying to improve quality of care in palliative care units, where the question of grief is acute. Precise models and existing evaluated support programs remain unrecognized, while no recent review of literature about spousal bereavement through cancer exists. **METHOD:** Using PsycINFO and PubMed, we systematically searched the literature with keywords and retrieved relevant literature. PsycINFO and PubMed « cancer » and « grie\*» respectively yielded 470 and 561 references (tallying) and « cancer » and « bereav\*» yielded 352 and 529 references. (1917 to 2009). We read through abstract to detect main problematics about grief and full texts (1986 to 2009) were retrieved when specificities of spousal bereavement through cancer were mentioned. **RESULTS:**

- Adjustment to spousal loss is impacted by some specificities of cancer care (caregiving experience, treatments, social and individual representations of cancer...).
- These specificities are not systematically present in the main models of grieving process.
- Variability in sample size, design and reliability of measures hinders synthesis of results.
- The question of complicated or prolonged grief is pervasive and prevents researchers to tap other topics like support or intervention programs.

**CONCLUSIONS:** Few empirical studies target spousal bereavement specifically following cancer. Literature dealing with cancer concerns inadequate grief. Little is known about phenomenology of grieving among bereaved spouses through cancer along years after the decease. Although references about support programs have emerged, few of these programs have been scientifically evaluated. This review underlines that more studies are needed with prospective, and qualitative research, and on common grief, needs and expectations of bereaved spouses.

#### A-578

##### **Cancer Patient's Quality of Life: Importance of Goal's and Hierarchy's Adjustment**

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**OBJECTIVES:** There is a growing interest for mental health and quality of life of cancer patients. The aims were: to understand cancer patients' mental health adjustment process, through anxiety, depression, coping strategies and quality of life and to identify intervention procedures that may improve cancer patients' quality of life (QoL). **METHOD:** Patients (180) referred for an oncology consultation completed: Karnofsky Index (KARN), Hospital Anxiety and Depression (HADS), State-Trait Anxiety Inventory (STAI), Revised Way of Coping Checklist (WCC) and Quality of Life Systemic Inventory (QLSI). The QLSI global gap score measure the distance between a person's current condition and his goal in 28 life domains. The QLSI also provides a global goal score and a global rank score giving patients' rank of priority for each life domain. **RESULTS:** Significant correlations (Pearson) were found between HADS, STAI, emotional coping and QLSI Gap ( $r = 0.45; 0.29; 0.20$ ; all  $p$  levels  $< 0.01$ ); between KARN, HADS, STAI and QLSI Goal ( $r = -0.20; 0.28; 0.22$ ; all  $p < 0.01$ ) and between KARN, Problem coping, emotional coping, social coping and QLSI Rank ( $r = 0.17; 0.24; 0.17, 0.14$ ; all  $p < 0.06$ ). **CONCLUSIONS:** Greater gap (i.e. poorer QoL) is associated to depression, anxiety and poor emotional coping. Lower goal is associated to depression, anxiety and low functional capacities. Higher life priorities are associated to better functional capacities and to better coping strategies. Therefore working on life goals and life priorities may be of some help in the adaptation to disease process.

#### A-579

##### **Anxiety And Depression In Patients With Testicular Cancer: Surveillance Vs. Radiation Treatment**

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**OBJECTIVES:** Low stage seminoma testicular cancer is highly treatable. Research comparing

post-orchietomy adjuvant radiation to surveillance reveals nearly identical survival rates, and suggests that 85% of patients receiving adjuvant radiation are being over-treated. Given that there is a dearth of research examining the impact of treatment modality on psychological well being, this retrospective, cross-sectional study examined the influence of adjunctive radiation versus surveillance on the psychological outcomes of patients. **METHOD:** A consecutive set of patients were identified who received an orchietomy combined with adjuvant radiation ( $n = 18$ ) or surveillance ( $n = 103$ ) between September 1997 and December 2009 and who have no evidence of current disease. Participants provided information on health worries and completed validated instruments for the assessment of anxiety and depression (HADS, POMS), sexual functioning (BSFI), and illness intrusiveness (IIS). Means and frequencies were compared using the Wilcoxon rank sum test and Fisher's exact test respectively. **RESULTS:** Comparisons between adjuvant radiation and surveillance found no significant differences. A trend for greater 'worry about future health' was detected in the adjuvant radiation group. Examination of the surveillance group found no significant differences between participants less than two years ( $n = 31$ ) versus greater than two years since orchietomy ( $n = 68$ ). A trend for greater illness intrusiveness on the relationship and personal development subscale of the IIS was found in participants greater than two years since surgery. **CONCLUSIONS:** This 'pilot' study suggests that the psychological sequelae of adjuvant radiation and surveillance do not differ. In the surveillance group, time since orchietomy does not effect psychological outcomes. This lack of evidence for distressing psychological outcomes combined with the physical/medical benefit of a less invasive treatment modality contributes to the literature in support of surveillance within this patient population. These findings require confirmation through further studies with enough power to apply equivalence testing.

#### A-580

##### Designing a Weight Loss Intervention for Breast Cancer Survivors

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**OBJECTIVES:** Women who gain weight or are overweight/obese after breast cancer (BCA) treatment are at increased risk for cancer recurrence, cardiovascular disease and other chronic diseases. Little is known about changing both dietary intake and increasing physical activity to achieve weight

loss among these survivors. There is growing interest in examining the potential benefits of intentional weight loss among BCA survivors. However, little is known about their needs and preferences in changing two risk behaviors. **METHOD:** We interviewed a group of 10 BCA survivors ( $n = 10$ , mean age = 55.9 years,  $SD = 9.8$ ; mean years since diagnosis = 3.6,  $SD = 3.1$ ; 9 = White, 1 = African American, mean BMI = 30.4,  $SD = 4.9$ ) to help design a weight loss intervention. Women were asked questions about the preferred modality, content, sequence of changing two risk behaviors and the nature of a viable comparison/control group for an efficacy study to test the effects of a weight loss intervention. **RESULTS:** The group was enthusiastic about a weight loss intervention. All the women preferred individual meetings with a nutritionist to learn about changing their diet and to receive feedback. Six women endorsed focusing first on one behavior rather than changing two behaviors simultaneously. Regarding the sequence of behavior change, 8 of the 10 women expressed preference to begin with dietary changes before starting exercise. A majority endorsed offering recipes and general nutrition information for the control group. **CONCLUSIONS:** Understanding the effects of weight loss among overweight/obese BCA survivors may have implications for their risk of cancer recurrence. Changing two risk behaviors (sedentary behavior and unhealthy diet) may be more challenging after BCA treatment. These data can be used to design appropriate weight loss interventions (e.g. content, sequence of behavior change, viable comparison groups) to meet the needs and preferences of BCA survivors prior to conducting efficacy studies among these survivors.

#### A-591

##### Experiencing the Challenges of Cancer Care in Botswana

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**OBJECTIVES:** Cancer has emerged as a major health problem in Africa. Although Botswana is considered a middle-income country within the African community, little attention has been paid to cancer care in the past while most cancers are detected at stages III or IV. The purpose of the presentation is to report on perceptions, experiences and meaning of cancer care and control in Botswana as gathered by the first author during an international cancer care internship. **METHOD:** Through the Student Without Borders program, the first author worked at the Cancer Association of Botswana (CAB) from September-December, 2009. Using an ethnographic lens, data were

collected by becoming immersed in the culture and actively participating in health promotion programs offered by the Association. Interviews with decision-makers, patients and health care providers were conducted and field notes were kept. **RESULTS:** Findings indicate that lack of cancer education and minimal resources constitute significant hurdles for cancer care in the country. Traditional healers represent the first line of treatment and are perceived as delaying access to 'Western' medicine. Lack of oncology training in the nursing field is the second main obstacle to early diagnosis. Access to treatment is limited. Patients suffer pain, loneliness, and isolation from family and friends when they seek treatment far from their homes. Follow-up support is not available. **CONCLUSIONS:** Cancer patients in this African country face considerable bio-psychosocial challenges and little hope of recovery. Education initiatives, resources and health policies need to be developed and implemented concurrently. Collaboration among local organizations to strengthen the quality of services and a vision for a comprehensive approach to patient care within this context are critical in order to instill hope for the future.

#### A-592

##### **The Fatigue Symptom Inventory: A Systematic Review of Its Psychometric Properties**

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**OBJECTIVES:** Fatigue is among the most common problems experienced by cancer patients. The Fatigue Symptom Inventory (FSI), first published in 1998, is a 14-item self-report measure assessing the severity and frequency of fatigue, the perceived interference associated with fatigue, and the daily pattern of fatigue in the past week. The purpose of the current study was to review and evaluate the psychometric properties of the FSI based on its use in published research studies. **METHOD:** A systematic review of the literature was conducted and identified 55 studies reporting results for the FSI. Alpha coefficients were summarized to characterize internal consistency reliability of multi-item FSI scales. Test-retest correlations were summarized to characterize test-retest reliability. Correlation coefficients between FSI scales and other published measures were summarized to characterize concurrent, convergent, and divergent validity. Finally, the mean difference statistic (*d*) was calculated to characterize sensitivity to change and discriminative validity of the FSI. **RESULTS:** Alpha coefficients for the interference scale ranged from 0.91 to 0.96. Most items demonstrated low to moderate test-retest correlations. Correlations with

other fatigue measures ranged from 0.50 to 0.86. Correlations with depression and anxiety measures were positive (range = 0.23 to 0.76). Correlations with measures of vitality and vigor were negative (range = -0.28 to -0.77). Effect sizes for sensitivity to change and discriminative validity ranged from small to very large and trivial to very large, respectively. **CONCLUSIONS:** Since its publication in 1998, the FSI has been widely used to assess fatigue. Its psychometric properties include high internal consistency and low to moderate test-retest reliability. Concurrent validity for the scale is moderate to high and there is good evidence for its convergent and divergent validity. Evidence for its sensitivity to change and discriminative validity is limited but generally positive. Taken together, these findings encourage the use of the FSI in future studies.

#### A-595

##### **When Parents Disclose BRCA1/2 Test Results: Their Perceptions of Offspring Response**

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**OBJECTIVES:** Testing minors for BRCA1/2 mutations is not currently recommended, as risk reduction measures and screening are not generally recommended before 25YO. However, many parents share their BRCA1/2 results with minor and young adult offspring. Offspring responses to this communication have not been described. **METHOD:** 163 parents who had BRCA1/2 testing and offspring 5-25YO at the time of parent testing (323 offspring total) completed semi-structured qualitative interviews regarding communicating their BRCA1/2 results to offspring. 52 parents had a BRCA1/2 mutation (POS). Parent reports of offspring reactions to disclosure were coded. Response proportions are utilized to summarize the results. **RESULTS:** 107 parents reported disclosure to 201 offspring. Frequently reported responses were neutral (39%) or relief (26%). Poor understanding (11%), scared/anxious (11%) and concern (10%) were less frequent. Neutral was more frequent with negative (NEG) results (45% v. 26% POS), and older offspring (42% 14-25YO v. 32% 10-13YO). Misunderstanding was more frequent with POS (20% v. 8% NEG) and in offspring <10YO (15%). Fear/anxiety were most

frequently reported with POS (18%) and offspring <10YO (22%). **CONCLUSIONS:** Parent reports suggest that most offspring may not experience adverse reactions to disclosure, although responses may vary according to content and offspring age. Younger offspring and those learning of a parent's BRCA1/2 mutation or variant of uncertain significance may be more susceptible to poor understanding and/or initial negative responses. Longitudinal evaluation of offspring reports of cognitive, affective and behavioral responses is needed to inform interventions to optimize adaptive responses to early communication of hereditary risk.

#### A-596

##### **Teaching Men and Women How To Get the Best Out of Each other in Times of Stress**

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**OBJECTIVES:** Research has clearly demonstrated that the intellectual differences between women and men are very small compared to their many similarities. But when it comes to coping with cancer, frequently small differences have a big impact. This presentation will offer a new paradigm for the recruitment and engagement of men and women focused on a strengths-based problem-solving approach used to identify men and women's unique contributions to coping and making meaningful connections during times of stress. **METHOD:** The four week 2-hour sessions are manualized courses that are interactive and based on the C.O.P.E problem-solving model. Approximately 90% of the meeting time is comprised of interactive exercises in which women and men learn to identify and communicate motivations behind their attempts to manage their own emotional responses and help each other overcome barriers to meaningful connections. Any man-woman pair coping with illness is encouraged to participate. **RESULTS:** Over the years, our team has developed an effective strategy for the recruitment and engagement of men and women in a highly interactive manualized program of problem-solving. The COPE Model of problem-solving has consistently been shown to reduce distress in men and women affected by cancer. Men attend and rate this program as frequently and highly as do the women. **CONCLUSIONS:** Although there is considerable extant data that documents the distressing misalignments between women and men under stress, there are extremely few models for practical interventions that can be easily applied in acute care settings. This successful group helps to maximize the potential that men and women's expectations and demands are aligned through enhanced understanding and

knowledge about gender-based perceptions and responses.

#### A-598

##### **Effects of a Weekend Retreat for Young Adult Cancer Patients**

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**OBJECTIVES:** There is evidence that peer support can reduce distress and improve quality of life. However, little is known about effectiveness of interventions to provide peer support to young adults with cancer. The purpose of this study was to evaluate whether a weekend retreat specifically for young adult cancer survivors can help to improve the quality of life, quality of mood and sense of support and hope for cancer survivors who participate in it. **METHOD:** Participants were 57 (45 female, 12 male) young adult cancer survivors, ranging in age from 19–38 years, who took part in one of three weekend retreats. Retreat participants were asked to complete a questionnaire assessing self-rated health, overall quality of life, hope, sense of community, sense of support and mood, once prior to the weekend retreat and again immediately after the retreat. **RESULTS:** On all indices measured, using paired t-tests, there was a significant difference between pre and post-retreat scores. Self-rated health and quality of life improved post retreat as did sense of community, support and hope. Total mood disturbance was decreased. **CONCLUSIONS:** A weekend retreat tailored specifically to the needs of young adults with cancer can provide immediate and significant benefit in a number of key areas of quality of life. The study is limited by lack of a control group but suggests that this relatively simple and low cost intervention can result in benefits to this underserved population. Further research is needed to identify which aspects of the retreat contributed most to which outcome.

#### A-599

##### **'I Am Not Alone': How a Weekend Retreat Helps Cancer Survivors to Cope**

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**OBJECTIVES:** There is strong evidence for the value of using groups to discuss the impacts of cancer and even brief interventions can have long-lasting effects. The purpose of this study was to evaluate whether a weekend retreat for cancer

survivors can help to improve the quality of life, quality of mood and sense of support and hope for cancer survivors who participate in it. **METHOD:** Participants were 47 attendees at each of two weekend retreats for cancer survivors and supporters, and were widely diverse in cancer diagnosis and stage. After the retreat participants were asked to describe how the retreat affected them. They were asked to describe effects again at 4 month and 12 month follow-ups. About half of the original respondents responded during follow-up. The open-ended responses were analysed using thematic analysis, at a descriptive level. **RESULTS:** Two major, interrelated, themes emerged from responses: 'I am not alone' and 'I can manage'. Participants felt more supported by others and felt they were better able to give support. They reported being able to manage emotions and to cope better, as well as learning new skills and new information. These themes continued to appear in responses from 4 and 12 months after the retreat and corresponded to the objectives of the workshop organizers. **CONCLUSIONS:** A weekend retreat, led by experienced facilitators, can be of long-lasting benefit for many adults with cancer. Since feelings of support and management of emotional response are key to quality of life, this relatively low-cost and easy to deliver intervention appears to be useful for those who self-select into the intervention. As well, increasing the sense of support and improved coping appear to be important objectives for cancer retreats.

#### A-603

##### **The Impact of Social Support on Survival in Young Women with Breast Carcinoma**

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**OBJECTIVES:** Previous evidence has shown that women diagnosed with cancer who have significant social support are more likely to survive. However, little information is available about the way social support may change during illness and how that impacts survival. This study examines the relationship between social support and survival among women diagnosed with breast carcinoma at age 50 or younger, specifically assessing the effect of network size and changes in social contact post-diagnosis. **METHOD:** A population-based sample of 594 women diagnosed with breast cancer was followed for up to 12.5 years (median follow-up time = 10.3 years). Half of the women were

between ages 45–50 at diagnosis, over 80% were married, and 29% were racial/ethnic minorities. Cox regression analysis was used to estimate survival as a function of social support, disease severity, treatment, health status, and socio-demographic factors. Changes in social contact and the size of social support were both evaluated. **RESULTS:** Fifty-four-percent of the women had local and 44.1% had regional stage disease. About 52% had a mastectomy, 68% received chemotherapy, 55% had radiation, and 29% had hormone therapy. Regression results showed that disease stage, estrogen receptor status, and mastectomy were associated with greater risk of dying. Although network size was not related to survival, increased contact with friends/family post-diagnosis was associated with lower risk of death, with a ratio of 0.31 (95% CI: 0.16–0.54). **CONCLUSIONS:** Findings from this study have identified an important aspect of a woman's social network that impacts survival. As an increase in the network of relationships is correlated with greater social support, greater support may have increased the likelihood of the women's survival by enhancing their coping skills, providing additional emotional support, and expanding opportunities for obtaining information.

#### A-606

##### **Do You See Light? Hope, Social Support and Distress among Younger and Older Women Diagnosed with Advanced Breast Cancer**

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**OBJECTIVES:** Hope and social support were found to be important resources in coping with psychological distress among cancer patients. On the last decade research findings support the hypothesis that older women cope differently with cancer in comparison to younger women. The purpose of the current study was to assess the interrelations between hope and social support and their role as protective factors against depression, among groups of younger and older women diagnosed with advanced breast cancer. **METHOD:** Participants were 150 Israeli women diagnosed with advanced breast cancer. The participants were divided to two age groups: younger group (age 54 or less) and older group (age 55 or above). All participants completed a background (demographic and medical) questionnaire, psychological distress questionnaire: Brief Symptoms Inventory (BSI), Social support questionnaire: The Cancer Perceived Agent of Social Support (CPASS) and Hope questionnaire. **RESULTS:** Among the younger group social

support was found to be significantly related to both hope and depression (higher social support was related to lower levels of depression and higher levels of hope). The relation between hope and depression in this group was not significant. Among the older group social support was found to be significantly related to hope and hope was found to be directly related to the depression. **CONCLUSIONS:** Younger and older women tend to utilize different patterns of coping. Younger women rely directly on external resources (social support) in order to cope with psychological implications of cancer. On the other hand, older women utilize their external resources in order to benefit from their internal resources (hope). Clinical implications are discussed.

#### A-607

##### **Put Your Hand in Mine: Hope, Social Support and Anxiety among Younger and Older Spouses of Women Diagnosed with Advanced Breast Cancer**

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**OBJECTIVES:** Hope and social support were found to be important resources in coping with psychological distress among cancer patients and their primary caregivers. On the last decade research findings support the hypothesis that older men cope differently with cancer in comparison to younger men. The purpose of the current study was to assess inter-relations between hope and social support and their role as protective factors against anxiety, among groups of younger and older men caregivers. **METHOD:** Participants were 150 Israeli men spouses of women diagnosed with advanced breast cancer. The participants were divided to two age groups: younger group (age 54 or less) and older group (age 55 or above). All participants completed a background (demographic and medical) questionnaire, psychological distress questionnaire: Brief Symptoms Inventory (BSI), Social support questionnaire: The Cancer Perceived Agent of Social Support (CPASS) and Hope questionnaire. **RESULTS:** Among the younger caregivers social support was significantly related to hope and hope was significantly related to anxiety (higher levels of support were related to higher levels of hope and higher levels of hope were related to lower levels of anxiety). In this group we found no direct relation between social support and anxiety. Among the the older caregivers both hope and social support were found to be significantly directly related to anxiety. **CONCLUSIONS:** Younger and older men caregivers tend to utilize different patterns of coping. Older men rely indirectly on external resources (social support) in

order to benefit from their internal resources (hope) while coping with the psychological implications of their spouses' cancer. On the other hand, older men rely directly on both external resources (social support) and internal resources (hope) in order to cope. Clinical implications are discussed.

#### A-608

##### **Developmental Perspective of Feminine Caregiving - Strategies and Constraints**

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**OBJECTIVES:** What is the psycho-social impact of the confrontation with the imminent loss for the caregiving family member and in its relationship with the remaining relatives, how the socio-familial and economic changes that are necessary for a proper care for the patient are experienced, taking into account the distinct developmental stages (teenager/young adult, adult and aged)? **METHOD:** Asking the daughters to care for their mothers represents a change in the life-styles, a change in the goals and life projects and the change of the ongoing developmental tasks. These challenges of being a 'caregiver' shall be illustrated using three female patients, referenced to, and consulted at, the In-Patients Palliative Care Support Team, at the Portuguese Institute of Oncology (Cancer Hospital) and subsequently discharged home having their daughters as main caregivers. **RESULTS:** A brief study of these cases enables the reflection on subjects such as the level of school drop outs, the shifting in professional goals, the care for younger brothers, the mending of interpersonal/family relationships and the thoughts about prior losses and the cultural and social impositions of this feminine care giving. **CONCLUSIONS:** Several studies demonstrate that around 70% of the palliative patient caregivers are women/daughters. These individuals perform most of the non-medical tasks the patient requires when at home, even though they may rely on the support of third parties from NGOs/volunteers. There is a need for studies that confirm these constraints or reveal the existence of others so that some situations that could irreversibly alter the life of the female caregivers can be prevented.

#### A-609

##### **Need for Psychooncological Care as seen by Cancer Patients in Primary Care**

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**OBJECTIVES:** The majority of patients and caregivers agree, that psychosocial care should be offered to cancer patients and this is justified by the image of cancer, the threats patients perceive and the impacts of disease and therapy. But there are still limited data on the need for particular interventions in primary therapy. Accordingly, the study investigates which psychosocial services are important for patients and what role they feel these services should play. **METHOD:** 265 cancer patients were investigated during their primary care in two hospitals. The patients were on average 61 years old, 58% female, educational level of 54% primary, 22% secondary, and 17% high school. The cancer had been diagnosed on average 33 months ago. 36% were in primary care, 32% in after care and 24% in relapse treatment. Main diagnoses were breast cancer (30%), colon cancer (13%), lymphoma/leukaemia (12%) and lung cancer (6%). **RESULTS:** As the most important interventions, the patients rated 'psychological individual counselling' (50%), psychological pain therapy (49%), social counselling (45%) and relaxation training (37%). Patients expect from a psychooncological service, that it helps them 'to recognize what is important in life' (66%), 'to see the good things in life' (58%), to support coping and to help the patients to understand what cancer means for him or herself (53%). **CONCLUSIONS:** The fact that more than half of the patients stress the importance of psychological as well as social counselling indicates that having a team of psychotherapists and social workers would be the best solution. Based on the fact that 61% of the patients would like a close cooperation between the psychosocial service and medical doctors, an integrational care model or a liaison service would best meet the needs of cancer patients.

#### A-610

##### **An Examination of Attachment Styles, Distress, and Oscillation Among Parents Who Have Lost a Child to Cancer. Description and Findings of the Study**

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**OBJECTIVES:** This study of bereaved parents whose child died of cancer, investigated how retrospective insecure attachment and social support impact the individual and the couple in dimensions of marital satisfaction, grief, and psychological distress. The impact of levels of discrepancy in retrospective attachment styles between spouses, on marital satisfaction, grief, psychological distress, and social support were examined. The study also explored the impact of insecure attachment on grief oscillation (Dual

Processing Model of Grief) (DPM). **METHOD:** The study was a cross-sectional correlational survey design. The sample was bereaved couples in the U.S. and Canada, who were living together at the time of diagnosis of the deceased child. The seven standardized instruments used were: Retrospective Attachment Questionnaire, Brief Symptom Inventory, Dyadic Adjustment Scale, Hogan Grief Reaction Checklist, Inventory of Daily Widowed Life, and Social Support Index. Multiple regression analysis using SPSS was utilized to test the hypotheses. **RESULTS:** Eighty-six individual and thirty-two couple surveys were used in the multivariate analysis of three hypotheses. Retrospective attachment was a stronger predictor of grief and of psychological distress than gender and social support. The reverse was true for marital satisfaction. Social support influenced psychological distress and marital satisfaction and some aspects of grief. Time since death played a moderating role on the impact of discrepancy of attachment style in grief. Retrospective insecure attachment influenced grief oscillation. **CONCLUSIONS:** Retrospective insecure attachment, social support, gender, and time since death influence various aspects of the parental grieving experience. Discrepancy in attachment styles in couples did not show the results expected. This study supports aspects of the DPM, in particular the claim that attachment styles have an impact on individual grief and to some extent on couples grieving outcomes. Implications for theory development, psychosocial interventions, and the need for future research will be discussed.

#### A-612

##### **Opening the Psychological Black Box in Genetic-Counselling: The Counselees' Perception Explains the Psychological Impact of DNA-testing, Pathogenic-Mutations the Medical Impact**

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**OBJECTIVES:** We tested the hypothesis that the Outcomes of DNA-testing (O) are better predicted and/or mediated by the counselees' Perception (P)

than by the actually communicated genetic-Information (I). Four perception-variables were included (P): the counselees' recollections and interpretations of both the cancer-risks and the likelihood that the cancer in their family is heritable. **METHOD:** Women tested for BRCA1/2 5 years before ( $sd=2.0$ ), participated in a retrospective questionnaire study. Communicated Information included (I): cancer-risks and BRCA1/2-test result, i.e. unclassified-variant testresults ( $n=76$ ), uninformative ( $n=76$ ) or pathogenic-mutations ( $n=51$ ). The 25 outcome-variables (O) included life changes, medical decision-making, BRCA-self-concept, current psychological well-being and quality-of-life. Bootstrapping mediation analyses determined whether relationships were direct (I->O or P->O) or indirect via the mediation of perception (I->P->O). **RESULTS:** Only the communication of pathogenic mutations or uninformatives directly predicted medical-outcomes (I->O), viz. performed and intended surgery. All other outcomes were predicted by the counselees' recollection and interpretation of their own cancer-risks and heredity-likelihood (P->O), or this perception mediated all effects (I->P->O). The counselees' perception was significantly different from actually communicated cancer-risks (I->P). The misperception of unclassified-variants predicted both psychological outcomes and radical medical decisions. **CONCLUSIONS:** Genetic-counsellors need to explicitly address the counsellee's interpretations and intended medical decisions. In case of rigid misinterpretations additional psychological counseling might be offered. Communication of unclassified-variants needs close attention given the pitfall of ambiguity.

#### A-613

##### **A Whisper-Game Perspective on the Family Communication of DNA-test Results: A Retrospective Study on the Communication Process of BRCA1/2-test Results Between Genetic-Counsellor, Proband and Relatives**

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**OBJECTIVES:** We analyzed how DNA-test result information was communicated and perceived within families. **METHOD:** We conducted a retrospective descriptive study in 13 probands with an unclassified variant, 7 with a pathogenic mutation,

5 with an uninformative result, and in respectively 44, 14, and 12 of their relatives. We examined differences and correlations between: (a) information actually communicated by genetic-counsellors, (b) probands' perception, (c) relatives' perception. The perception consisted of recollections and interpretations of both cancer-risks and heredity-likelihood. **RESULTS:** Differences and low correlations suggested few similarities between the actually communicated information, probands' and relatives' perception. Probands recalled the information differently compared to what was actually communicated ( $R=0.40$ ), and reinterpreted this differently ( $R=0.30$ ). The relatives' perception correlated best with the proband's interpretation ( $R=0.08$ ), but also differed significantly from this. Relatives reinterpreted this information differently ( $R=0.25$ ), and this re-interpretation only slightly correlated with the original message from the genetic-counsellor ( $R=0.15$ ). Low correlations between proband's and relatives' perceptions were explained by the proband's way of communicating. **CONCLUSIONS:** Like in a children's whisper-game, many errors occur in the transmission of DNA-test result information in families. More attention is required for how probands disseminate information to relatives. Genetic-counsellors may directly communicate to relatives, e.g. via letters.

#### A-614

##### **Post-Traumatic Stress in Patients with Acute Leukemia**

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**OBJECTIVES:** Acute leukemia is a potentially fatal condition associated with considerable morbidity and mortality. The disease course is marked by discrete, life-threatening events (diagnosis, relapse and refractory disease), which may evoke symptoms of post-traumatic stress (PTS). However, PTS has not been evaluated systematically in these patients. This study was undertaken to evaluate PTS in acute leukemia patients to determine the impact of physical distress, psychosocial factors and communication with the medical team on this outcome. **METHOD:** Patients with new onset or relapsed acute myeloid, lymphocytic and promyelocytic leukemia were recruited from hematology clinics and inpatient units at a cancer centre. Using multivariate regression analysis we evaluated demographic factors, past psychiatric history, disease/treatment variables (leukemia type,

new onset/relapse, active treatment/supportive care, duration of illness), and communication with the medical team as predictors of PTS. Measures included: Stanford Acute Stress Reaction Questionnaire (SASRQ), Memorial Symptom Assessment Scale and CARES Medical Interaction Subscale. RESULTS: Subjects were 118 adults, mean age 51.4+15.1 years, 61% male, 82% new onset leukemia, and 97.5% in active treatment. At baseline, subjects reported a mean of 8.2+4.1 physical symptoms, including lack of energy (78%) and pain (44%). Mean SASRQ was 26.7+20.3, and 9.3% met criteria for acute stress disorder. In regression analyses, PTS was predicted by higher physical distress ( $p < 0.0001$ ), past psychiatric history ( $p < 0.01$ ), and poorer communication with the medical team ( $p < 0.002$ ) (adj.  $R^2 = 0.29$ ). CONCLUSIONS: PTS has not previously been evaluated systematically in patients with acute leukemia. Findings suggest that a significant minority of these patients suffer from PTS, and that it is associated with higher physical distress, past psychiatric history, and poorer communication with medical caregivers. Future longitudinal findings will allow testing of a causal model for the emergence and course of PTS and help to identify timing and targets for proactive palliative care intervention in this population.

#### A-618

##### Comparison of Physical and Psychological Distress in Patients with Acute Leukemia and Advanced Solid Tumours

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OBJECTIVES: Acute leukemia (AL) is a potentially fatal condition associated with considerable morbidity and mortality. However, the palliative care needs of AL patients are not well established. The present study was undertaken to evaluate illness-related physical distress and its relation to psychological distress in patients with AL (acute myelogenous, lymphocytic or promyelocytic leukemia). Findings are compared to an earlier study in which similar factors were examined in patients with advanced solid tumour (AST) cancers. METHOD: In a longitudinal study of physical and psychological distress, 118 adults with AL have been recruited from outpatient clinics/inpatient units at a cancer centre. In an earlier study, 751 adults with AST were recruited from outpatient clinics at the same centre. Measures

included: Beck Depression Inventory-II (BDI-II), Beck Hopelessness Scale (BHS), and Memorial Symptom Assessment Scale. Symptom profiles in these two samples were compared controlling for age and gender. RESULTS: Mean duration of illness was 0.1 vs. 2.4 years (AL vs. AST); 97.5% vs. 52% were in active treatment. Physical symptoms included lack of energy (78% vs. 74%,  $p = 0.38$ ), nausea (30% vs. 42%,  $p = 0.06$ ), pain (53% vs. 44%,  $p < 0.005$ ) and lack of appetite (55% vs. 29%,  $p < 0.0001$ ). Clinically-significant symptoms of depression (BDI-II > 15) and hopelessness (BHS > 8) were less common among leukemia patients (19.8% vs. 26.2%,  $p < 0.01$ , and 9.6% vs. 21.5%,  $p < 0.0001$ , respectively). CONCLUSIONS: Results suggest that AL patients report less psychological distress than those with AST, despite a similar prevalence of physical distress. The shorter duration of illness and emphasis on curative treatment in the hematology setting may contribute to better psychological well-being in these patients, although longitudinal research is needed to determine whether such outcomes are sustained.

#### A-621

##### Epidemiology of Insomnia Comorbid with Cancer: An 18-Month Longitudinal Study

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OBJECTIVES: The goal of this large scale epidemiological study was to assess the prevalence and incidence of insomnia comorbid with cancer over an 18-month period. METHOD: All patients scheduled to undergo surgery after a first diagnosis of non-metastatic cancer were solicited at their pre-operative visit. Among the 3196 patients approached, 1681 were found eligible and 962 (57%) accepted to participate. The participants completed a semi-structured interview for insomnia at baseline (T1), 2 (T2), 6 (T3), 10 (T4), 14 (T5) and 18 months (T6). RESULTS: The prevalence of insomnia symptoms decreased steadily and significantly over time (T1: 60%; T2: 48%; 46%; T3: 46%; T4: 41%; T5: 38%; T6: 37%;  $p < 0.01$ ). The decrease was significant between T1 and T2 and between T3 and T4 ( $ps < 0.01$ ). Rates were the highest in breast (42–69%) and the lowest in prostate (25–38%) cancer patients. The incidence of insomnia was 20% at T2, 22% at T3, 17% at T4, 17% at T5, and 14% at T6. CONCLUSIONS: Insomnia is highly prevalent in cancer patients, particularly at the time of cancer surgery and then decreases progressively over time. Despite this overall pattern, insomnia symptoms develop in a significant proportion of patients

during the cancer care trajectory, thus suggesting distinct patterns of evolution across patients.

#### A-622

##### **Exercise Compliance And Intensity (MET-hours/week) Related To Stage Of Disease And Fatigue (BFI) In Young Adults With Cancer**

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**OBJECTIVES:** Young adult (YA) patients with cancer undergo aggressive disease and treatment and have difficulty maintaining function and quality of life. Exercise has been shown to decrease isolation, provide a sense of empowerment, improve quality of life and increase survival in large populations of cancer patients. The primary objective of this study is to identify the extent to which stage of disease and fatigue relate to exercise compliance in the YA population of cancer patients. **METHOD:** A convenience sample of 97 consecutive YA patients (mean age = 33.7 years) with breast (15.5%), central nervous system (20.6%), gastrointestinal (30.9%), sarcoma (13.4%), testicular (10.3%) and other (9.3%) miscellaneous tumors were screened for exercise eligibility at a hospital-based oncology clinic. Active lifestyle coaching and individualized exercise programs at a community-based wellness centre were offered. Activity levels (MET-hours/week) and Brief Fatigue Inventory (BFI) scores were recorded at baseline and 6-month follow-up. *T*-tests were used for analysis. **RESULTS:** 42.3% of patients had recurrent or advanced disease. Compliance with exercise prescription was 70%. Exercisers had significantly higher baseline activity ( $p = 0.0002$ ). No differences in exercise compliance, MET-hours/week and BFI scores related to stage of disease were recorded. Exercisers significantly increased activity levels to 27.71 MET-hours/week ( $p = 0.0004$ ) Non-exercisers reduced activity levels to 0.71 MET-hours/week ( $p = 0.05$ ). BFI severity and impact scores did not significantly change, but moderately correlated with activity levels ( $r = -0.3$  and  $-0.26$ , respectively). **CONCLUSIONS:** This study demonstrates that YA patients with cancer are highly motivated to exercise regardless of disease location or stage and can safely do so with appropriate guidance. They benefit from fatigue management, decreased isolation, and the sense of empowerment shown to be related to exercise in a community-based setting. Non-exercisers decrease their activities to negligible levels and are at risk for greater disability and social isolation.

#### A-623

##### **Development of a Psychosocial Risk Screening Tool for Genetic Testing**

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**OBJECTIVES:** To develop a reliable and valid genetic-testing psychosocial risk screening tool (GPRS) to help health care providers determine which of their patients undergoing genetic testing for adult-onset hereditary disease are at increased psychological risk. **METHOD:** The development of the GPRS included two phases. Phase I: Item Generation and Refinement, and Phase II: Initial Validation. In Phase I the candidate scale was generated from a literature review and expert feedback. It was then further refined among individuals with a history of cancer or Huntington disease who were awaiting genetic test results. In Phase II the instrument was evaluated using a separate sample of individuals from 6 cancer centres across Canada. **RESULTS:** Phase I analysis of 141 participants indicated that the 25 item GPRS has a high internal consistency (Cronbach's = 0.8) with four factors: Current Mood, Perceived Impact, Past Trauma and Worry About Children. Phase II analysis focused on the ability of the instrument to identify individuals at risk for anxiety and depression. Psychological assessment results from 586 participants (>90% of the sample) who would have received genetic test results by May 2010 will be presented. **CONCLUSIONS:** Reliability analysis showed that the GPRS demonstrated good internal consistency. When Phase II data from the full sample becomes available in fall, we will assess GPRS for its sensitivity, specificity, and predictive value in identifying psychiatric distress related to genetic testing. If shown to be effective, the GPRS will be implemented clinically and examined for its external validity to identify psychosocial risk early on, to facilitate timely intervention and to increase provider and patient satisfaction.

## A-625

**Development and Validation of an Instrument to Measure the Impact of Genetic Testing on Self-Concept in Hereditary Non-Polyposis Colorectal Cancer (HNPCC)**

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**OBJECTIVES:** The purpose of the study was to develop and validate a scale for measuring the impact of receiving a positive genetic test result for HNPCC on an individual's self-concept. **METHOD:** The study was conducted in two phases: Phase 1) Supplemental item generation and refinement, and Phase 2) Scale selection and initial validation. Canadian adult HNPCC carriers with or without a history of colon cancer were recruited to the study. During Phase 1, specific colorectal self-concept items were generated with patient interviews and with genetic health professionals. Phase II invited 160 HNPCC carriers and tested scale reliability and validity against a set of validating measures. **RESULTS:** Phase I generated a specific colorectal self-concept scale with 24 items. In Phase 2, 115 (72%) carriers completed the proposed candidate scale and a battery of validating measures. The final self-concept scale consists of 20 items with two dimensions: stigma/vulnerability and gastrointestinal anxiety. The scale demonstrated good reliability (Cronbach's  $\alpha = 0.93$ ) and correlated moderately with validating measures supporting satisfactory convergent and criterion validity. The scale's performance was stable across various participant characteristics. **CONCLUSIONS:** A new scale for measuring self-concept among adults with HNPCC mutations has been developed and is available for further testing. The instrument has potential use as a clinical screening tool and as a research measure, contributing to the empirical and theoretical literature.

## A-627

**Does Every Cloud Have A Silver Lining? Finding Benefit After A Diagnosis Of Cancer Of The Head And Neck**

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**OBJECTIVES:** Some individuals are able to gain psychological benefits from illness and adversity, such as a greater sense of purpose and closer relationships. This is termed 'benefit finding' (BF). The main aim of this study was to explore the extent to which BF is reported in head and neck cancer (HNC) patients. Secondary aims were to establish the relationships between BF, other patient reported outcomes and predictive factors such as coping strategy and levels of optimism. **METHOD:** This longitudinal (repeat measures design) study was conducted in a sample of 103 newly diagnosed patients with HNC. Self-completion questionnaires were used to assess BF (Benefit Finding Scale) pre-treatment and 6 months after treatment, and pre-treatment coping (Brief COPE), optimism (LOT-R), quality of life (SF-12v2, EORTC QLQ-C30 Global QoL/health score), anxiety and depression (HADS). Sixty-eight patients (66%) completed the post-treatment follow-up measure. Correlation coefficients, regression models, principal component analyses and cluster analyses were conducted. **RESULTS:** Moderate to high levels of BF were reported. Anxiety, depression and QoL were not related to BF. Regression models of BF Total Score and three new factor analysed BF scales indicated that use of emotional support coping and active coping strategies were predictive of finding more positive consequences. A protective effect of optimism and living with a partner were also found. The amount of variance in BF explained by these pre-treatment factors was 32–41%. **CONCLUSIONS:** These findings demonstrate that moderate to high levels of benefit finding were reported after treatment, and that both dispositional and potentially modifiable factors, in particular optimism and coping strategies, were associated with the identification of positive consequences. Components of BF, either directly or via coping strategies, could be targeted for intervention before and after treatment in order to maximise longer-term patient related outcomes and adaptation.

## A-628

**The Role of Nurse Navigation in Supporting Patients Through the Diagnostic Phase of Cancer Care**

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**OBJECTIVES:** The process of diagnosing cancer often involves tests, exams, appointments and

lengthy waits. Waiting for a diagnosis and for treatment to start can be very distressing for patients. The objective of this work was to explore the role of patient navigation in improving the patient's experience during the diagnostic process. Of specific interest was the impact of having a nurse in the role to identify and address both physical and psychosocial needs of the patient. **METHOD:** A literature review was carried out to summarize the information available on models of patient navigation, preparation for the role and evidence for its effectiveness on the patient's experience in cancer care. Interviews and focus groups were conducted with navigators, other clinicians and healthcare managers to gain further insight into patient navigation and the role of nurses in providing patients with psychosocial and other support, with a specific focus on the diagnostic phase of care. **RESULTS:** The literature review and consultation with 17 individual stakeholders revealed that navigation during the diagnostic phase of care gives patients access to information and support, thereby reducing their distress around the diagnostic process. While navigation activities may be provided by laypersons, clerical staff or other clinicians, nurses add value to navigation through their ability to assess psychosocial and physical symptoms, manage complexity, provide supportive care and integrate with other healthcare professionals. **CONCLUSIONS:** The intensity of care required during navigation depends on individual patient needs. For those patients with mild psychosocial distress, informational navigation may be sufficient. Patients at higher risk or with more severe symptoms may require more intensive support and/or clinical intervention by a nurse, perhaps with advanced practice skills. Identifying those individuals who require more clinical intervention is essential so that symptoms can be addressed and the diagnostic experience optimized.

#### A-630

##### **The Impact of Race on Reasons for Ineligibility and Refusal to Cancer Clinical Trials**

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**OBJECTIVES:** Cancer clinical trials (CTs) are key to new drug development, yet less than 5% of all adult cancer patients enter Phase I - III CTs while minority enrollment is much lower. Low accrual is the biggest barrier to speeding progress to new treatments. Differences between African American (AA) and Caucasian Americans' trial ineligibility and reasons for trial refusal are under-researched. We aimed to compare these to inform future

interventions to aid accrual. **METHOD:** The Clinical Trials Eligibility Database (CTED), a novel system for evaluating trial eligibility and tracking patient status, was used to identify trial eligible patients. Reasons for ineligibility and refusal were recorded by the research staff at the time of eligibility assessment using a pull down menu. The selections for ineligibility and refusal reasons were derived from the literature and the experience of the research staff. **RESULTS:** Of 2,431 patients evaluated over three-years, 38% were AA. 49% of AAs were ineligible compared with 41% of Caucasians. AAs tended to refuse more often than Caucasians. ( $F = 1.277$ ;  $p = 0.07$ ) Rates of refusal reasons differed significantly. ( $p = 0.0025$ ) The rate of AA's refusals due to 'trial/research concerns' and 'issues of decision making' was double that of Caucasians. Caucasians refusal due to the 'extra burden' and 'treatment preference' was double that of AA's. **CONCLUSIONS:** Real time longitudinal collection of information on ineligibility and refusal comparing AAs and Caucasians revealed that traditionally cited reasons for refusal such as 'fear of research' were not key factors. Rather, more practical reasons emerged as of greater importance. This offers an opportunity to target these different barriers to enhance CT enrollment.

#### A-634

##### **'New Ways' Project: Changing the Way Professionals Interact with Oncologic Patients Experience in Hospital de Santo António, Centro Hospitalar do Porto, Portugal**

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**OBJECTIVES:** Gather relevant information to identify critical intervention areas in several services (Haematology, Day-Hospital, Oncology and Surgery), define and implement actions to put the Patient/Family in the centre of professionals' attention according to the 'Patient Centric' approach (Patient-Centered Care concept, which implies a 'respectful of and responsive to individual Patient preferences, needs, and values and ensures that Patient values guide all clinical decisions'. **METHOD:** Our approach consisted of three phases: 'Read the Reality' - Diagnosis: collect information through observation, interviews and surveys to Patients, Family and Health Care Professionals. 'Change the Reality' - Action Plan: development of an Action Plan by a multidisciplinary group of Professionals (workshops, new informational handouts, redesign of patient's

circuit in the Hospital to assure a better support). Implementation of the Action Plan by an internal group of professionals from the services involved. **RESULTS:** Better coordination/communication between services/professionals, several professionals participating actively in the project, Hospital Administration support, implementation of a Communication Skills Programme to all professionals involved in the project. **CONCLUSIONS:** The implementation of this Project motivated professionals from other services that were not involved since its beginning, and now want to implement it on their services. In a near future, it will improve patients', families' and professionals' empowerment, patients' quality of life, conducting to more efficient processes and lower costs per Patient.

#### A-639

##### **Assessing the Complementary Medicine (CAM) Information and Decision Support Needs of Patients and Health Professionals at a Canadian Cancer Agency**

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**OBJECTIVES:** The purpose of this study was to examine the information, education and decision support needs related to CAM of cancer patients and their health care professionals (HCPs) at a regional cancer agency in Canada. The overall aim of this was to inform the development of a structured CAM education and decision support interventions for implementation in conventional cancer care settings. **METHOD:** Survey methodology, including closed and open-ended items, was used to conduct a needs assessment of patients attending a regional cancer centre and oncology HCPs. Patients were asked about CAM use, related information needs, and the type of CAM education and decision support strategies that would be helpful. HCPs' current practice related to CAM and their CAM information and education needs were assessed. Descriptive statistics and qualitative content analysis was used to summarize the data. **RESULTS:** 408 patients and 91 HCPs participated. 50% of patients were using CAM and had information needs about the safety/efficacy of CAM. 28% had spoken to a HCP about CAM, but under 10% had their information needs met. Patients preferred booklets, websites and group sessions to learn about CAM. Over 60% of HCPs reported a patient disclosure about CAM in the

past month, but struggled to provide support and information. HCPs requested on-line CAM education. **CONCLUSIONS:** These findings provide new evidence of the significant gap that exists related to CAM education and decision support in Canadian conventional cancer care settings. Education is required for both cancer patients and HCPs and must be offered through a variety of easily accessible resources. In addition, HCPs require specialized training to support cancer patients in making informed CAM decisions. Specific education and decision support interventions currently under developed will be discussed.

#### A-641

##### **A Definitive Meta-analysis to Ascertain the Optimal Screening Method for Depression in Cancer and Palliative Care. Part I - Single Test Application**

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**OBJECTIVES:** We aimed to examine the validity of screening and case-finding tools used in the identification of depression following cancer, as defined by an ICD10 or DSMIV criterion standard for any depression diagnosis. In this part, we look at the merits of using each screening tool alone. **METHOD:** 52 analyses tested 16 tools to help clinicians identify depression in cancer settings. We excluded those without at least two independent validity attempts, leaving 8 tools for comparison. These were one and two verbal questions, the Distress Thermometer (DT), the Hospital Anxiety and Depression Scale (HADS) (in three formats), the Edinburgh Postnatal Depression Scale (EPDS) and the Beck Depression Inventory (BDI-II). We subdivided results into mixed oncology settings, palliative care and any cancer setting. **RESULTS:** From 33 analyses in mixed oncology settings ( $n = 6564$ ) the optimal tool was the BDI-II (sensitivity 91.2%, specificity 86.1%). Across 16 analyses ( $n = 2458$ ) conducted in palliative settings the optimal method in palliative care was the 2 verbal questions (sensitivity 94.9%, specificity 91.1%). At a prevalence of 19% out of 100 consecutive cancer patients, two questions would facilitate detection of 18 cases, missing only 1 case with 74 correctly reassured and 7 false positives. **CONCLUSIONS:** Using stringent standards only 8 methods have been well validated in cancer and palliative settings. However without a second-step examination (see part II) there are significant numbers of false positives. The main caution in interpretation of these findings is the reliance on DSMIV definitions of major depression.

## A-642

**Reduced Distress And Pain Among Oncology Outpatients Following The Introduction Of Routine Screening**

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**OBJECTIVES:** Untreated distress can lead to unnecessary suffering, more pain and fatigue, higher health service utilization, reduced cognitive function and disrupted immune and endocrine function. Up to 94% of distress goes unnoticed by health professionals and therefore remains untreated. Routine screening combined with appropriate management is a recommended standard of care. However, there have been only a handful of published reports of large scale (>1,000 patients) clinical implementation of screening. **METHOD:** Patients complete a brief, computerized assessment of their pain and distress prior to outpatient appointment. The screening algorithm utilizes the Distress Thermometer with a second questionnaire (SPHERE PSYCH) for patients over threshold. A Clinician Alert is generated if a problem is flagged. Cancer Care Coordinators access patients' results electronically and referral pathways have been agreed with allied health. Over 10,000 occasions of screening involving nearly 5,000 patients were undertaken from October 2007 to June 2009. **RESULTS:** The percentage of patients over threshold for distress on their first occasion of screening decreased from 29% to 10%. Similarly, the percentage of patients over threshold for pain decreased from 35% to 11%. Regression analysis demonstrated that the likelihood of being over threshold for distress was reduced following the introduction of routine screening after accounting for gender, clinic type, and current treatment ( $p < 0.001$ ). The effect was greater among women than men. **CONCLUSIONS:** The prevalence of pain or distress over threshold levels has decreased significantly since the introduction of routine screening. This decrease was maintained after controlling for several variables commonly associated with distress. While this is a service evaluation and not a randomised trial, the data are consistent with a positive effect of routine screening in contributing to decreased pain and distress among patients.

1 Institute of Medicine, 2008

## A-645

**Cancer, Aging, and Death: Older Adults Reflecting on Illness and Later Life**

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**OBJECTIVES:** Many cancer patients have concerns relating to life and death that they find are important to address and resolve (Bolmsjö, 2002; Jacobsen *et al.*, 2000; Lee, 2008; Moadel *et al.*, 1999). These 'existential' reflections may endure over an extended period of time and may also be exacerbated by aging, which can involve similar difficulties to cancer (e.g. pain, fatigue, disability). The purpose of this research is to explore how aging cancer patients experience existential concerns. **METHOD:** I used a qualitative research methodology known as interpretative phenomenological analysis (IPA) to analyze 20 interviews with aging cancer patients. IPA is a cyclical process, in which the researcher tries to make sense of the participants' interpretations (Smith & Osborn, 2003). My interpretation of the transcripts will be informed by theoretical perspectives in existential and interpretive phenomenology. **RESULTS:** For some individuals, reflecting on life and death evoked fear and anxiety while for others it was a source of consolation and meaning. People's understandings of the relation between life and death, their values of time and how it should be lived, and the projects they pursued for the remainder of their lives are just some examples of the salient existential concerns that took on different forms and held different meanings for the participants. **CONCLUSIONS:** The prevalence of existential concerns can be seen in the research interviews, as well as other, published biographical narratives of aging cancer patients (de Beauvoir, 1983; Stephaniuk, 2007); however, the meaning of existential concerns changes both between and within different narratives. I will utilize some anthropological research (Becker, 1997) and philosophical insights (Frankl, 1984; Gadamer, 1989) to help explain these differences. I will then relate these existentialist and phenomenological insights to possible intervention strategies.

## A-647

**Social Support and Psychosocial Outcomes among Cancer Patients: Ethnic and Sex Differences in a Multicultural Population**

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**OBJECTIVES:** This study examined the role of social support, particularly in regards of the use of confidants and role of people living with the patients as moderators of distress in the context of a multicultural cancer population. **METHOD:** The study was based on a sub-sample of patients in an ethnically stratified patient Screening for Distress RCT database. Cancer patients were interviewed and asked about whom they lived with (family partners, etc) and the people they confided in about their personal and health issues. **RESULTS:** A sample of 142 patients were interviewed. Patient ethnicity was significantly associated with the number of confidants used and their likelihood of living with adult children. Additionally, significant interactions were found between living with a spouse and lower depression scores, and between living with adult children and higher anxiety scores over time. **CONCLUSIONS:** Results indicated that there are certain ethnic and sex differences related to specific dimensions of social support which may have an influence on the patients' psychosocial outcomes. These differences, therefore, need to be taken into consideration for the delivery of more personalized cancer care.

#### A-648

##### **The Role of Age and Motherhood on Fear of Cancer Recurrence in Breast Cancer Survivors**

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**OBJECTIVES:** While fear of cancer recurrence (FCR) is a frequently cited unmet need of cancer survivors, few studies have examined psychological determinants of this phenomenon. The relation between age and FCR is well documented, but the effect being a mother has on FCR remains to be investigated. This study examined the (1) effect motherhood had on FCR (2) differences in FCR scores in women of different ages, and (3) interaction between age and motherhood on FCR. **METHOD:** A sample of 3239 women with breast cancer (mean time since diagnosis: 6.6 years) completed the Concerns About Recurrence Scale (CARS) as well as a series of demographic questions within a larger web-based study. Women were divided into four groups based on their current age: 34 and younger, 35 to 49, 50 to 64, and 65 and over. **RESULTS:** Univariate analyses were performed with motherhood and age category as the independent variables and the CARS overall fears sub-scale as the dependent variable. Results indicated that age category and having children were related to FCR ( $F = 78.88$ ,  $p < 0.01$ ;  $F = 10.61$ ,  $p < 0.01$ ). Follow-up tests indicated significant differences between each age category;

specifically women under 34 expressed the highest levels of FCR and women 65 and over reported the lowest levels of FCR. No significant interaction was found. **CONCLUSIONS:** Consistent with previous research, younger age was associated with more distress. Regardless of age, having children was also related to higher levels of FCR. Women under 34 with children reported the highest levels of FCR suggesting that they may be a more vulnerable subgroup of breast cancer survivors. Due to the large sample size in this study, statistically significant results may not be clinically significant; thus, clinical implications must be interpreted with caution.

#### A-650

##### **Person-centred Multimedia Information and Navigation Support: An Exploration of Perceptions among Individuals with Colorectal Cancer**

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**OBJECTIVES:** Information seeking is identified as a significant component in engaging and empowering individuals affected by cancer as they strive to manage illness demands. In response, the Oncology Interactive Navigator TM (OIN) was designed to provide comprehensive informational support to individuals with cancer. Embedded within a Canada-wide study, the present qualitative inquiry explored the role of the OIN, as a complement to usual care, in addressing the needs of individuals newly diagnosed with colorectal cancer. **METHOD:** A subset of participants ( $n = 10$ ), who were provided unrestricted access to the OIN for six weeks, were interviewed individually in person or by phone. The interviews lasted between 40 and 67 minutes. Digital recordings of the interviews were subsequently transcribed verbatim and content-analyzed as per the study's purpose. **RESULTS:** Rich descriptions were obtained on how the OIN filled important information gaps for participants. They indicated that the OIN served as a significant and reliable source of information that allowed them to feel more competent as participants in their care. For some, the OIN was used to pace their exposure to colorectal information according to their readiness and preferences. Furthermore, participants underscored the importance of introducing the OIN early (i.e. at the point of diagnosis). **CONCLUSIONS:** The OIN is a promising intervention that is reported to be beneficial in meeting the information needs of participants in the present study. The qualitative data obtained in the study will be useful in guiding the ongoing development and implementation of the OIN as an integrated and comprehensive approach to person-centred care.

## A-651

**How do I 'sell' Psycho-Oncology to the Administrators, Oncologists and Surgeons?**

Catherine Adams

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**OBJECTIVES:** This presentation will discuss strategies that may be effective in convincing sceptical cancer specialists and administrators of the benefits of a psycho-oncology service. It is relevant to all psycho-oncology clinicians, but will be particularly useful for people who are establishing new psycho-oncology positions. **METHOD:** The experience of the author over the past 9 years in establishing two psycho-oncology services will be presented. One of these is located in a large regional public cancer centre, and the other in a privately run Breast Centre for women with breast cancer, both of them are located in New South Wales, Australia. Both settings employ surgeons, medical, and radiation oncologists. Both settings use computerised screening for pain and distress. Strategies useful for both individuals and systems will be discussed. **RESULTS:** Results of strategies employed will be presented in both qualitative and quantitative terms. These include increasing numbers of referrals, provision of ongoing and increased funding, and requests for psycho-oncology support from various medical specialties. **CONCLUSIONS:** It is possible to convert even the most sceptical medical specialist or administrator into a supporter psychosocial care. It is important to speak to them in their own language. Often this will be an unfamiliar language such as medical cost offsets, or reduced bed days, or reductions in time spent in consultations. The secret of success can be seen to be developing the ability speak the right language to the right people, at the right time.

## A-655

**The Meaning of Surviving Cancer for Latino Adolescents and Emerging Young Adults**Barbara Jones<sup>1</sup>, Debbie Volker<sup>1</sup>, Yolanda Vinajeras<sup>2</sup>, Linda Butros<sup>2</sup>, Cynthia Fitchpatrick<sup>3</sup>, Kelly Rossetto<sup>4</sup>*University of Texas at Austin, Austin, Texas, United States<sup>1</sup>, University of New Mexico, Albuquerque, New Mexico, United States<sup>2</sup>, Dell Children's Medical Center, Austin, Texas, United States<sup>3</sup>, Boston College, Boston, Massachusetts, United States<sup>4</sup>*

**OBJECTIVES:** The purpose of this project was to discover the experiences and meaning of surviving cancer for this population. Childhood cancer survival rates have steadily increased in the U.S. over the past 20 years to record highs of 80% survival. However, Hispanic adolescents with

cancer have poorer outcomes and receive more inconsistent care than their non-Hispanic counterparts. Due to disparities in access to health care, Hispanic adolescents with cancer have been underserved /understudied. **METHOD:** This pilot study explored the meaning of cancer survivorship for 10 Hispanic/ Latino adolescent cancer survivors. Participants were interviewed using a phenomenological approach about the meaning of surviving cancer. Participants ranged in age between 14 and 22 years old, and years since diagnosis ranged between two and six years. Interviews were audio taped, transcribed, and entered into Atlas.ti, a qualitative software program. Data were analyzed for themes of experience. **RESULTS:** Data analysis produced seven themes that emerged as salient for these Latino adolescent cancer survivors as they discussed what this experience meant to them and how they coped with it: gratitude, humor/positive attitude, empathy for younger children with cancer, god/faith, cancer happens for a reason/cancer changed my life/, familial support, staff relationships. **CONCLUSIONS:** The results of this pilot study highlight the importance of family, community, spirituality and gratitude for Hispanic/Latino adolescent cancer survivors as they struggle to survive the treatment and make meaning out of their cancer experience. The results provide opportunities for program developers and health care professionals to begin to address this group of young people.

## A-656

**Cancer and Aging: 'Learning to live finally'**

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**OBJECTIVES:** Much quantitative psycho-medical literature presents aging as a decline, e.g. in physical and cognitive abilities, as well as vulnerability to psychological distress; these effects are said to be exacerbated by cancer (e.g. NIH CCS 2009, ACS 2009). Indeed, some cancer patients have called cancer and aging an 'unholy alliance' (Lerner 1990). This qualitative study explores the difficulties with which older cancer patients struggle as they try to make meaning of their experiences. **METHOD:** We conducted 20 comprehensive interviews with aging cancer patients. A range of texts on aging, time, and mortality formed an interdisciplinary conceptual framework, including Bengtson *et al.* (2009), Randal & McKim (2008), Charmaz (1997), Heidegger (1993), Liessman (2004), Tugendhat (2007), and Ricoeur (2009). Qualitative text analysis was grounded in Interpretive Description (Thorne 2008), informed by Interpretative Phenomenological Analysis (Smith *et al.*, 2009), Narrative Analysis (e.g. Charon 2006;

Bal 2007), and Metaphor analysis (Teucher 2000, 2007). RESULTS: One of the greatest surprises in the new data on offer here was how little aging played a role in the interviews. Except for one woman, all cancer patients (ages 63–87) spoke about being ‘young in heart and mind,’ that they have ‘lots of living to do, and that ‘aging means failure’ (80 yr. old f). While some viewed cancer, e.g. as a ‘wake-up call,’ others referred to their (double) cancer as ‘minor health problem.’ CONCLUSIONS: Indeed, gerontologists have recently redefined aging as a period of generativity and renewed self-esteem (e.g. Gross & Fagetti 2008; Randall & McKim 2008). But, in aging cancer patients, this renewal may have come with a lost sense of aging in the context of the lifespan and mortality. The focus of most of these patients’, having survived death by cancer, is on ‘learning to live finally’ (Derrida 2007), thus hoping to postpone death by aging.

#### A-660

##### **Cognitive Function and Fatigue in Colorectal Cancer Patients: Interim Analysis of a Longitudinal Prospective Study**

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**OBJECTIVES:** A subset of cancer patients has cognitive impairment and fatigue after chemotherapy (CTh). The incidence and cause of this impairment is unknown. Here we present interim data from our longitudinal prospective study evaluating neuropsychological (NP) performance (using classical NP tests and CANTAB) and fatigue, in patients with colorectal cancer (CRC) aged up to 75 years. Putative underlying mechanisms of cognitive impairment and fatigue are investigated. **METHOD:** Cognitive function was evaluated at baseline (pre-CTh), 6, 12, 24 months. Group A (Stage II/III) received CTh, group B (Stage I/II) received no CTh. All patients completed NP assessment, with impairment defined using global deficit scores, and concurrent questionnaires for fatigue, QOL, anxiety/depression, and perceived cognitive function (PCF). We evaluated cytokines, clotting factors, sex hormones, CEA and apolipoprotein genotyping as potential causal factors. Associations between results, demographic and disease-related factors were sought. **RESULTS:** Baseline 341 patients, follow-up 239, 194, 97 respectively. Median age 58;

60% male. Baseline NP impairment: classical tests 36%. No significant NP group differences were found. PCF impairment: baseline 10%; 6 months 16% vs 9%; 12 months 17% vs 7%. Fatigue was greatest in CTh pts. Fatigue, QOL, anxiety/depression & PCF were strongly associated with each other ( $r = 0.46-0.76$ ), but not with NP performance. Cognitive function was not associated with cytokines, sex hormones, clotting factors, CEA or apoE. **CONCLUSIONS:** Cognitive impairment was present in 36% of CRC patients prior to receiving adjuvant CTh; with a non-significant difference between CTh and non-CTh groups at 12-months (23% vs 18%). PCF impairment was substantially lower than in breast cancer survivors, but highest in those who received CTh. Fatigue was greatest at 6 months in patients receiving CTh (71% vs 36%). Cytokine levels were elevated compared to healthy volunteers, but levels were not associated with cognitive function.

#### A-661

##### **Mortality and Cause Specific Mortality among Danish Baptists and Seventh Day Adventists**

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**OBJECTIVES:** Denmark is a relatively secular nation in which religion plays only a minor role in public life. We found it of interest to investigate the relation between religious belief and mortality experience in this context. By their religious belief members of Seventh Day Adventists (SDA) and Baptists (BAP) do not consume tobacco, alcohol and live by a vegetarian lifestyle. In this study, we report the mortality experience among members of SDA and BAP in Denmark. **METHOD:** We obtained information on all members of the Danish SDA since 1920 and for member files in local Baptist churches and linked this with Causes of Death registry and Danish Central Civil Registration System to identify the members. We identified 86% of SDA records and 96% of BAP records resulting in a sample of 7.491 Adventists and 3.942 Baptists. Comparisons of all-cause and cause specific with the general Danish population standardized according to age and period were computed. **RESULTS:** The standardized mortality rates among Adventists and Baptists compared to the Danish general population will be presented at the conference. **CONCLUSIONS:** The conclusion will be presented at the conference.

## A-662

**Patient Satisfaction Instruments for Cancer Clinical Research or Practice: A Systematic Review**

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**OBJECTIVES:** Cancer patient satisfaction assessment is increasingly considered accounting for the need to assess evolving patterns of care organisation and delivery, or to test new cancer treatments and interventions. Satisfaction or dissatisfaction with care can also influence patient behaviour and consequently impact on care results. This presentation will review patient satisfaction questionnaires specifically validated for the field of oncology, using key methodological criteria for assessing patient-reported outcome measures. **METHOD:** Questionnaires were identified from 2 previous literature reviews and a literature search undertaken on Medline with the search terms 'patient satisfaction' combined with 'outcome assessment (health care)' or 'outcome and process assessment (health care)' and 'neoplasms' (2006-April 2009), limited to adults aged more than 18 years old and of English language, excluding questionnaires addressing the cancer genetic testing and screening services; surveillance phase of cancer; patients' preferences; or one aspect of care only. **RESULTS:** Seventeen cancer patient satisfaction instruments were identified. Most of these were developed with the input of the target population, bearing on various cancer care contexts or treatments, demonstrating reasonable psychometric robustness although reproducibility or responsiveness were less often demonstrated. Among the 8 instruments available cross-culturally, little information were provided on the translation/adaptation results. Seven instruments were used in studies or psychometrically revised. **CONCLUSIONS:** Given the currently existing standardised cancer patient satisfaction instruments, rather than creating new tools it may be wise to build on these to allow for comparisons and interpretation of satisfaction scores across cultures/languages, cancer treatment or care programs. Satisfaction measures have to be relevant to the context and purpose of each particular situation. Therefore, measures could encompass core/generic items complemented by new ones designed for particular cancer treatment or care experience.

## A-663

**Consumers' Involvement in Optimizing Written Information in Clinical Cancer Trials - Experiences from Using Patient Advocate Focus Groups**

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**OBJECTIVES:** Interest in involving people affected by cancer in research is growing worldwide but, apart from in the USA, the UK, Canada and Australia, publications about this are scarce. Written patient information is important in clinical cancer trials but is often unnecessarily complex. To optimize this information, we wanted to investigate a method for collecting consumers' opinions on written information using focus group interviews with patient advocates, recruited through Swedish patient associations. **METHOD:** We invited patient associations to recruit informants with experience of breast or colorectal cancer within the last three years to participate in focus groups. The groups were to examine seven written patient information texts for clinical trials with a palliative and adjuvant intent. The informants received the texts a few days prior to the interviews, as this is the time given to participants in the clinical setting to decide whether they wish to participate. **RESULTS:** The patient associations were able to provide us with suitable informants rapidly and efficiently, according to our specifications. Based on their own cancer experience, the informants were able to contribute valuable patient aspects. The information extracted from the focus group interviews covers a wide range of concrete viewpoints on written information that can be highly useful for guiding authors in writing patient information in the future. **CONCLUSIONS:** Using patient associations for recruiting informants to focus group interviews proved to be a rapid and efficient way to collect proposals for improvements of written patient information for clinical cancer trials, based on patients' experience. This can be a useful method for developing consumers' involvement in oncology research.

## A-664

**Caregivers, especially males and the young, often do not perceive they have emotional support from their spouses and family. Who does provide it?**

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**OBJECTIVES:** To describe the sources of emotional support available to the family caregiver including a specific examination of the nature of emotional support that the caregiver indicates is available from the patient diagnosed with cancer for whom they are providing care. **METHOD:** Subjects were caregivers of advanced cancer

patients identified consecutively when presenting in a Radiation Oncology clinic. Questionnaires were completed by 110 caregivers using an array of standardised instruments. Additionally, subjects completed a questionnaire to obtain socio-demographic data and patients' medical data was collected from their medical records. The caregivers were also asked if they had any current health conditions. **RESULTS:** While 92% of people could share their feelings only 60% of people identified their spouse or partner. These numbers were higher when the spouse was the patient. The family was an important resource for 80% but significantly less so for males (62%,  $p = 0.032$ ). Friends were important for two thirds, the doctor for one third of males and females and older people but significantly less so for the young (6.3%  $p = 0.049$ ). Presentation will expand. **CONCLUSIONS:** Many couples have difficulty providing emotional support to each other. Many men and younger people do not use the family emotional resources. Doctors are an important emotional resource not only for patients but also their caregivers. Young caregivers however continue to be invisible in the health sector. Continuing review of psychosocial assessment approaches is required to identify the vulnerable together with consideration of just what interventions may really help.

#### A-667

##### **Anxiety and associated Factors in Women at High Risk of Breast Cancer due to a Familial or Genetic Predisposition initiating Intensive Surveillance**

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**OBJECTIVES:** Intensive surveillance in women at high risk of breast cancer due to a familial or genetic predisposition is currently investigated in a French magnetic resonance imaging (MRI) screening prospective multi-centre study in which annual standard screening with mammography is compared to mammography combined with MRI, provided to women depending on their level of breast cancer risk. This study assesses psychological distress and associated factors in these women initiating intensive surveillance. **METHOD:** 1561 women were invited to complete generic (STAI State Anxiety Inventory), cancer specific psychological distress (IES Impact of Event Scale) and risk perception questionnaires within one week before the first screening. Socio-demographic (age, education level, professional, marital status) and clinical information (personal or family breast cancer history plus: for the 'MRI' group, possible

BRCA1/2 genetic result, previous breast or any MRI, prophylactic oophorectomy or hormone treatment; for the 'Mammography' group, borderline lesions history) were collected. **RESULTS:** Response rates were high (>91%). Mean ages (47.6 for 'MRI'/53.1 for 'Mammography') differed significantly so as education level with 'MRI' women of higher education level (48.8% versus 37.7%). High levels of state anxiety were observed (40.9 for 'MRI' and 41.6 for 'Mammography'). 'MRI' women perceived a higher breast cancer risk. In multivariate analyses, personal history of breast cancer, standard mammography screening modality, higher cancer specific distress and risk perception significantly increased state anxiety scores (31.3% variance explained). **CONCLUSIONS:** Psychological variables and personal cancer experience predominantly affect anxiety in women at high risk of breast cancer initiating intensive surveillance. However, anxiety was also related to the modality of breast cancer screening: although of lower breast cancer risk, women undergoing the standard mammography evidenced higher levels of anxiety compared to those about to receive a complementary MRI, suggesting more apprehension for breast cancer discovery in these women or reassurance in women selected for MRI.

#### A-671

##### **Soft Handling: Reiki Intervention for the Italian Inpatients With Breast Cancer**

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**OBJECTIVES:** Psychological distress associated with mastectomy includes anxiety due to the lost of a gender symbolic part of the body. The purpose of this study was to improve the well-being in breast cancer inpatients undergoing mastectomy by the complementary Reiki treatment, and to evaluate this technique in reducing the levels of anxiety. Reiki treatment was proposed like a psycho-body intervention to promote deep relaxation and to support the surgical inpatients. **METHOD:** A sample of 40 women from 26 to 70 years (MD = 55) with breast cancer was enrolled. The individual Reiki treatment was carried on in a complementary therapy setting of the Breast Unit. Every patient received three Reiki sessions lasted about 1.5 hour each one: two sessions before and the last one after surgery. The effects of these treatments were controlled by S.T.A.Y - Y1 administered before and after each treatment. **RESULTS:** The findings of this study showed an improvement of the perceived well-being in the sample of these breast cancer inpatients, with a significant decrease of the anxiety ( $p = 0, 000$ ) after

the soft handling Reiki treatments. The paired T test evidenced these changes in the average; the levels of anxiety between before and after the three Reiki treatments changed significantly: before  $M = 92\%$ ,  $M = 86\%$ ,  $M = 71\%$ ; after  $M = 60\%$ ,  $M = 54\%$ ,  $M = 27\%$ . **CONCLUSIONS:** At the end of this trial, many women expressed positive opinions about this supportive care and described the feelings of sweet heat through the Reiki contact. The emotional distress felt by the women undergoing mastectomy, could be lightened with Reiki giving the patients a sensation of reassuring, soft, psychological holding and caring. Reiki should be integrated with standard care because it improves well-being and accompanies the patient along such a traumatic journey in woman's life.

**A-676****Humanization of Care in a Decentralized Oncology Attendance Model**

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**OBJECTIVES:** The oncology attendance model focused on specialized facilities places obstacles to the care of the ones who live far from them, producing difficulties for access and suffering, mainly in palliative care. The purpose of the study was to analyze change perception of patients and health professionals related to treatment conditions and entailment observed in an experience of palliative chemotherapy decentralization to a health facility close to their homes. Communication with referral service was emphasized. **METHOD:** Health professionals (doctors, nurses, technicians) and 18 cancer patients of the decentralized facility were interviewed. The approached themes were: meaning of decentralization assistance; advantages and disadvantages perceived; care quality; patients perceptions of their health condition; relationship between decentralized facility and referral regional service. Recommended ethical procedures for qualitative research were observed. The material was submitted to the thematic analysis of contents to capture patients' and workers' opinions. **RESULTS:** Quality of technical attention delivered in the decentralized service was observed by the sensible use of same protocols from the referral service, their support and fluid communication. Doctor and nurses team considered the work rewarding for the humanization and recognition of patients and families. Patients related that closeness to workers helped the treatment to be more bearable and trustful and there was a perception of comfort in a painful phase of illness and life. **CONCLUSIONS:** The experience calls for the enlargement of access to the oncology comprehensive care and the strategic role

of the relationship among health professionals from different assistance levels. It valorizes the life quality of patients and the entailment enlargement with the health professionals. The humanized access to qualified health care needs the construction of a closer relationship between the health teams from specialized services and local system allowing support to patients, families and health professionals.

**A-680****Implementation of a Screening Programme for Cancer Related Distress: Part III - Does Screening Aid Clinicians' Quality of Care?**

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**OBJECTIVES:** Cancer clinicians are often unable to accurately identify distress or treat distress in routine care. We aimed to examine the effects of a simple screening programme based around the Emotion Thermometers (ET) on clinicians quality of care, specifically their willingness to offer appropriate treatment or referral. **METHOD:** We asked chemotherapy nurses of the Leicester Royal Infirmary to give us their clinical opinion before and after screening 352 patients for distress, anxiety/depression. Each were defined by a score of 4 or higher on the ET. We measured the influence of patient and clinician reported distress on the willingness of clinicians to offer reasonable quality psychosocial care across all nurse-patient interactions. **RESULTS:** No action was taken in 59.4%. Of those helped, a referral was made in 25.9% of cases. In those who screened high vs low, 34.9% vs 14.8% received reasonable care (Chi  $P < 0.001$ ). 55 patients expressly wanted help, and of these 54.5% were helped. In 140 whom clinicians considered unwell 50% were helped (vs 34% Chi  $P < 0.001$ ). In those with neither patient reported or clinician evaluated distress 10/90 (11.1%) were offered help. **CONCLUSIONS:** The introduction of screening programme for distress appears to increase the quality of care provided to patients who have self-reported distress, by clinicians who recognize this distress. However even with the programme about half of patients who want help may not receive it.

**A-681****Long-Term Follow-Up Of Childhood Cancer Survivors In Québec**

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**OBJECTIVES:** The progress of the treatments for childhood cancer has been such that the survival rate of children treated for cancer is now over 75%. These treatments are however associated long-term morbidity. Approximately 75% of childhood cancer survivors develop chronic medical complications, and 40% have at least one severe complication. Medical follow-up of these patients is therefore very important. **METHOD:** The long-term follow-up program of the Centre Hospitalier Universitaire Sainte-Justine, in Montréal, Québec, was started in 2005. 350 patients are now followed in the program. Based on our experience, we identified successful initiatives, problems and challenges. **RESULTS:** Several successful initiatives were developed, including one-day information sessions for survivors of children cancer who are now young adults or teenagers, a financial assistance program for long-term complications of childhood cancer, a hiking trip in the Adirondack Mountains for cancer survivors, diverse education activities and research studies. Problems encountered are related to both physicians and patients, and are especially important when transferring the care of a young adult childhood cancer survivor to an adult hospital. **CONCLUSIONS:** Future projects and challenges include the development of a multidisciplinary clinic for the follow-up of adult survivors of childhood cancer, and the creation of provincial and national databases. Because of the frequent and potentially serious complications of childhood cancer treatment, long-term medical follow-up of childhood cancer survivors is very important. In addition to medical care, a long-term follow-up program should include social initiatives and activities, to improve the quality of life of these patients.

#### A-682

##### **Maximizing Your Patient Education Skills (MPES): A Multi-site Evaluation of an Innovative Patient Education Skills Training Course for Oncology Health Care Professionals**

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**OBJECTIVES:** Many oncology HCPs lack the knowledge and skills needed to communicate effectively with and to identify and support the learning and informational needs of patients and families, and few programs offer sufficient training in this area. In response, an innovative and inter-professional course, Maximizing Your Patient Education Skills (MPES), was developed. The current study evaluated the acceptability and relevance of MPES and its impact on knowledge regarding PE and communication theory, self-assessed competencies, and skills. **METHOD:** Multi-site ( $n = 7$ ), one-group, pre-post intervention. All participants participated in the 4-hour MPES course. Baseline (Pre-course T0) and 3-month post course (T1) assessments included a PE knowledge questionnaire, the Self-Assessed PE Competency Questionnaire, and 2 clinical case vignettes. In order to inform the results and gather further feedback on the course, a focus group was also conducted with a sub-set of participants. **RESULTS:** 130 HCPs completed T0 measures and took the MPES course; 98 (75%) completed the T1 post-course assessment. Participants were highly satisfied with MPES and found it to be relevant. There were highly significant improvements ( $p < 0.001$ ) on all outcomes. Effect sizes for pre-post mean change scores on knowledge and self-assessed competencies  $\sim 1 SD$  and  $0.5-0.70 SD$  for skill change. Focus group data provided valuable information on how MPES affected practice and feedback on the course format. **CONCLUSIONS:** Given the evidence that well-planned education and support can contribute to a number of positive health outcomes and the evidence that HCPs may lack the skills to teach and support patients and their families effectively, these results suggest that MPES course may be of value to oncology professionals. Efforts to further develop this course include exploring alternative funding models and using different learning platforms.

#### A-687

##### **The Experiences of Patients Referred for Colorectal Symptoms on a Rapid Referral 'Two Week Rule' - An Examination of Quantitative and Qualitative Data from Two Hospitals**

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**OBJECTIVES:** The UK Department of Health introduced the two week rule for all suspected cancer referrals in 2000. Little work has explored patient experience and the psychological impact of

this in the context of colorectal referrals, despite the role that psychological issues may play in the development and exacerbation of symptoms. This research aims to improve understanding of the issues that surround investigation of colorectal symptoms by exploring the experience and psychological impact on patients. **METHOD:** HAD Scales were administered to over 800 patients attending four Colorectal Clinics (Outpatients - for a palpable mass or change in bowel habit, Rectal Bleeding, Colonoscopy and Barium Enema) under the two week rule. Semi-structured interviews were also conducted with a purposive sample of ten participants (two men and eight women) aged between 37 and 78 years old. Qualitative data were analysed using interpretative phenomenological analysis (IPA). **RESULTS:** 18.2% of patients scored in the clinical range for anxiety and 7.1% for depression. When divided by clinic type, those attending Rectal Bleeding and Outpatients appointments showed the highest anxiety levels (21.5 and 31.3% respectively). Four super-ordinate themes emerged from the interview data with a number of sub-themes which highlighted anxiety, uncertainty and the sense of vulnerability associated with the two week rule process, with meaningful information as a potential mediating factor. **CONCLUSIONS:** Health care services need to support and meet the information needs of people referred by the two week rule in order to reduce the psychological effects of this process. It is possible that information regarding the implications of the two week rule and certain symptoms could be improved. Understanding mediating factors enables services to provide the best care for patients and also improve adherence to the referral process and overall satisfaction with services provided.

#### A-689

##### **The MUHC Psychosocial Oncology Program: An Innovative Program Meeting the Needs of Oncology Patients and Family Members**

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**OBJECTIVES:** Innovative psychosocial oncology programs need to be created to meet the needs of patients and family members. The McGill University's Health Center (MUHC) Psychosocial Oncology program has been in operation since January 2008. While still in its infancy, this program has been driven by the specific needs of the patients and their family members. This talk will present the development of this innovative program, its' team composition and description of the population its serves. **METHOD:** The

Psychosocial Oncology program is available to all MUHC cancer patients and family members who are experiencing: 1) problems with mood (e.g. depressed and/or anxious) and/or 2) problems with coping. The program employs a standardized triage process once a referral is made. All patients and family members who are referred to the program are contacted within 48 hours of receiving the referral. Appropriate interventions are offered based on the needs of the referred person. **RESULTS:** The MUHC Psychosocial Oncology program receives over 500 referrals per year. First, the uniqueness of this program including its triage process will be highlighted. Second, data will be presented on the types of referrals received and provide a description of the psychosocial profiles of the patients and family members seen. Third, data on patients and family member's satisfaction with the program will be presented. Finally, interventions inherent in our program will be presented. **CONCLUSIONS:** Since its inception, the MUHC Psychosocial Oncology program has become an integral part of oncology care at the MUHC. Psychosocial interventions are geared to help patients and family members to help reduce distress and foster hope in meeting the challenges that living with cancer presents. The program has also helped to build greater interdisciplinary collaboration between the diverse disciplines to meet the needs of the patients and family members.

#### A-690

##### **Finding Meaning of the Loss: Bereaved Cancer Caregivers**

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**OBJECTIVES:** Substantial proportion of family caregivers has reported difficulty in finding meaning of the death of the relative with cancer. This study examined the demographic and psychological predictors of the extent to which cancer caregivers report diverse aspects of finding meaning out of their bereavement experience. **METHOD:** Bereaved caregivers ( $n = 180$ ) were identified from a larger longitudinal cancer caregiver study at the 8-year follow-up phase (time since the death = 3.8 years). Demographic predictors included age, gender, education, and spouse to the care recipient; Psychological predictors included the extent to which caregivers perceived caregiving stress (Pearlin's stress overload scale) and self-esteem as a caregiver (CRA caregiver esteem scale). Diverse aspects of finding meaning were measured using the Benefit Finding (BF) scale targeting for

bereaved populations. **RESULTS:** Multivariate hierarchical general linear modeling on the six aspects of BF revealed that the bereavement experience brought female caregivers to be more empathic, appreciating life, having positive self-view, and re-prioritizing values in life ( $ps < 0.04$ ); and spouses to be more accepting what happened and getting closer to family members ( $ps < 0.03$ ). Additional variance in become more empathic was predicted above and beyond the demographics by caregivers' competence in the caregiver role while they were providing care ( $p < 0.04$ ). **CONCLUSIONS:** Results suggest that male and non-spousal caregivers would have more difficulty in finding meaning from the bereavement experience. Psychosocial programs for caregivers, particularly targeting male and non-spousal caregivers, aimed to improve competence and mastery in cancer caregiving may help them find meaning after the death of their care recipient.

#### A-694

##### **Child Mental Health Prevention In The Context Of Adult Medicine: A Randomized Controlled Trial Of A Manualized Preventive Counseling Program For Children Of Parents With Cancer**

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**OBJECTIVES:** Evidence shows children of cancer patients are at a high risk for developing mental illnesses. A preventive counseling program for population was developed and positively evaluated by both parents and children (process/outcome). Efficacy of this manualized preventive counseling program for children and adolescents of cancer patients is to be tested in a randomized controlled trial with measurements before and after treatment as well as a 6 month follow-up to assess treatment success stability. **METHOD:** Design: Two-group randomized trial with intervention and wait-list-control comparison conditions and a 6-month-follow-up. Setting and participants: 140 families are recruited within a two years period. Outcome measures and analysis: a) in children: health related quality of life, emotional symptoms or strain; b) in parents: parental competence, depression, anxiety; c) in family: family functions (communication, emotions, affective responsiveness, general level of functioning, family coping, reduction of parentification); d) furthermore therapeutic attitudes, clinical practice, manual coherence. **RESULTS:** Preliminary results will be presented at the meeting. **CONCLUSIONS:** Preliminary conclusions will be presented at the meeting.

#### A-695

##### **The Relation of Meaning in Life, Quality of Life, Distress, Coping, and Social Support in a Sample of Austrian Colon Cancer Patients and Healthy Controls**

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**OBJECTIVES:** Colon cancer is the most common malign disease for both: men and women. This potentially life threatening illness implicates an extreme physical and emotional burden for the patients and their partners. This study tries to ascertain, if it is possible to perceive one's life as satisfying and meaningful, notwithstanding the existential anxiety being initiated through the diagnoses colon cancer. Do distress, coping styles, and the social support of partners influence patient's quality of life? **METHOD:** 112 colon cancer patients, stage I and II, without stoma, a Karnofsky Index of 80 to 100, being in remission were recruited 5 years after diagnosis. 51 healthy controls were matched to a subsample of patients, who lived in a partnership, in age, gender, and education. Distress, coping styles, social support, quality of life and subjective fulfilment in meaning of life were assessed with standardized instruments. Data were analysed with MANOVAs and linear regression analyses. **RESULTS:** Patients living in a partnership report more social support. Male patients gain more social support than female ones, who have a higher anxious preoccupation. Quality of live of the patients can be explained ( $R = 0.799$ ) by lower distress, avoidance, and better social support. Meaning in life is predicted ( $R = 0.776$ ) by lower obsessiveness and paranoia and better cognitive and body functions. Patients report a higher level of meaning in life than healthy controls. **CONCLUSIONS:** It is possible to perceive one's life as satisfying and meaningful, notwithstanding the existential anxiety being initiated through the diagnoses cancer. In addition, the results of this study punctuate the necessity for further research with colon cancer survivors to learn more about their needs years after the diagnoses. The results of this study emphasize the importance of a bio-psycho-social model in treatment and support of colon cancer patients including the social environment of the patients.

#### A-697

##### **Physical, Psychological and Social Difficulties Experienced by Cancer Patients: Correct and False Detection by their Primary Caregivers**

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**OBJECTIVES:** Family caregivers are increasingly involved in cancer care and are often an important source of information for clinicians as regards patients' difficulties. The aim of this study is to assess primary caregivers' correct and false detection of patients' physical, psychological and social difficulties and to investigate patients' and caregivers' sociodemographic and psychological variables associated with correct and false detection. **METHOD:** This is a multicentered, cross-sectional study. Consecutive patients and caregivers completed the Hospital Anxiety and Depression Scale, the Ways of Coping Checklist and the Cancer Rehabilitation Evaluation System (CARES). Caregivers reported their perception of patients' difficulties on an adapted CARES version. Correct detection rates are the percentage of difficulties experienced by patients and reported by caregivers. False detection rates are the percentage of difficulties not experienced by patients but reported by caregivers. **RESULTS:** Caregivers' correct detection rates were 67% for physical difficulties ( $SD = 29$ ), 69% for psychological difficulties ( $SD = 31$ ) and 40% for social difficulties ( $SD = 38$ ). False detection rates were 28% for physical difficulties ( $SD = 24$ ), 37% for psychological difficulties ( $SD = 31$ ) and 22% for social difficulties ( $SD = 27$ ). Significant correlations were found between all correct and false detection rates ( $r$  ranging from 0.347 to 0.548;  $p < 0.001$ ). Other variables collected are only weakly associated with these caregivers' levels of detection. **CONCLUSIONS:** Although caregivers perceived correctly two third of physical and psychological difficulties experienced by cancer patients, they minimized their social difficulties. Moreover, primary caregivers falsely detected physical, psychological and social difficulties. Clinicians should be aware that primary caregivers' correct detection of patients' difficulties also leads them to falsely detect difficulties not experienced by patients. Caregivers support should take these results into account.

### A-703

#### **Complementary Medicine Decision Support in the Conventional Cancer Care Setting: Application of the Supportive Care Framework**

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**OBJECTIVES:** A gap in care exists in many cancer settings where patients do not receive the necessary

support to make safe and informed decisions about complementary medicine (CAM). Little is known about how best to address this gap. This presentation will outline how the Supportive Care Framework (SCF) (Fitch, 1994) has informed the development of a research program addressing the CAM information, education and decision support needs of patients, embedded within a conventional cancer setting. **METHOD:** Using the SCF as a guiding framework and a variety of quantitative and qualitative methodologies, a multi-project CAM education and decision support research program was conceptualized and established within a provincial cancer agency. Application of the SCF led to the development of a continuum of patient interventions that addressed a range of information and decision support needs from basic to complex. These interventions are currently being tested within a living laboratory context. **RESULTS:** The SCF and findings suggest that most patients have basic CAM information needs that can be addressed through general CAM information resources. Those patients with more specific CAM information and decision support needs require tailored group education programs, decision aids, and workbooks. A structured one-on-one decision support program is appropriate for those few patients with complex CAM information and decision support needs. These interventions have shown positive effect on the quality of patients' CAM decisions. **CONCLUSIONS:** The SCF is an effective conceptual framework to conceptualize, develop, evaluate and provide CAM information and decision support interventions within conventional cancer care settings. This framework also provides an important tool for cancer care organizations to efficiently plan and allocate decision support services, in alignment with the range of CAM needs experienced by patients with cancer.

### A-705

#### **Caregivers and Peer Support**

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**OBJECTIVES:** This research was undertaken in order to better understand the needs and expectations of caregivers related to peer support. Through focus groups with caregivers from the general population, the study sought to better understand caregivers' expectations of peer support, what criteria should be considered when making a match with a peer volunteer, timing of the support and how to promote the program effectively. **METHOD:** In 2007 eighteen focus groups were held in six Canadian cities ( $N = 69$ ). Later that year 21 more focus groups were held

( $N = 106$ ). Participants were 18 and over and caring for someone diagnosed with cancer in the past five years. Recruitment ensured minimum numbers of male participants and a variety of cancer diagnoses, levels of caregiving and phases on the cancer continuum. Participants were compensated \$60 upon completion of the focus group. **RESULTS:** There was consistency across all focus groups regarding their need for peer support. Participants identified three main supportive care needs - emotional, bereavement and informational support. Caregivers want a 'good listener', someone who can empathize with their situation and is non-judgemental. They want someone who is going to be honest, yet offer hope when appropriate. The most common matching criteria identified were life situation, cancer diagnosis, relationship to patient and geography. **CONCLUSIONS:** There is a tremendous demand for caregiver peer support. On an unaided basis, participants consistently expressed a desire to speak with someone who had been through a similar experience. Participants expressed concern that there are programs available but they were not aware of them. They identified word of mouth referrals from people who have used the service or recommendations from health care professionals as the most effective ways to promote peer support programs.

#### A-707

##### **Program Impact of a Cancer Information and Peer Support Program**

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**OBJECTIVES:** Program evaluations were carried out for the information and peer support programs of a Canadian charitable organization during 2008. They were designed to identify client-perceived impacts of receiving service and measure client satisfaction. Findings demonstrate how these programs can augment help available within the traditional health care setting. They also help the organization continue improving the programs. **METHOD:** To evaluate the information service, a 10–15 minute structured telephone interview was conducted with eligible clients. Recruitment was done by the service and the interviewing was carried out by a third-party research group associated with a major Canadian university. All peer support clients whose service ended during the year were mailed a survey to respond to anonymously, measuring satisfaction and impact of the program using closed and open ended questions. **RESULTS:** Information Service:  $N = 1010$ . Most

(92.3%) said their contact with the service helped in at least one of a variety of ways including coping, anxiety or stress. Nearly all respondents took at least one positive action (96.4%) as a result of contact with the service. Peer Support:  $N = 762$ . Respondents reported an increase in their sense of hope (97.3%), decreased anxiety (94.9%), increased sense of efficacy to cope (95.7%) or increased feeling of being supported (96.2%). **CONCLUSIONS:** Information and peer support programs help clients understand living with cancer and help them feel more comfortable talking to health care providers and family. The programs increased hope, decreased anxiety and made clients feel better able to cope. This session will provide an understanding of the credibility and effectiveness of the supports available through this organization. It will also share how results are being used to continually improve these programs.

#### A-708

##### **An Investigation Of The Effect Of A Coping Strategies Intervention In People With Head And Neck Cancers**

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**OBJECTIVES:** The study aim was to investigate the effect of a psycho-educational intervention on people with head and neck (H&N) cancers. The test intervention is designed to foster coping strategies in people with cancer and comprises a package delivered by a trained therapist delivered over 3–4 sessions during a 3–4 week period. The outcomes of interest were coping strategies, symptoms of anxiety and depression and quality of life. This paper reports results concerning coping strategies. **METHOD:** A placebo-controlled, randomized study design was used. Subjects were patients with a confirmed first H&N cancer, recruited in Montréal hospitals, after their cancer ablative therapy, 6–12 months following diagnosis. To be included, subjects had to have a score of 8 on one or both of the anxiety and depression scales of the HADS. Outcomes were evaluated at 2 and 4 months following randomization. Coping strategies were evaluated using the Ways of Coping Checklist (WOCC). **RESULTS:** The original sample comprised 85 subjects, randomized approximately equally into test and placebo groups. Sample numbers at 2 and 4 month evaluation points were 57 and 46 respectively. WOCC scores at baseline were the same for test and placebo groups. At 2 months, the 'blamed self' strategy was used significantly less in the test group, and at 4 months, the 'wishful thinking' strategy was used significantly less by the test group.

**CONCLUSIONS:** This study shows the limited, short term benefits of a psycho-educational intervention in H&N cancer patients. Of the 5 coping strategies evaluated by the WOCC, two were impacted by the test intervention in the hypothesized manner.

#### A-712

##### **Addressing Cancer Patient Needs: Provision Of Care By Specific Health Providers**

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**OBJECTIVES:** Improved knowledge of the extent to which health providers meet the different needs of cancer patients can help define objectives of care for specific health providers (Rasmussen B.H. and Sandman P.O., 1998), and identify needs which might be better addressed by other initiatives (Mojtabai R. *et al.*, 2002). The aim of this study was to determine how cancer patients perceive the time spent with specific health providers in addressing their care and information needs. **METHOD:** A framework was developed to characterize care and information needs into four categories: direct physical care, psychosocial care, education, and navigation. Patients in active treatment for cancer were asked to report their use of health services during two telephone interviews. The amount of time spent addressing the four categories of care and information needs was determined for appointments with the following health providers: nurse, family physician, oncologist, and social worker. **RESULTS:** Eighty-five percent of participants were female and average age was 57. A total of 20 patients reported 203 patient-clinician encounters (137 nurses, 17 family physicians, 47 oncologists and 2 social workers). Face-to-face time with clinicians averaged 58.6, 18.1, 23.8 and 32.5 minutes, respectively. Patients report that all health providers address varying amounts of psychosocial care and education. Nurses and social workers, however, provide the majority of navigation services. **CONCLUSIONS:** Understanding the degree to which specific health providers address particular care and information needs can help target delivery of services to cancer patients. These results show that patients perceive specific health providers spend comparatively more or less time addressing needs within the four categories. Further research can help promote a continuity of care where the unique aims of specific health

providers combine to comprehensively address the needs of cancer patients.

#### A-714

##### **An Inter-professional Model of Care to Improve Surgical Outcomes in Thoracic Oncology**

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**OBJECTIVES:** Traditional pre-operative teaching methods in the pre-admission unit were resulting in patient anxiety, families being unprepared to care for their loved ones on discharge and staff dissatisfaction related to lack of communication. To address these issues, we developed a novel method of pre-operative teaching to engage patients and families in their own care and recovery from lung cancer surgery or metastatectomy. **METHOD:** Population: Lung cancer patients and patients with lung metastases who have a planned lung resection and their families/significant others. Patient age has ranged from sixteen years to octogenarians. A teaching program, based on feedback from patients/families received from 2007 to 2009, was developed to:

- address the psychoeducational needs of both patients and families
- assess the pre-operative preparation needs of the patient
- introduce what is expected in the recovery phase of care
- initiate discharge planning.

**RESULTS:** Patients and families are reporting a greater sense of preparation and active involvement in surgical and discharge planning. Inpatient staff verbalize patients arrive on unit prepared to participate in the work of the recovery phase of care and as a result, in some cases, patients are being discharged sooner. Important unexpected benefits have been engagement of families/significant others in helping patient to prepare for surgery and discharge planning. **CONCLUSIONS:** In preparing the outpatient teaching sessions, our focus was on the patient having access to appropriate information to facilitate surgical recovery. The newly developed session provides an inter-professional focus involving nursing, social work and physiotherapy to maximize patient comprehension and involvement. Assessment and intervention of discharge barriers at time of teaching has become an important added benefit from this session. In addition, communication between the inpatient and outpatient teams has evolved to problem prevent rather than crisis solve.

## A-719

**Searching For Hope In Brain, Lung, and Pancreatic Cancers: A Collaborative Qualitative Research Study**

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**OBJECTIVES:** Literature on hope and cancer indicates that serious questions remain about the role of hope in advanced cancer, however this research has primarily focused on end-of-life experience. Our exploratory study examines the experience of hope in long-term survivors of lung, brain, and pancreatic cancers - cancers of poor prognosis. We wish to better understand the meaning of hope, the role hope plays, and what contributes to hope or takes it away from these patients. **METHOD:** Semi-structured interviews of 30–60 minutes with five survivors of each of these three cancers were recorded, transcribed and coded thematically to determine how hope is conceptualized, what factors give or take away hope, and what role it plays through diagnosis, treatment, and survivorship. Participants completed an online version of the Herth Hope Index, a validated 12-item hope scale. **RESULTS:** Results confirmed a literature review finding: there is no one definition of hope, but also that hope does not always mean ‘cure.’ Our preliminary analysis identifies major themes across diagnosis groups and provides insight into the meaning, source, and role of hope in long-term survivors. Participants expressed an array of interpretations of and uses of hope, and indicated activities and communities that helped them build and maintain hope, while also identifying triggers that threatened hope. **CONCLUSIONS:** Many participants emphasized the importance of feeling hopeful and participating in hope-fostering activities. For most, hope is a vital part of their cancer experience, from early diagnosis to long-term survivorship. Health professionals should be aware of the role hope plays, especially in cancers of poor prognosis. They can promote hope by assessing some very basic needs and directing patients to resources and supportive and psychosocial services that help survivors understand and cope with their illnesses.

## A-721

**Understanding Racial/Ethnic Disparities in Quality of Life in Young Women with Breast Cancer**

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**OBJECTIVES:** Breast cancer diagnosis and treatment significantly impact women’s daily functioning. However, little information is available that describes health-related quality of life (QOL) in multi-racial population cohorts. This study examines differences in QOL outcomes among breast cancer patients by race/ethnicity, controlling for socio-demographics, disease and treatment characteristics, social support and intrusiveness of illness factors. **METHOD:** The population-based cohort included 391 women diagnosed with breast cancer at age 50 years or younger. All subjects were identified by Rapid Case Ascertainment and completed questionnaires at baseline, four- and 12-month follow-up. Change in QOL was measured using the eight subscales and two composite scales from the SF-36 Medical Outcomes Survey. Associations between minority status and change in each of the ten QOL scales over the 12-month period were estimated using linear regression models. **RESULTS:** Race/ethnicity significantly affected all QOL scales, except the mental health composite scale. Minority women saw a smaller improvement in the QOL domains of physical health composite, physical role functioning, emotional role functioning, emotional health, social functioning, bodily pain, and vitality, compared to their white counterparts. However, they saw a larger improvement in physical functioning and general health. Other predictors in QOL change included chemotherapy, radiation, greater intrusiveness of illness, and increased symptom severity. **CONCLUSIONS:** As probability of survival among women diagnosed with early stage breast cancer continues to rise, younger women with breast cancer will have to deal with psychological and physiological stresses from their illness for longer periods of time. Our findings identified important predictors for positive changes in QOL in minority women, enabling health care providers to develop strategies to address QOL concerns of these patients.

## A-722

**Treatment Decision Making among Older Individuals with Cancer: Exploration of the Concept and Relational Context**

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**OBJECTIVES:** Individuals with cancer face many decisional tasks throughout the illness trajectory. For older individuals, variations in health and functional status, physiologic aspects of aging, and tension between quality and quantity of life present unique challenges to cancer-related decision making. A better understanding of their decisional processes is needed to offer optimal support. This

presentation examines the concept of treatment decision making among older individuals with cancer in the existing literature, particularly attending to relational context. **METHOD:** Through computer-generated searches of scholarly works, relevant articles published between 1986 and December 2009 were identified. Articles considering patient decision making in general were identified and analyzed with consideration of the existing empirical papers examining treatment decision making from the perspective of elderly individuals with cancer. Analysis and clarification of the concept was done using the methods of pragmatic utility developed by Morse and colleagues. Significance of the relational environment was noted and explored. **RESULTS:** In-depth analysis suggests that among older individuals, cancer treatment decision making is an ongoing process, modified over time through personal and relational factors, integrating analytic and emotional components. Salient aspects of the relational environment include family, interaction with health care professionals and the broader socio-political system. The role of family is particularly important for elderly cancer patients where limitations related to cognition, functional status, and/or health literacy often implicate family directly in cancer-related decision making. **CONCLUSIONS:** Assumptions frequently associated with 'patient decision making' are not consistent with empirical literature considering older individuals with cancer. Decisions may not appear 'rational' in the way usually assumed by health professionals. Individuals' choices are shaped by, and shape, their relational environment. Conceptual clarification and consideration of relational context are central to developing a science that captures the meaning of cancer-related decision making for older individuals and their families, providing guidance for supportive interventions and targeted follow-up care.

#### A-730

##### **Immediate and Long Term Effects of an Inpatient Rehabilitation Programme on Emotional State and Body Image in Breast Cancer Patients as Compared to Appropriate Controls**

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**OBJECTIVES:** So far no studies have investigated rehabilitation effects in breast cancer patients by using controls matched for identical motivation for participating in a hospital rehabilitation programme. Furthermore, previous studies in rehabilitation have rarely addressed effects on the

deteriorated body image accompanying breast cancer surgery, chemotherapy and irradiation. Therefore the present study investigates rehabilitation effects on emotional states and body image comparing an inpatient sample with a postoperative control awaiting an inpatient rehabilitation programme. **METHOD:** 130 breast cancer patients were tested after admission to a rehabilitation clinic (t1), after 3 weeks of treatment (t2), and 4 weeks after discharge (t3) by questionnaires on body image and emotional states, and at t1 and t2 a body image computer test. Identical questionnaires were applied to 50 postoperative controls after completion of radiotherapy and 3 weeks later before admission to inpatient rehabilitation. Several demographic variables were additionally obtained in both samples. **RESULTS:** There was a clear improvement in positive emotionality and body image from t1 to t2 compared to controls indicating beneficial effects of rehabilitation. After discharge (t3) positive scores had decreased, but were still significantly higher than upon admission. Interestingly, the computer test revealed positive rehabilitation effects not only for dissatisfaction with, but also for perceptual distortion of the patients' own body. Measures of a negative body image were significantly correlated with negative affective states. **CONCLUSIONS:** The study demonstrates that an appropriate control group can help to obtain unbiased results of beneficial immediate and long term effects of inpatient rehabilitation treatment. Furthermore, self rated as well as objectively assessed measures of a negative body image can be improved which was shown to be independent of surgical techniques. However, ratings on body image are highly confounded by affective states which physicians have to consider when assessing physical complaints of patients.

#### A-731

##### **Family Nursing Rounds in Oncology Settings: Collaborating to Enhance Person-Centered Care**

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**OBJECTIVES:** Nurses often face challenging clinical situations as they strive to support patients and families in the context of their cancer experience. Integrating current evidence into this practice is not always straightforward. We describe the development of a forum for nurses to share clinical challenges with their peers for feedback and support, with the goal of enhancing evidence-based person-centered care throughout the trajectory of

care at a large university-affiliated cancer center. **METHOD:** Monthly lunchtime, hour-long rounds take place wherein a nurse presents a complex family case for discussion and feedback from peers. Case summary sheets focus discussion on family structure, patient's and family's greatest concern, and primary nursing care challenges. In- and out-patient nurses and students from across the trajectory of care attend. Facilitators and guests with academic expertise in family approaches encourage discussion and use of relevant evidence integrated with the McGill Model of Nursing. **RESULTS:** Each meeting involves 5–13 participants. Identified concerns include: cross-cultural care, multiple individuals with cancer within one family, effective responses to anxiety, anger or guilt, implementing family assessment, barriers to establishing therapeutic relationships, and identification of appropriate resources/referral for patients and families. Formal feedback from participants reaffirms the value of the rounds and led to modifications in format and location. The rounds are now open for videoconferencing with cancer care nurses practicing in remote areas. **CONCLUSIONS:** Family-focused rounds effectively provide peer guidance and support in comprehensively addressing the needs of individuals touched by cancer. They serve to target and tailor optimal psychosocial nursing interventions and enhance continuity of care across multiple specialties. Within this context of intra-profession support, interprofessional collaboration is encouraged and supported. Overall, family rounds provide nurses with the opportunity to share challenges, integrate evidence, and work together to optimize person-centered care for patients and their families.

#### A-733

##### **A Better Understanding Of Stress Factors Experienced By Nurses When Providing End-of-Life Care In The Intensive Care Unit (ICU)**

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**OBJECTIVES:** The objective of this study was to describe the stress factors experienced by nurses when providing end-of-life care in the Intensive Care Unit (ICU). This study is part of a larger research project which is aimed to validate a

conceptual framework to better understand job satisfaction and well-being of nurses, and to improve the context within which end-of-life care is provided. **METHOD:** A descriptive qualitative design was used for this study. A total of 42 ICU nurses working on different shifts (e.g. day, evening, night, rotation) from five clinical settings of three different cities in the province of Québec participated. Ten focus groups (duration:40–60 minutes) were completed using a semi-structured interview guide. Discussions were audiotaped, transcribed, and analyzed using the InVivo software. In order to increase fidelity and validity of data analysis, a double codification was also performed. **RESULTS:** Stress factors were clustered into three categories as previously found in a palliative care study: Organizational, professional and personal. However, some stressors were specific to the ICU. According to organizational stressors, e.g. lack of intimate area for family, and lack of accessibility to the palliative care team were highlighted. Regarding professional stressors, the lack of experience with end-of-life care was frequent. Finally, communication issues with families were major personal stressors for ICU nurses. **CONCLUSIONS:** Providing end-of-life care is a great challenge, and the nurses' experience may vary depending on the context within which they are practicing. The Intensive Care Unit appears to generate specific stressors related to the nurses' experience which should be considered in developing strategies to improve end-of-life care in this particular context.

#### A-737

##### **Burnout Syndrome in Medical Staff Working with Children in Cancer Hospital (still under analysis)**

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**OBJECTIVES:** The medical staff treating children with cancer is subjected to many stressors during treating these suffering children, in addition to the relapsing nature of cancer and the presence of terminal cases requiring palliative treatment as well as the frequent loses of patients may aggravate the burden over the treating staff which make more them vulnerable for developing burnout syndrome. The psychosocial department in children cancer hospital Egypt 57357 carried this study on the hospital's staff. **METHOD:** This study was conducted on a sample of the nurses working at the hospital. 55 nurses completed the Arabic version of the Maslach Burnout scale. The scale consists of 3 subscales: 1- Emotional exhaustion

(EE), 2- Depersonalization (D), 3- Personal accomplishment (PA). **RESULTS:** Results showed that 92% of nurses had significantly high score on the PA category and 45% had high scores of EE category, while only 21% of the sample had high scores on the D category. **CONCLUSIONS:** Nurses working with children suffering from cancer are manifesting symptoms of burnout syndrome specially on the depersonalization subscale. These nurses need to go therapeutic interventions in order to continue treating these children inspiring hope and psychological well being to these patients and their families.

#### A-739

##### **The Unique Psychosocial Needs of Recurrent Cancer Patients: A Qualitative Study**

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**OBJECTIVES:** Recurrence is a distinct phase in the cancer continuum, but psychological treatments offered to patients with recurrence have generally been those designed for patients with and initial diagnosis of advanced disease. Data are needed to identify the unique needs of recurrent cancer patients. We undertook a qualitative study to explore the ways in which psychological intervention should be tailored to the recurrence experience. **METHOD:** Women with recurrent breast or gynecologic cancer ( $N = 35$ ) participated in semi-structured interviews. Participants were diagnosed with breast ( $n = 17$ ), ovarian ( $n = 10$ ), endometrial ( $n = 6$ ), fallopian ( $n = 1$ ), or cervical ( $n = 1$ ) cancer recurrence. The mean age was 61 years ( $SD = 9$ ); 89% were Caucasian (9% African-American, 3% Hispanic). Patients were asked to discuss challenges of the recurrence diagnosis, differences from initial diagnosis, and useful coping strategies. Interviews were recorded and transcribed, and the transcripts were analyzed using Atlas.ti. **RESULTS:** Consistent with our quantitative research, patients described prominent physical symptoms with recurrence. Emotionally, the first diagnosis was characterized by shock and a new sense of physical vulnerability. In contrast, the recurrence diagnosis was characterized by disappointment and frustration. Fear was noted for both diagnoses. We commonly noted decreases in physical and social resources from initial diagnosis to the recurrence. Regarding coping with recurrence, many patients endorsed appreciating 'good days' and suspending future expectations. **CONCLUSIONS:** Some components of interventions designed for initially diagnosed patients (e.g. disease-related education) may not be relevant for recurrence patients, whereas other components

(e.g. utilization of social support) continue to be useful. While some recommend unstructured support interventions for those with advanced disease, these data suggest that education and skill building for specific topics (e.g. physical symptoms) may be more useful. Interventions that promote a focus on the present (e.g. acceptance, mindfulness), are indicated.

#### A-743

##### **Capturing the Oncology Interactive Navigator (OIN) Contributions to Individuals' Experiences with Cancer: A Pilot Study**

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**OBJECTIVES:** The purpose of this study was to begin documenting contributions of an innovative web-based information support tool, the Oncology Interactive Navigator (OIN) among individuals newly diagnosed with colorectal cancer or melanoma. As a promising means to complement person-centred care approaches, high quality multimedia interactive tools offer readily accessible, easily updated and tailored cancer informational support and guidance. **METHOD:** Guided by Self-Determination Theory (SDT) and related concepts of personal competence, knowledge and the need for supportive environments, this study employed a pre-post intervention design in 8 Canadian cancer centres. Eligible participants were offered unrestricted access to the OIN for 6 weeks. They completed self-report measures at baseline (T1) and at T2 (within 7 days of completing the intervention) to capture potential changes in key variables. Automatic OIN tracking also provided usage data. **RESULTS:** Findings for the colorectal sample who completed the study to date ( $n = 53$ ) show an average of 67.3 minutes spent on the OIN. Most popular topics include decisions and treatments as well as coping and support. 70% of participants shared the OIN with family and friends. Repeated measures analysis shows significant changes in cancer knowledge ( $p = 0.001$ ) and cancer competence ( $p = 0.011$ ) between T1 and T2. Additional results will be presented for the melanoma sample. **CONCLUSIONS:** Preliminary evidence gathered so far suggests that the OIN is an engaging repository of cancer supportive information that enhances cancer knowledge and cancer competence among newly diagnosed individuals. Further qualitative and quantitative inquiry is underway to continue documenting the potential added-value of the OIN among diverse patient

groups. A planned randomized clinical trial also will allow causal inferences to be made regarding the effects of the OIN as well as its cost-effectiveness.

#### A-744

##### **Terminal Cancer Patients' Psycho-social Assessment at the Activation of Palliative Care Unit**

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**OBJECTIVES:** The aim of the study is the psychosocial evaluation of oncological terminal patients' condition at the intervention of the Palliative Care Unit (PCU). In this phase patients are hospitalized and PCU is activated in order to define a personalized palliative care program at home or in hospice using multimodal integrated modalities. **METHOD:** From July 2004 to December 2008, we evaluated terminal patients affected by advanced oncological disease before hospital discharge. The evaluation has been conducted through semi-structured interview, built to assess the following dimensions: state of consciousness, interactive abilities, communication, diagnosis awareness, prognosis awareness, anxiety and depression symptoms. The variables are described by percentage. **RESULTS:** We evaluated 290 terminal patients (male: 163, female: 127; range age: 50–95). Regarding consciousness, 29.2% are vigilant, 51.4% conscious, 13.2% confused and 6.3% unconscious. Interactive abilities are spontaneous in 66.8%, mediated by the family in 13.1%, following stimulation in 15.2%, absent in 4.8%. Communication is truthful in 27.7%; only 26.5% are aware of diagnosis and 5.9% of prognosis. Anxiety was detected in 36.3%, depression in 12.9% and a state of pessimism and sadness in 41.2%. **CONCLUSIONS:** Psycho-social condition's evaluation of terminal cancer patients at hospital discharge reveals a state of intense vulnerability; critical factors seem to be diagnosis and prognosis, awareness and communication between patients, professionals and family. The PCU starts up at the disease's final phase and is marked by particular communication styles regarding cancer and prognosis. These observations and the understanding of patient's

emotional suffering imply several bioethical and psychological considerations in order to implement structured and personalized palliative programs.

#### A-745

##### **Adapting The MOS Social Support Survey: Incorporating Spiritual Support For Cancer Survivors**

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**OBJECTIVES:** Although spiritual support is important for cancer patients, few validated questionnaires ask about it. Qualitative in-depth interviews, from a larger study examining social support in cancer survivors, indicated that spiritual support was an important, but missing, component in the MOS Social Support Survey. Therefore, the purpose of this study was to validate a spiritual support subscale for the MOS Social Support Survey (Sherbourne & Stewart, 1991). **METHOD:** The full study utilized a mixed method approach including an in-depth qualitative interview and other quantitative survey measures including the Interpersonal Support Evaluation List (Cohen, & Hoberman, 1983), Social Network Index (Cohen, Doyle, Skoner, Rabin, & Gwaltney, 1997), and the MOS Social Support Survey. The women ( $n = 176$ , mean age 57, two years post treatment, Stages 0-II cancer) consisted of 45 African Americans, 52 Asian/Pacific Islanders, 54 Caucasians, and 25 Latinas. **RESULTS:** Initial internal-consistency reliability was similar to the original study ( $\alpha > 0.92$ ). With the inclusion of the spiritual subscale, MOS reliability was 0.95 and the spiritual subscale itself was 0.86. Exploratory factor analysis found that spiritual support loaded onto its one, as did emotional/informational, affectionate, and tangible support (loadings  $> 0.72$ ). Positive social interaction had cross loadings (.45–.65) between emotional/informational and tangible support. The subscale significantly correlated with the FACIT-Sp subscale (Brady, Peterman, Mo & Cella, 1999). (.18–.23,  $p < 0.05$ ). **CONCLUSIONS:** The spiritual subscale for the MOS Social Support survey is reliable and valid. Furthermore, with only three additional items examining an essential aspect of social support within cancer survivors, the brief and simple approach of the original MOS is preserved. This study contributes to the continuing efforts of developing a short, yet comprehensive tool that examines social support in cancer

survivors. However, validation studies should be performed for people with other cancers and medical conditions.

#### A-752

##### **A One-year Program to Empower Adolescent and Young Adult Survivors to Offer Critical Support to their Peers Fighting Cancer**

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**OBJECTIVES:** The results achieved in impacting current AYA patients' behaviour in treatment compliance and hopefulness measures by inviting them to interactive programs of a cancer survivor group were significant on the wards of three hospitals. A comprehensive nation-wide plan was needed to aid the formation of local focus groups and facilitate the networking of adolescent cancer survivors with current cancer patients across the country, especially the less supported regions of Romania. **METHOD:** Forty young people ages 14–24 were recruited to design a nation-wide information and peer-based support program specifically targeting AYA cancer patients. 24 survivors of paediatric cancer made up four focus groups of six participants. Four siblings, four current patients and eight patient support volunteers contributed with feedback on content. The program involved the creation of information messages, short films and communication posters and AYA cancer survivors hosting discussions in 11 rural hospitals. **RESULTS:** 500 cancer patients and their families benefited from the messages of hope and encouragement shared by the cancer survivors nationwide. Information that is especially relevant for the AYA demographic is now available in all paediatric treatment units. Registered members of the adolescent and young adult community has tripled since the onset of the program. The short movies of personal survivorship accounts as well as the media posters are downloadable from a specifically created website. **CONCLUSIONS:** When empowered and supported through organised means, AYA cancer survivors are the most effective in conveying helpful attitudes, promoting coping and sharing advice from personal experience. Their testimonials combat the unhelpful myths of mass media and provide information in an age-appropriate way. While working with survivor youth whose psychosocial development is affected by their earlier cancer experience can be challenging, their involvement can help increase confidence and helps the transition process towards their independence.

#### A-754

##### **What Can We Learn From Cancer Patients' Reflections On Life As Death Approaches? Analysis Of Dignity Therapy Transcripts**

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**OBJECTIVES:** Over the past decade our research team has delved into the cancer patient experience of dignity as death approaches. Out of these empirical research efforts, a conceptual framework of patient dignity was developed, followed by the creation of a dignity therapy intervention. Dignity therapy is a novel, manualized, therapeutic approach designed to decrease suffering, enhance quality of life and bolster a sense of dignity for patients approaching death. **METHOD:** In our earlier work, the benefits of dignity psychotherapy were documented in a sample of 100 dying cancer patients (50 from Canada, 50 from Australia). In this qualitative study, a random sample of 50 of 100 dignity therapy transcripts was analyzed using interpretive description. All 50 transcripts were independently coded by three individuals. Meetings were held regularly after each successive 5 transcripts had been coded, so that the coding categories could be discussed and refined. **RESULTS:** The findings revealed that dignity therapy provided patients with a safe, therapeutic means to review the most meaningful aspects of their lives in a manner that revealed their core values. Core values are defining and permeating features of a patients' whole life. The most commonly expressed values included 'Family', 'A Sense of Accomplishment', 'True Friendship', 'Pleasure', 'Rich Experience', and 'Caring'. Exemplars of each of these values illustrate the defining role of values in our lives. **CONCLUSIONS:** Findings are discussed in terms of values theory, our conceptual framework of dignity, and the practical ways that health care providers can enhance the dignity of dying cancer patients.

#### A-757

##### **Hope and Transformation in the Face of Death: An Examination of the Lived Experience of Adult Children Living at Home whose Parent has Cancer**

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**OBJECTIVES:** The purpose of this qualitative study was to explore the lived experience of adult

children living at home whose parent has been diagnosed with, and treated for, cancer. The question that this study sought to address was: What is it like to have a parent diagnosed with, and treated for, cancer for an adult child living at home? Little is known about how adult children living at home experience their parents' illness. **METHOD:** The present study used a hermeneutic-phenomenological methodology. A purposeful sampling design was used. Participants were adult children living at home, between the ages of 21 and 35, whose parent had cancer. Participants took part in an in-depth interview, from one to three hours long. Interviews were audio-taped, transcribed verbatim, and themes and sub-themes were identified. **RESULTS:** Four themes emerged from the participants' stories: 1) Getting the diagnosis: Confronting death, 2) Experiencing the impact of treatment, 3) The need for emotional support, and 4) The cancer legacy. Despite the multiple demands of cancer, and the emotional suffering, adult children drew experiences of personal growth and transformation. It was described as a journey of self-understanding, strength, self-confidence, empathy, and awareness of the sensitivities and plights of others. **CONCLUSIONS:** The study revealed that although adult children have been ignored in the psycho-oncology research, in the practical realities of the home and the hospital, they are integral part of the caregiving work. Adult children experienced death-fear, anger, shock, anxiety, and helplessness. The study also shows that adult children assign some form of positive meaning to their experiences. Clinicians need awareness that support services must include all members of the family, not only the spousal caregiver.

#### A-759

##### **Toward a True Person-Centred Partnership: Reconciling Healthcare System Innovation with Active Patient Engagement.**

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**OBJECTIVES:** A person-centred care model involves a fundamental shift in the ways the healthcare workforce operates. This shift requires a comprehensive understanding of and support for the diverse needs of patients and families within their social context. The Oncology Interactive Navigator (OIN) is an evidence-based tool that was conceived to enable a participatory partnership between providers and individuals affected by cancer. The potential of the OIN is explored through a 'hands on' demonstration. **METHOD:** This innovative web-based platform fuses technology with rigorous content and clinical integration. The OIN as a web-based platform provides clear,

comprehensive and actionable content tailored using a natural intelligence model. By integrating clinical and psychosocial aspects within hospitals and community settings, the OIN supports self-management and empowerment. A pan-Canadian CPAC funded study has begun evaluating the OIN contributions to the cancer experience. **RESULTS:** Preliminary evidence shows that the OIN offers cancer information which is supporting a patient's competence and engagement. Of the 216 newly diagnosed individuals invited to participate in the pilot study, 149 used the OIN (94 with colorectal cancer, 55 with melanoma), averaging 56 minutes of use per patient. In addition, patients returned to the OIN on numerous occasions (mean = 4.1 visits), increasing the overall content accessed to 91%(melanoma) and 93%(colorectal cancer) over their cancer journey. **CONCLUSIONS:** Evidence gathered so far suggests that the OIN is filling an important information gap in cancer care. Ongoing work incorporates findings from the pilot to guide the completion of an additional 23 OIN cancer titles. Future research will be undertaken to document implementation strategies and cost-effectiveness among diverse populations at different stages of the cancer trajectory.

#### A-760

##### **Age of Onset and Vocational Behavior of Young Adult Brain Tumor Survivors**

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**OBJECTIVES:** Career development and employment is a significant problem for young adult CNS survivors. Research has suggested that young adult survivors of CNS cancer are almost five times more likely to be unemployed as adults (OR, 4.74[95% CI 1.21–18.65]). This presentation will provide an overview of the initial results of an exploratory study that examined the impact of age of onset and vocational behavior in young adult CNS survivors. **METHOD:** For this study 65 CNS young adults survivors (18–30) completed a career/vocational survey to obtain information regarding career development and vocational behavior. In addition, informed consent and demographic information including age of initial diagnosis, treatment protocols (radiation, chemotherapy, and surgery), duration of treatment, educational background, and employment history were obtained at the time of

survey completion. **RESULTS:** Results indicate that young adult CNS survivors who were diagnosed between the ages of 6 and 12 reported lower levels of productive vocational behavior than individuals who were diagnosed before the age of 6 and after the age of 12. In addition, young adult CNS survivors as a whole also reported lower levels of productive vocational behavior when compared to young adults without a disability or cancer diagnosis. **CONCLUSIONS:** Findings are consistent with research suggesting that this age of onset and disability status negatively impact career and work behavior. These findings highlight the importance of providing career and vocational services as part of the psycho-social treatment program for young adult CNS survivors. More research is needed addressing the psychological, physical, and diagnosis specific factors that impact vocational behavior. Emphasis should be on longitudinal studies and clinical randomized trials employing career and employment interventions.

#### A-762

##### **Role Of Psychosocial, Genetic And Treatment Modalities Variables In Adaptation Problems Following Cancer: Results From A Pediatric Experience**

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**OBJECTIVES:** Recent improvement in childhood leukemia treatment protocols have led to significant increase in survival rates. However, several physical, psychological and social problems, have been documented in these patients. Researches have mainly focused on neuropsychological impact (eg.: IQ) while the literature on neurobehavioural outcomes is scarce. This study focused on quantifying prevalence of adaptation issues in this population, and risk factors associated. Better evidence-based personalized interventions could potentially lead to increased quality of life in these young cancer survivors. **METHOD:** Patients diagnosed with acute lymphoblastic leukemia were invited to participate in a longitudinal study. Patient's parents fulfilled a questionnaire regarding their perceived child adaptation problems five times during the study. Genotypes of the patients were also obtained to assess the presence of polymorphisms in genes involved in chemotherapeutic agents metabolism. A focus was made on the role played by corticosteroids (CS) and polymorphisms in CS metabolism-related genes. Analyses were done by linear multiple regression statistical modeling. **RESULTS:** The patients

proportion reaching clinical range for adaptation problems 4 years post-diagnosis was higher than expected (20, 8% vs 15, 9%). In addition to age at diagnosis, adaptation problems can be predicted by measures of perceived familial well-being ( $p = 0, 005$ ) one year post-diagnosis. When also assessing a polymorphism in NF-kB1 gene ( $p = 0, 008$ ) and its interaction with the CS dose received during induction ( $p = 0, 035$ ), the proportion of explained variance increases significantly (overall model:  $p = 0, 002$ ). **CONCLUSIONS:** These preliminary data suggest that genetic as well as psychosocial factors should both be assessed when trying to optimize adaptation outcomes predictions in this population. They highlight the importance of providing further support specifically to parents for which their role of caregiver of a child with cancer put their familial well-being more at stake than typically observed. Not doing so may otherwise reflect on the patients' ability to achieve full potential as a cancer survivor.

#### A-765

##### **The Psychosocial Impact of Being a Caregiver to a Hematopoietic Stem Cell Transplant Patient: A Review of the Literature**

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**OBJECTIVES:** While hematopoietic stem cell transplant (HSCT) has become a well-established treatment for hematological malignancies, it is a demanding treatment with associated physical and psychological sequelae that can affect patients and their family members. Caregivers to HSCT patients not only have to cope with the life-threatening nature of the disease and treatment, they have added care-giving responsibilities. This study aimed to review the literature on the psychosocial impact of being a caregiver to a HSCT patient. **METHOD:** A critical review of the literature was conducted over the past 20 years up until December 2009. Databases searches included CINAHL, Medline, PsycInfo, and Academic Search Complete. Studies were excluded if they pertained to caregivers of children (under the age of 18) undergoing a HSCT. The search revealed nine original quantitative research articles with over 20 participants and two qualitative research articles that were reviewed and analyzed. **RESULTS:** Distress among caregivers is highest pre-transplant and then decreases over time, but care-giving responsibilities remain elevated several years post-transplant. In one study comparing distress in both patient and caregiver, caregivers reported higher levels of distress than patients six months and one year post-transplant. Predictors of distress

include being a female caregiver, higher levels of subjective burden, and patient symptom distress. Caregivers also reported uncertainty, fear of the future, and difficulties adapting to role changes. **CONCLUSIONS:** The experience of being a caregiver to a HSCT patient is one of uncertainty, learning to adapt to changing roles, and distress. As only three of the 11 studies reviewed examined patients and caregivers as dyads, research that includes both members of the dyad is needed to evaluate the reciprocal relation between caregiver and patient variables. Larger sample sizes are necessary to identify caregivers that are more vulnerable to adjustment difficulties over the transplant trajectory.

#### A-768

##### **A Mobile Social Networking Approach to a Cancer Survivorship Intervention for Young Adults**

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**OBJECTIVES:** Childhood cancer patients who have completed treatment need to manage the transition from the pediatric to the adult health care system. Mobile social networking approach provides them with the resources required for successful survivorship. This study attempts to determine which factors of young cancer survivors are associated with higher rates of participation in mobile social networking intervention that builds health social capital and enables easy access to useful resources for successful cancer survivorship. **METHOD:** Participants were issued a pre-paid cell phone with MMS capabilities as well as an integrated video camera which can take short videos. They produced unstructured visual narratives with the phone, posted to the social networking website for sharing with the group. Pre-intervention measures such as depression, social support, evaluation of the services used, information needs and information seeking habits, and survivorship self-efficacy were analyzed in conjunction with study activities via cell phone. **RESULTS:** Linear regression analyses evaluated the prediction of the participation to social networking activities from the pre-intervention

measures for childhood cancer survivors. Social support composite index is linearly related to three variables, number of (1) private in-site messages sent to other participants,  $F(1, 7) = 3.854$ ,  $t(7) = -1.963$ ,  $p < 0.05$ , (2) comments,  $F(1, 7) = 1.935$ ,  $t(7) = -3.455$ ,  $p < 0.05$ , and (3) total login to the system,  $F(1, 7) = 7.712$ ,  $t(7) = -2.777$ ,  $p < 0.01$ , such that as overall social support increases the overall interaction and activities for the participant increases. **CONCLUSIONS:** Participant's perception of a close social support network is a key component in building health mobile networking for childhood cancer survivors. Social networking with cell-phone based multimedia messaging and video-sharing model can be highly effective in getting the young engaged in disseminating health information and connecting to others with similar health concerns. Mobile-based social networking intervention programs for successful cancer survivorship needs to employ network-building approach and be responsive to the individual's existing social network.

#### A-771

##### **The Relationship between Pain and Posttraumatic Stress Symptoms in Palliative Care**

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**OBJECTIVES:** Pain and psychological distress, including posttraumatic stress disorder (PTSD), are considerable concerns for palliative care patients. According to the chronic pain literature, pain and PTSD co-occur and are mutually maintained by several psychosocial variables. This study investigated the relationship between pain and posttraumatic stress symptoms (PTSS) in palliative care. The objectives were (1) to examine psychosocial predictors of PTSS; and (2) assess whether psychosocial mutual maintenance variables mediate the relationship between pain interference and PTSS. **METHOD:** One hundred palliative care inpatients and outpatients (63 female) were recruited with a mean age of 63.4 years. Consenting patients were administered a mental status exam prior to completing measures of PTSS, pain, anxiety and depressive symptoms, pain catastrophizing, and pain anxiety at their bedside or in their examination rooms. Symptom distress scores and palliative functional status, as well as other demographic and medical information, were collected from their medical charts. **RESULTS:** Objective 1: Using hierarchical multiple regression, pain anxiety

emerged as the most significant predictor of PTSS, after controlling for pain intensity, pain interference, and symptom distress ( $F(7, 65) = 6.97, p < 0.01$ ). Objective 2: Using multiple regression and bootstrapping to assess for mediation, pain catastrophizing ( $F(2, 82) = 17.55, p < 0.01$ ) and pain anxiety ( $F(2, 82) = 28.43, p < 0.01$ ) emerged as significant mediators of pain interference and PTSS. Subsequent analysis showed pain anxiety to be the stronger mediator of pain interference and PTSS ( $F(3, 81) = 19.60, p < 0.01$ ). CONCLUSIONS: This is the first study to examine predictors of PTSS, and the relationship between pain interference and PTSS in palliative care. The results suggest that pain interference and PTSS are concerns and co-occur for palliative care patients. The also findings indicate that pain anxiety mediates this relationship, lending partial support to the existence of mutually maintenance variables in this population. These findings suggest avenues that may improve the assessment and treatment of palliative care patients.

#### A-776

##### **Do I have Choice in Caregiving? Does It Matter?: Caregivers' Perspective**

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OBJECTIVES: Although the effect of perceived locus of control has been well documented in patients' adjustment, similar information in caregivers' remains sparse. This study examined the demographic and caregiving characteristics that associated with perceived choice in caregiving role and investigated the association between choice in caregiving and diverse aspects of adjustment outcomes. METHOD: A total of 1229 caregivers participating in a national survey for caregivers that used random digit dialing sampling method (99 were cancer caregivers) in the United States. Caregivers were unpaid and who were caring for a family member who is >55 years old within the past 12 months when participating in the survey. Questions on various demographics and caregiving were asked via telephone. RESULTS: Multinomial logistic regression analyses revealed that older age and female gender were significantly related to choice-in-caregiving. Among caregiving characteristics, caregivers who were currently providing care at the time of the survey were more likely, whereas caregivers who had provided care for the past 5 to 9 years were less likely to report choice-in-caregiving. Finally, lack of choice-in-caregiving was strong and consistent predictor of physical strain, emotional stress, and financial burden.

CONCLUSIONS: Results suggest that caregivers who are involved in caregiving for family members with chronic illness without having a sense of personal control and choice would suffer from poor quality of life. Younger, male, and caregivers who are currently in providing care will benefit from psychosocial programs designed to help them increase the sense of control in their caregiving role, thereby minimize the burden of care and improve their quality of life.

#### A-785

##### **Addressing the Quality of Care Issues for Chamorro Women Diagnosed with Cancer: A Community Partnership Approach**

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OBJECTIVES: This project is a joint partnership between a California State University, East Bay faculty and the Guam Communications Network. The purpose of the project is to understand quality of care as perceived by Chamorro women living in Guam who are diagnosed with breast cancer and to design a culturally appropriate intervention. Today, the Chamorro represent one of the three largest Pacific Islander groups in the United States, and 92,000 Chamorro reside in the continental U.S. METHOD: A qualitative approach is used to gather information to explore this topic. Six interviews were conducted with Chamorro cancer survivors in Guam from September 2008 to June 2009. The interviews were taped and then transcribed in English for analysis. A report back finding session was conducted where the researcher reported the findings of the study and solicited information to assist in designing an intervention. RESULTS: One important quality of care aspect repeatedly addressed by different key informants was limited resources to treat cancer in Guam. The only hospital in Guam was not accredited by the Joint Commission. Besides limited access and inconsistent quality of care, survivors had to travel off-island for cancer treatment and have to cope with being away from family members, fear and recurrence, and difficulties in accessing follow-up care. CONCLUSIONS: In order to improve the quality of life for Chamorro women diagnosed with breast cancer in Guam, the quality of care for those in Guam needs to be improved. Although these key informants complained about the health care system on their island, they considered themselves fortunate when compared to other Pacific Islanders in the Mariana Islands. This is an interesting coping mechanism for Chamorro women that warrants further research and exploration.

A-787

**The Relation between Emotional Expression Styles in Mothers and Anxiety in Children with Cancer**Sheyda Dibaei<sup>1</sup>, Masoud Janbozorgi<sup>2</sup>, Masoud Arefnazari<sup>1</sup>, Emad Ashrafi<sup>3</sup>*Islamic Azad University, Science and Research Branch, Tehran, Iran, Islamic Republic of<sup>1</sup>, The Research Institute of Hawzeh va Daneshgah, Qom, Iran, Islamic Republic of<sup>2</sup>, Tarbiat Modares University, Tehran, Iran, Islamic Republic of<sup>3</sup>*

**OBJECTIVES:** The important role of emotion in communication between parents and children with cancer is emphasized in the literatures. Previous researches have demonstrated that the communication about the disease between the child with cancer and parents is mainly about treatment and medical procedures and not about the emotional impact of the situation which can cause more psychological problem for sick child. Therefore, this study examined the role of mother emotional expression styles in anxiety of children with cancer. **METHOD:** The sample is 84 children (8–17 years old) with cancer (in and out patient) and their mothers who were in hospital. Emotional Expression Questionnaire (EEQ), Emotional Control Questionnaire (ECQ) and Ambivalence over Emotional Expression (AEQ) for mothers and Revised Children's Manifest Anxiety Scale (RCMAS) for sick children were used. **RESULTS:** Data analyses revealed that children whose mothers were high in ambivalence over emotional expression and low in emotional expression reported higher level of anxiety. But significant relation between emotional control of mothers and children anxiety were not found. Also, mother emotional expression styles (all together) accounting for 11% of the variance in child anxiety. **CONCLUSIONS:** These findings show that emotional expression and ambivalence over emotional expression in mother may contribute to sick child anxiety which can lead longer treatment or improvement. This study suggests that emotional states of mothers can have an

important factor in understanding cancer pediatric patients' experience of anxiety.

A-795

**Development and Evaluation of a Decision Aid for Hereditary Breast and Ovarian Cancer Mutation Carriers in Considering Disclosure to Offspring**Susan Clarke<sup>1</sup>, Mary Jane Esplen<sup>2</sup>, Brenda Toner<sup>2</sup>, Margaret Fitch<sup>3</sup>, Louise Bordeleau<sup>4</sup>*de Souza Institute, University Health Network, Toronto, Ontario, Canada<sup>1</sup>, Department of Psychiatry, Faculty of Medicine, University of Toronto, Toronto, Ontario, Canada<sup>2</sup>, Sunnybrook Health Sciences Centre, Toronto, Ontario, Canada<sup>3</sup>, McMaster University, Hamilton, Ontario, Canada<sup>4</sup>*

**OBJECTIVES:** This study in progress is designing & testing a decisional aid, targeted around dissemination of genetic risk information by HBOC carriers to their offspring between ages 12–25 years, in determining when and how to share emotionally laden genetic information. BRCA1/2 carriers can experience challenges around communicating complex genetic issues, and are often uncertain around 'when' and 'how much information' to share with young offspring which can result in significant distress. **METHOD:** A mixed model is being utilized to design the intervention with a pre post design. **RESULTS:** The study is ongoing. A literature review and the decisional tool will be presented with preliminary findings around its uptake and patient and clinic staff responses to the tool. The psychosocial intervention consists of a decisional aid guiding BRCA1/2 carrier parents in determining when and how to share genetic risk information with offspring between ages 12–25 years. Qualitative findings from focus groups will be presented that informed the development of the psychosocial tool. **CONCLUSIONS:** This study will contribute to the rapidly emerging field of cancer genetics with a validated tool in supporting carriers in determining when and how to share genetic information with their biological children.

## POSTER ABSTRACTS

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### P-1

#### A Model of Oncologist-Patient Attachment

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**OBJECTIVES:** The goal of this paper is to enhance the current understanding of attachment theory of the doctor-patient relationship, by providing a model and detailed patient perspective into how attachment development occurs in the oncology setting. Understanding the oncologist-patient attachment provides a better understanding of the dynamic for the goal of better treatment adherence and less patient psychiatric distress. **METHOD:** This is an observational descriptive study, examining attachment development from a patient perspective. It is a longitudinal assessment based on patient interview interview and emails. **RESULTS:** A four-stage, chronological model—initial, developing, connecting, and mutual—emerged as an organizing mechanism. In the Initial Stage, the patient enters the relationship with a pre-disposition to needs and how they should be satisfied. In the Developing Stage, the logistics of the relationship are defined. In the Connecting Stage, the patient's trust in the oncologist is total. In the Mutual Stage, a partnership develops based on knowledge and experience. **CONCLUSIONS:** Using this model it provides a better understanding of the attachment process, yielding better outcomes and experiences for both patient and oncologist.

### P-5

#### Examining Predictors of Psychosocial Support Seeking

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**OBJECTIVES:** Although previous research has indicated a clear relationship between cancer stage and support seeking as well as emotional distress

and support seeking (those with a higher stage of disease or higher level of distress are more likely to seek support), research has yet to examine the role that distance from a health care centre plays in potentially adding to an individual's distress. Further, might distance impede the ability of patients to seek psychosocial support services? **METHOD:** Patients admitted to the Cancer Centre complete a 'consent to release information form' at time of admission, as well as a Hospital Anxiety and Depression Scale (HADS; Zigmond and Snaith, 1983). Using this, Supportive Care has been updating a database of all cancer patients on variables related to distress (HADS), medical status (cancer type, disease stage), demographics (age, gender, marital, distance from the TBRHSC), and support seeking (appointments with Supportive Care). **RESULTS:** Pearson Product Moment correlations yielded significant relationships between distress and support seeking,  $r = -0.101$ ,  $p < 0.001$ , stage and support seeking,  $r = 0.108$ ,  $p < 0.001$ , and distance and support seeking,  $r = -0.076$ ,  $p < 0.001$ . When entered into a regression analyses, these variables emerged as significant predictors of supportive care use. **CONCLUSIONS:** Individuals living further from the hospital centre are less likely seek supportive care services, despite similar distress levels. These results support the need for further investigations into whether the psychosocial needs of those living greater distances from the hospital centre are being left unmet. Results are discussed in reference to patient and family centred care initiatives, and further research directions are addressed.

### P-9

#### Some Factors Relating to the Personal and Professional Characteristics of the Doctor that Affect the Correctness of Communication of Diagnosis of Cancer in Elderly Patients

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**OBJECTIVES:** Communicating a diagnosis of cancer or a terminal prognosis is a complex and difficult task that requires a specific preparation. It still remains an open problem for doctors in hospitals of different specialties (HM, oncologists, hematologists, surgeons, internists), as well as for family doctors (GPs). In Italy, recent investigations have shown that the trend is still that the doctor does not ask how much the patient wants to know about his sickness. **METHOD:** From January 2008 to June 2009 we conducted an observational study of 255 physicians (59/F+184M, 25 to 74 years) which have been posted 3 closed questions with free answers: a) do you communicate the diagnosis of malignancy in the elderly patient and considerate the advice of family members? b) for the diagnosis which kind of terms do you use (malignancy, cancer?) c) If you do not use these terms which other terms do you use? **RESULTS:** 51% use the terms cancer for the diagnosis, 49% use mass, lump, cyst, polyp. The women doctors are more reluctant to disclose the diagnosis than the male medicals ( $X^2: p = 0.0045$ ) and overall the proper communication is influenced by the type of doctor and their age ( $X^2: p < 0.05$ ). Moreover, important disturbance in both groups (HM plus GPs) the elevated age of the physician decreases the propensity to provide a diagnosis to the elderly patient (index of K-tau-b: -0,225). **CONCLUSIONS:** There is a greater tendency than in the past to inform the elderly of the diagnosis using appropriate terms, but in our view is still very low percentage of doctors who communicate the correct diagnosis in a clear and comprehensible to the elderly patient.

#### P-15

##### **Psychospiritual Analysis as Predictor of the Efficacy of Chemotherapy and Immunotherapy**

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**OBJECTIVES:** The prognosis of the cancer is influenced by the psychoneuroendocrinoimmune conditions of patients. If it is true that the psychoneuroimmune status may influence the prognosis of tumor, it is probable that the psychospiritual condition may affect the prognosis of cancer and the efficacy of the different conventional antitumor treatments. On this basis this study was carried out to analyze the relation between the psychospiritual profile and the response to chemotherapy and immunotherapy in cancer patients. **METHOD:** The psychological profile was investigated by the

Rorschach's test. The spiritual status was analyzed in terms of spiritual faith by a specific score evaluating five criteria and giving a value of 20 points for the single parameters. We have evaluated 30 metastatic non-small cell lung cancer patients treated by chemotherapy (cisplatin plus gemcitabine) and 30 metastatic renal cell cancer patients treated by immunotherapy (subcutaneous low-dose IL-2). **RESULTS:** The tumor response rate achieved in the patients with a faith score equal to or greater than 60% was significantly higher than that found in the patients with a faith score less than 60%, in both cancer patients. The tumor response rate obtained in patients with psychospiritual identity at the Rorschach's test was significantly higher with respect to that observed in patients who had no psychospiritual identity, in both cancer patients. **CONCLUSIONS:** This preliminary psychological studies would seem to suggest that the pre-treatment analysis of the psychological and spiritual status may predict the efficacy of the both chemotherapy and immunotherapy in advanced cancer patients. If the successive studies will confirm this results the psychological and spiritual investigations before the onset of the conventional anticancer treatment would have to be included within the common clinical examination in the medical oncology.

#### P-16

##### **Knowledge of Health Care Providers on Cancer in Magu District, Mwanza-Tanzania**

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**OBJECTIVES:** Cervical cancer is by far the most common cancer of women in development countries, with the highest rates found in Latin America, sub Sahara Africa and South East Asia. In Tanzania, systematic cervical cancer screening programmes do not currently exist and detection of the disease relies mostly on case presentation. The aim of this study was to determine the level of knowledge of health care provider in cervical cancer rural district in Tanzania. **METHOD:** Visits were made to all health facilities in Magu district. The principal investigator and trained research assistant collected the data through interviews and observation. Those health care providers who were found absent in their health care facilities in the first time were re-visited. By using a '0-17' scale structured questionnaire, 54 health care providers were interviewed in 43 health care facilities. The availability of basic facilities for gynaecological examination was assessed by using a checklist. **RESULTS:** Out of 54 health care providers in the district, 22 (40.7%) health care

providers had heard of a Pap smear with the level of awareness being highest among the higher cadres. Their level of knowledge on cancer of the cervix ranged from 1 to 13 on a score scale of '0 to 17' (mean score 4.63). Knowledge on symptoms, risk factors and prevention were significantly higher among the higher cadres than those in lower cadres. **CONCLUSIONS:** Health care providers had poor knowledge on cancer of the cervix and this was more on lower cadres. The availability of basic facilities for gynaecological examination was encouraging. A more organized continuing education of health care providers is recommended to provide adequate knowledge on risk factors, symptoms, treatment and prevention of the disease. Health care providers should be encouraged to provide health education to the community, thus raising the level of awareness about the disease.

#### P-17

##### **Needs, Expectations and Attendance Among Infrequent Users of a Cancer Wellness Centre in Montreal, Quebec**

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**OBJECTIVES:** Statistics from the use of a Montreal Cancer Wellness Centre in 2008 report that out of nearly 500 cancer survivors who attended, 27% came only once, 20% came 2–3 times, and nearly half the attendees came less than 3 times. The purpose of this study was to examine the relationship between goals, expectations, and attendance among infrequent users of the centre to better access future programming. **METHOD:** We interviewed 13 cancer wellness centers in Canada and the U.S. to assess if our attendance expectations were realistic. Second, from a total sample ( $N = 134$ ) from our wellness center, we randomly selected individuals who registered and never returned ( $n = 16$ ), and who registered and returned 1–3 times ( $n = 17$ ). We used a phenomenological approach to assess the meaning of attendance using telephone interviews focusing on attendance barriers plus questions focusing on their specific goals and needs. **RESULTS:** Other Wellness Centers revealed similar attendance patterns; 30% of registered participants never returned or attended very infrequently. At our center, four themes were revealed from non-users and infrequent users; health and fitness goals, emotional needs, reasons for poor attendance, and suggestions. Reasons for not attending centered on health complications, scheduling conflicts, child care, wanting more French groups, and parking barriers. Few differences were observed on the main themes

between the non-users and the infrequent users. **CONCLUSIONS:** The results have implications for health care providers working with cancer survivors, for service interventions, and for future research on wellness center programming. Suggestions from the participants will be used to improve and address present and future needs of participants such as addressing parking limitations, providing healthy snacks, addressing age disparities and language barriers, accommodating personalized requests in programming and addressing scheduling complications between staffing, day, and evening hours, and providing more groups centered on health education.

#### P-19

##### **Family Burden: Caregiver's Perceptions in a Rural Area**

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**OBJECTIVES:** Cancer is considered a familiar illness. Illness is an event that throw patients (pts) and caregivers (cgs) off balance. It changes familiar and inner settings. Caregivers have an active role in assistance and they can be tired both from a psychological and physical point of view. Our aim is to value the effects of psychological distress and fatigue on burden of care in caregivers (cgs) of patients (pts) undergoing chemotherapy treatments. **METHOD:** 38 cgs were asked to undergo a psychological interview. Cgs: mean age 50 years old (range 23–75), 52% males, 54% are partners, 28% children, 72% live with the pts. In order to accompany pts to the hospital, 24% cgs ask for holidays, 16% for a paid leave, 6% for a unpaid leave. 6% have economic problems due to illness. Prevailing feelings linked to illness are: worry (72%), hope (38%), powerlessness (20%) and fear (16%). **RESULTS:** 38% of cgs change habits in the relationship with pts: 79% spend more time together. Data analysis shows cgs are not worried about the activities they have to do for the pts (>71%), about practical problems occurred among the members of the family (63,1%) or about the administration of therapy (>52%). Cgs suffer more psychological feelings: 60% of them are not able to accept illness, 10% have problems of communication with pts. **CONCLUSIONS:** Cgs have high levels of unmet needs. Cgs show difficulties in the changes of the relationship (>45%). 57,4 % of them think that they need to express their emotions and feelings. 72,7% cgs

wants to speak with other members of their family, 45 % with the pts, 5% with the psychologist. There is an increasing recognition of the importance of providing support for cancer cgs with evidence that cgs can be as distressed as pts.

#### P-20

##### **Couple Types and Coping Strategies: A Research About Conjoint Drawing**

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**OBJECTIVES:** Recent studies (Green *et al*, 2000; Kayser, Scott, 2008) show that a supportive relationship between oncological patients (pts) and their caregivers (cgs) improve pts coping strategies. 56 couples composed of oncological pts (mean age 58,4 [range 34/72]) undergoing chemotherapy treatment and their cgs (53,6% were partners, 19,6% children, 8,9% brothers or friends, 5,4% parents) were asked to paint together a picture about their relationship. **METHOD:** We used the Conjoint Drawing Graphic (CDG) and its Projective Analysis (Bing, 1970) to identify different types of couples and to evaluate the correlation between them and pts' coping strategies. In order to investigate the interactive process behind CDG we used the Observational Scheme (Saita, 2006) that describes Cooperative, Non-Cooperative and Ambiguous couples. With the 'Couple Life Space' Scheme (Zavattini, 2007) we classified couples government space form into: Dynamic Balance, Individual, Fragmentation, Filling, Measurement and Grouping-Redaction. **RESULTS:** Pts coping style is: Reactivity (60%), Fatalism (14,5%) and Denial (12,7%). Cooperative couples are more (45,5%) than Non-Cooperative (32,7%) and Ambiguous (21,8%). Couples government space is: Individual (54,5%), Dynamic Balance (18,2%), Fragmentation (18,2%), Measurement (5,5%), Filling (3,6%). The study displays high levels of correlations between Cooperation and Reactivity (29%) and Non-Cooperation and Reactivity (23,6%). Data show links between Individual Product and Reactivity (25,5%), Fragmentation and Reactivity (14,5%) and Dynamic Balance and Reactivity (12,7%). **CONCLUSIONS:** Results show the positive effects of a Cooperative and Balanced relationship on the coping strategies. A lot of pts with reactive coping style decided not to involve cgs in their paints, even if the picture

illustrates a situation that pts and cgs live together (home, couple) maybe in order to protect them so cgs are involved in the illustration even if in a indirect way. Our aim is to improve samples to verify our data.

#### P-23

##### **'Chasing Rainbows—Young Adults Living With Cancer': An Innovative Documentary Film Resource**

Pat Taylor

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**OBJECTIVES:** 1. To offer emotional and practical support, hope and meaning to young adult cancer patients, their families, caregivers and medical support teams through a documentary film entitled 'Chasing Rainbows: Young Adults Living With Cancer' 2. To foster dialogue and promote action surrounding the need for resources targeted at young adults, to improve quality and accessibility of cancer care for this age group. 3. To support the voice of young adults in the global cancer community **METHOD:** Chasing Rainbows: Young Adults Living with Cancer is an upbeat 43-minute documentary built around a living-room conversation between six young adults: four women and two men. With passion and humour, they discuss hope, fear, faith, sexuality, infertility, family relationships, finances, the future and more. Their stories are an invaluable source of information, inspiration and hope—both for other young adults facing life-threatening illness, and for their families, friends, caregivers and medical support teams. **RESULTS:** Producer Pat Taylor has screened Chasing Rainbows across Canada, in the US and in Mumbai (India), and has had requests for screenings in the UK, Italy, the Netherlands and Australia. In the course of the film's travels it has become abundantly clear that there is a great need for resources targeted specifically at young adults in the cancer community. **CONCLUSIONS:** In an effort to make this resource as widely accessible as possible, Pat has completed the French-language versioning of Chasing Rainbows, and is in the process of translating the film into Spanish, Chinese, Arabic, Malay, Hindi, Portuguese and Italian.

#### P-25

##### **Caring for the Family Caregivers of People With Brain Cancer: Laying the Groundwork for a Caregiver Intervention to be Delivered Across a Wide Geographic Region**

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**OBJECTIVES:** The purpose of this feasibility study was to identify a suitable psychoeducational intervention for family caregivers of people living with brain cancer across a wide geographic region. Proposed interventions included a weekend workshop, a telephone support group, a video conferencing group, and an internet caregiver group. **METHOD:** Intervention preferences were gathered through structured telephone interviews with 22 caregivers, and evaluated using thematic analysis. Participants were prompted to indicate, (1) if a proposed intervention was the kind of program that they would want to join (acceptability), and (2) if they thought that they could join this program, even if they did not want to (accessibility). **RESULTS:** The weekend workshop was identified by participants as most acceptable (70.55%) and least accessible (63.6%). Participants were most likely to access a telephone support group (72.7%), video conferencing group (77.3%) or internet caregiver group (81.8%), while only 50.8% on average would accept one of these telehealth interventions. Participants cited the use and impersonal nature of telehealth technologies as being a barrier to these interventions. Participants identified financial and practical barriers to attending a weekend workshop. **CONCLUSIONS:** Caregivers in this catchment area desire information about the impact of the CNS tumour, managing home and finances, and how to access emotional support. This study provides potentially valuable information about how to deliver a psychoeducational intervention to CNS caregivers, that is likely to succeed across a wide geographic region.

#### P-27

##### **Relationships of Social Support, Psychological and Physical States Among Japanese Elderly Women with Breast Cancer: Focused on Predictive Factors on Psychological States**

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**OBJECTIVES:** In Western cultures, it has been reported that relationships of social support and psychological and physical states among elderly women with breast cancer. Few studies reported relationships of these variables in Japanese elderly women with breast cancer. Thus, the purpose of this study was to investigate the relationships of social support and psychological and physical states among Japanese elderly women with breast cancer. **METHOD:** A descriptive, comparative and correlational study was designed. A convenience sample of Japanese elderly women with breast cancer participated in this study. Four instruments with established reliability and validity were

used: 1) the Social Support Scale for Japanese Elderly, 2) the General Health Questionnaire, 3) the Visual Analogue Scale of Social Support, and 4) the Physical States Interview Form. Data were analyzed using t-tests, Pearson's correlations, and stepwise multiple regression analysis. **RESULTS:** Significant differences were found in conflict ( $t = 2.00$ ,  $p = 0.05$ ) and in physical states ( $t = 2.29$ ,  $p = 0.03$ ) between the women who contacted with other patients and who did not. Psychological states showed significant correlations with social support network ( $r = 0.28$ ,  $p = 0.025$ ) and with conflict ( $r = 0.275$ ,  $p = 0.037$ ). Stepwise multiple regression analysis showed that conflict (beta = 0.274) was most influencing factor on psychological states, followed by social support network (beta = 0.266). **CONCLUSIONS:** The findings suggest that conflict and social support network were important factors for the women's psychological states. Healthcare professionals should provide information of social support as an important factor. Findings from this study point to a need for additional research to investigate the relationships of these variables among Japanese elderly women with breast cancer as a process of breast cancer experiences. **ACKNOWLEDGEMENT OF FUNDING:** Japan Society for the Promotion of Science: Grant-in-Aid for Scientific Research (C): #MO19592503.

#### P-28

##### **Practical Use of Psychiatric Unit for Oncology Patients with Psychiatric Symptoms in Terms of Palliative Medicine**

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**OBJECTIVES:** Basic Law for Cancer in Japan effective in 1996 emphasizes psychological support for oncology patients in the field of palliative medicine. Previous reports have focused mainly on visiting surgery or internal medicine ward by psycho-oncologist when oncology patients developed mental disorders. However, when delirium or suicidal ideation have developed severely, moving to psychiatric unit would be desirable. We present four oncology patients who moved to psychiatric unit and showed substantial recovery. **METHOD:** All the four oncology patients had admitted to surgery or internal medicine ward to undergo chemotherapy. During their chemotherapy term, they have complained depressive mood, suicidal idea, hallucination or delusion. They were forced involuntary hospitalization from their original ward to psychiatric ward after detailed assessment by psycho-oncologist. Administration of appropriate anti-depressants and atypical antipsychotic

drugs had begun based on APA guideline. All patients had given us informed consent to participate in the case report. **RESULTS:** They were diagnosed as major depressive disorder with psychotic episode (two patients), delirium and brief psychotic disorder by DSM-IV-TR. Appropriate pharmacotherapy and psychotherapy led all patients to remission state within a few weeks or a few months in collaboration with physicians who took care of physical status in psychiatric ward. They have returned to their original ward and resumed chemotherapy or transferred to home healthcare system. **CONCLUSIONS:** Previously, use of psychiatric unit for oncology patients with psychiatric symptoms had been limited because of prejudice among patients and medical personnel, inexperience in oncology patients among psychiatrists and small number of facilities. However, under the robust collaboration with psycho-oncologist and physicians, to transfer patients with psychiatric symptoms to psychiatric unit temporarily is shown to be a good practice of palliative medicine. It is essential that we accumulate similar cases to provide more evidence.

#### P-39

##### **Randomised Controlled Trial (RCT) of a Comprehensive Post-Treatment Support Package (SurvivorCare) for Bowel Cancer Survivors**

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**OBJECTIVES:** Bowel (or colorectal) cancer (CRC) is the most common cancer affecting Australian men and women. The illness and its treatments can cause distressing physical side-effects, impact on the person's emotional and psychological state and adversely affect social, occupational and relationship functioning. This presentation will report on the effectiveness of an innovative supportive care program (SurvivorCare) for people with potentially curative CRC, aiming to reduce psychological distress and unmet needs. **METHOD:** Patients will be randomised to receive usual care or the SurvivorCare package, which comprises: (a) survivorship educational materials; (b) a tailored survivorship care plan for the patient, GP and specialists; (c) a nurse-led end of treatment consultation, followed by telephone-based follow up 1, 3 and 7 weeks post-treatment session. This study will aim to recruit 334 patients from up to 12

Australian cancer treatment centres. Psychological distress will be the primary study outcome. **RESULTS:** The study is due to commence recruitment in early 2010. In pilot testing, 10 people received the complete package. All survivors considered it appropriate, relevant and useful. Survivors and staff found the intervention to be highly acceptable. **CONCLUSIONS:** The pilot study supported the intervention's suitability and feasibility. The intervention was well-received by patients and can potentially help them manage their concerns and worries. If SurvivorCare is shown to reduce distress and unmet needs, it will be possible to quickly and broadly disseminate this model of care.

#### P-43

##### **Improving the Psychosocial Health of People with Cancer and Their Carers: A Community-Based Approach**

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**OBJECTIVES:** Although clinical practice guidelines advise routine screening for psychological distress to facilitate referral to evidence-based care, this frequently does not occur in practice. This presentation presents the design of a two-arm randomised controlled trial with distressed patients and carers, comparing minimal contact self-management versus an individualised tele-based cognitive behavioural intervention. Uniquely, the study was undertaken within a practice-based setting to facilitate rapid translation into practice after study completion and to ensure ecological validity. **METHOD:** Patients ( $n = 280$ ) and carers ( $n = 280$ ) contacting the participating community-based cancer Helplines during the study period and screening positive for distress were recruited and randomised to 1) a nurse-led 30–45 minute telephone support session and given a self-management manual or 2) a tele-based, psychologist delivered cognitive behavioural intervention. Participants' anxiety and depression, cancer specific distress, unmet supportive care needs, positive adjustment, and overall QOL are assessed at

baseline and 2, 6 and 12 months post-recruitment. **RESULTS:** The presentation will discuss the challenges of undertaking this work within a practice setting, including competing workloads, unfamiliarity with research protocols, and help giving attitudes. Baseline data outlining the adjustment problems experienced by these patients and carers will be presented. **CONCLUSIONS:** Cancer Helplines are highly accessed by distressed patients and carers and provide a unique point of articulation for distress screening and evidence-based care. However, there are skill and attitudinal barriers to be overcome in order for distress screening to become standard care; and the heterogeneous nature of the psychological problems these clients display presents challenges for both research and practice.

#### P-49

##### **Decisions in Palliative Care: Individual Factors Influencing The Physician-Elderly Patient-Caregiver Triad**

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**OBJECTIVES:** In the elderly who receive palliative care, deterioration of health status is generally difficult to predict. Hence, the decisions regarding treatment become complex and may generate conflicts between participants. The philosophy behind palliative care leads the physician to work in concert when choices are being made. The purpose of this presentation is to specify the factors that influence the elderly patient, his caregiver, and the physician in the decision-making process regarding the choice of treatment. **METHOD:** In this case study, we followed three triads in the Maison de soins palliatifs and one in Long-Term Care Centre, for a period of 9 to 14 days. Our results are based on: semi-structured individual interviews that were held with each of the participants in the triad; and the recording of meetings among the physician, the patient, and/or the caregiver. The analysis was carried out using the mixed thematic approach of Huberman and Miles. **RESULTS:** We present separately in this poster session the individual factors specific to each participant. For example, the patient is influenced by his definition of the situation, his personal experiences, and his values. The caregiver is further influenced by the decision-making ability of the patient. As for the physician, although noticeably influenced by the same factors as those of the other members of the triad, he takes into consideration the standards of palliative care practice. **CONCLUSIONS:** Although the factors for the elderly patient, the caregiver, and the physician are

appreciably similar, divergence in their content is possible. For an efficient dialogue, a better understanding of these individual factors would help to grasp the challenges faced by each member of the triad and would allow the latter to reach a consensual decision, thus avoiding conflicts.

#### P-53

##### **Translation and Trans-Cultural Adaptation from French to English of an Instrument Measuring Self-Perceived Palliative Care Nursing Competencies**

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**OBJECTIVES:** To promote nursing competencies, one needs to take into consideration self-perception of competencies, a determinant of achievement. However, there is a lack of reliable and valid instruments to measure self-perceived palliative care nursing competencies. There are strong advices from the literature to use a simultaneous development approach for new instruments. This study was designed to provide a simultaneous translation and trans-cultural adaptation from French to English of an instrument measuring self-perceived palliative care nursing competencies. **METHOD:** The instrument was first developed in French in the Province of Quebec, Canada. After a while, an advisory committee of four English speaking nursing palliative care experts in the USA revised the content and the semantic of an English translation of the instrument. The French version was simultaneously modified to maintain semantic and conceptual equivalence. Individual cognitive interviews were conducted in English and in French to review the clarity and comprehension of the items. **RESULTS:** To ensure conceptual, cultural and linguistic equivalence between the French and English version, one domain has been modified, the definition of palliative care has been revised, and the scale values have been changed. Also, 15 items out of 65 have been deleted, 16 new items have been proposed and the content of 9 items has been improved. The semantic of the French version has been also reviewed to maintain equivalence with the English version. **CONCLUSIONS:** Instruments may use idiosyncratic expressions or social norms that could not be translated into different languages. Using a simultaneous approach gives the possibility to reformulate the items at an early stage of the development, which reduce the risk of cultural bias. Translating and adapting from French to English a new instrument designed to measure self-perceived palliative care nursing competencies provided two conceptual and linguistic equivalent versions that might be used all across North America.

P-57

### Patient's Perceived Need and Psychological Distress and/or Quality of Life in Ambulatory Breast Cancer Patients

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**OBJECTIVES:** A needs assessment can be used as a direct index of what patients perceive they need help with. The purposes of this study were to investigate the association between patients' perceived needs and psychological distress and/or quality of life and to clarify the characteristics of patients with a high degree of unmet needs. **METHOD:** Randomly selected ambulatory female patients with breast cancer participated in this study. The patients were asked to complete the Short-form Supportive Care Needs Survey questionnaire, which covers five domains of need (health system and information, psychological, physical, care and support, and sexuality needs); the Hospital Anxiety and Depression Scale; and the European Organization for Research and Treatment of Cancer QLQ-C 30. **RESULTS:** Complete data were available for 408 patients. The patients' needs were significantly associated with both psychological distress ( $r = 0.63$ ) and quality of life ( $r = -0.52$ ). A multivariate analysis revealed that employment status, duration since diagnosis, advanced stage, and a lower performance status were significantly associated with higher total needs. Only sexuality needs were significantly associated with a younger age, while the other domains were significantly associated with duration since diagnosis, advanced stage, and a lower performance status. **CONCLUSIONS:** Moderate to strong associations exist between patients' needs and psychological distress and/or quality of life. The characteristics associated with patients' needs are multi-factorial, and interventions to respond to patients' needs may be one possible strategy for ameliorating psychological distress and enhancing quality of life.

P-58

### Feasibility and Usefulness of the 'Distress Screening Program in Ambulatory Care' in Clinical Oncology Practice

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**OBJECTIVES:** Although the implementation of routine screening for distress is desirable, doing so is difficult in today's busy clinical oncology practice. We developed the 'Distress Screening Program in Ambulatory Care' (DISPAC program) as a practical means of screening for and facilitating the treatment of major depression and adjustment disorders in cancer patients. This study assessed the feasibility and usefulness of the DISPAC program in actual clinical situations. **METHOD:** As part of the DISPAC program, nurses administered a psychological screening measure, the Distress and Impact Thermometer (DIT), to consecutive cancer patients visiting an outpatient clinic in the waiting room. The attending physician then recommended psycho-oncology service referral to all positively screened patients. We compared the proportion of patients referred to a psycho-oncology service during the DISPAC period with the usual care period. **RESULTS:** Of the 491 patients during the DISPAC period, 91.9% (451/491) completed the DIT; the results were positive in 37.0% (167/451), recommendations for referrals were given to 93.4% (156/167), and 25.0% (39/156) accepted the referral. Ultimately 5.3% (26/491) were treated by psycho-oncology service as having major depression or adjustment disorders, a significantly higher proportion than during the usual care period (0.3%;  $p < 0.001$ ). The nurses required  $132 \pm 58$  seconds per person to administer the DIT. **CONCLUSIONS:** The DISPAC program is useful for facilitating the care of cancer patients with psychological distress. Nevertheless, the acceptance of referrals by patients and the reduction of the burden placed on nurses are areas requiring improvement.

P-59

### Economic Impact of Cancer Diagnosis and Treatment on Radiotherapy Patients and Their Families

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**OBJECTIVES:** Cancer is a devastating and frightening disease. It evolves a lot of emotions ranging from anger to guilt feeling to fear of death. The experience of cancer presents a number of demands on the individual and his family that has psychosocial and financial implications. The aim of study is to assess the economic impact of cancer diagnosis on the patients and their families. **METHOD:** The study consisted of an interviewer-administered survey instrument of 213 patients who willing participated in the study following a duly applied informed consent procedure. The questionnaire was developed by the researchers, consulting with other questionnaires and validated in a private cancer hospital in Ibadan. It has internal consistency reliability of 0.76. **RESULTS:** The subjects

consisted of 61 males and 152 females. Married 162, single 43. 57 of the patients earn below 20,000 Naira, 64 earn between 20,000 and 50,000 while 68 earn above 50,000 thousand Naira per month (1 USD = 150 Naira). The study revealed that the economic cost of cancer diagnosis and treatment had significant impact on the patients coping and adjustment as this constituted a large percentage of their family earning. **CONCLUSIONS:** The result of this study shows the negative impact of the economic hardship experienced by cancer patients and their families as it affects their ability to cope and adjust to their cancer situation. This has a lot of implications for psycho-oncology, the health personnel, hospital administrators and policy makers in the health services.

#### P-62

##### **Aerobic versus Resistance Exercise Training for Prostate Cancer Patients on ADT**

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**OBJECTIVES:** Androgen deprivation therapy (ADT) is an effective treatment for advanced-stage prostate cancer. Unfortunately, ADT has several side-effects that significantly impair health-related quality of life (HRQOL). In patients receiving ADT, resistance training has been shown to improve important physical and psychosocial outcomes. However, little is known about the effects of aerobic exercise in this population. This pilot study compares the effect of aerobic and resistance exercise interventions on HRQOL and fitness in a 24-week randomized trial. **METHOD:** 60 men receiving ADT for prostate cancer are being recruited for this prospective, randomized trial. Participants are assigned to either a resistance or aerobic home-based, moderate-intensity exercise 3–5 times per week for 30–60 minutes/session. Primary outcomes include fatigue, HRQOL, and exercise adherence. Secondary outcomes include aerobic and musculoskeletal fitness, body composition, and biomarkers associated with tumorigenesis (leptin, adiponectin, and IGF-1). Outcomes are assessed at baseline, 12, 24, and 48 weeks. **RESULTS:** Preliminary findings are presented. 746 patients have been screened, yielding 257 eligible participants. To date, 47 participants have agreed to randomization, 4 of whom have since withdrawn (85% retention). Preliminary findings from baseline to 12 weeks for all participants indicate a significant improvement in body fat percentage, VO<sub>2</sub> peak, weekly physical activity

volume ( $p < 0.05$ ). No obvious differences have emerged in physical or psychosocial outcomes between groups. **CONCLUSIONS:** Preliminary findings suggest that significant improvements in body composition and aerobic fitness can be obtained with 12 weeks of aerobic or resistance training, with no difference between groups. The high retention rate and improvements in weekly physical activity volume indicate a highly adherent population supporting the feasibility of a large-scale studies comparing aerobic and resistance exercise training.

#### P-64

##### **Gender Differences in Dealing with Emotional Aspects and the Desire to Receive Professional Psychological Help, in Cancer Patients at the First Visit to an Oncology Service**

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**OBJECTIVES:** The main goal of the study is to explore gender differences in perceived self-confidence to cope with cancer, emotional distress, and desire to receive professional psychological help, in cancer patients at their first visit to the Oncology Service. **METHOD:** From September to December 2009, all the patients receiving their first visit in the Oncology Service were assessed, using a structured questionnaire. Patients included in the study were 40 (Men = 19; Women = 21). Inclusion criteria: Adult cancer patients. Gender differences and the other variables were evaluated. **ASSESSMENT:** Socio-demographical and medical variables. Emotional distress (mood, tension, fear, anger), Desire to receive psychological help and Perceived self-confidence were evaluated with a Likert scale with 4 levels of response. **RESULTS:** Preliminary results shows: Mean age was 61 (range = 36–82). Breast cancer (34%) and colorectal cancer (22%) were the most frequent diagnoses. There were not gender differences in emotional distress, self-confidence to cope with cancer. Of all those seeking psychological help, 64% said that they need much effort to face their status ( $p = 0.02$ ). However, 82% of women would receive psychological help, whereas only 29% of men expressed this will. These differences were statistically significant ( $p = 0.03$ ). **CONCLUSIONS:** In our study we can conclude that at their first visit to the Oncology Service: 1) There are not gender differences in emotional distress nor in self-confidence to cope against illness. 2) Women express more their desire to

receive psychological help than men. 3) It could be waited for statistically significant differences after including all subjects and analyzed the sample.

#### P-66

##### **Using Participatory Action Research Techniques, Healthy BRCA Mutation Carriers Design a Model of Care**

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**OBJECTIVES:** To identify the unmet medical and psychological needs of healthy women testing positive for BRCA gene mutations and define programs to meet these needs in the context of the Israeli healthcare system. **METHOD:** The study was conducted using Participatory Action Research (PAR) techniques. PAR involves a spiral of steps, each encompassing a circle of planning-action-fact finding. Using PAR techniques involving a series of focus group interviews and intensive discussions, we worked closely with one group of eleven health professionals from diverse disciplines and three focus groups of 23 healthy female BRCA carriers recruited from a genetics clinic. Focus groups were led by a trained moderator and the researcher. **RESULTS:** Through their narratives, carriers described dilemmas and ongoing stress associated with the constant threat of illness, mixed messages from caregivers, practical barriers to care, and a lack of psychosocial support that affect and sometimes radically change life perspectives. Participants suggested a 'one-stop' center to provide medical and psychological care. Their ideas were presented to focus groups of health care professionals who manage care for healthy carriers. A multidisciplinary outpatient clinic for healthy carriers was opened. **CONCLUSIONS:** The primary study outcome was inception of a one-stop multidisciplinary clinic incorporated into an existing healthcare setting. The clinic provides medical and psychosocial services, including improved access to imaging surveillance, as well as expert medical consultation and counselling. In addition to providing a response to the healthcare issues presented by the healthy BRCA mutation carriers, the study findings strengthened interdisciplinary connections among participating nurses, genetic counsellors, and physicians, and psycho-oncologists.

#### P-67

##### **Enhancing Empathy Among Medical Students Towards Psychosocial Needs of Cancer Patients and Their Families Through Micro-Skills Interview Training**

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**OBJECTIVES:** This quasi experimental study assessed and compared the effectiveness of faculty-supervised and self-instructional listening micro-skills training in increasing the responsiveness of medical students to the psychosocial needs of cancer patients and their families during medical student-patient-family member interviews. **METHOD:** Seventeen final year medical students were randomly assigned to conditions for training and to baselines within each condition. Training conditions were identical in informational content and time requirements. Self-instructional training incorporated two videotapes developed for the study. Data from the training conditions were analyzed separately through the use of graphs, statistical analyses, and t-tests, comparatively, and on the basis of overall training effectiveness across all participants. The standard for significance was .05. **RESULTS:** Faculty-supervised training was more effective than self-instructional training in increasing responsiveness as measured by (a) observational data from videotaped interviews, (b) patient and family member ratings of interviews, and (c) number of psychosocial needs recognized on medical student dictation reports. Overall use of training was effective in increasing (a) appropriate use of four interview micro-skills, (b) patient and family member interview ratings, and (c) number of psychosocial needs recognized on dictation reports. **CONCLUSIONS:** The two training conditions were hypothesized to be equally effective in increasing responsiveness as measured by a content-based mastery test. However, graphed data and t-test results indicated that faculty-supervised training was effective in increasing scores and self-instructional training was not. T-test results indicated that overall training was effective in increasing scores on the mastery test.

#### P-68

##### **The Effectiveness of Delivering Unfavorable News to Patients Diagnosed with Cancer Training Program for Future Oncologists in Orissa, India**

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**OBJECTIVES:** Collaborative communication, rather than one-way authoritarian, physician-led medical interview, is significant in navigating difficult circumstances like delivering 'bad news' to patients diagnosed with cancer. Additionally, the potential psychological effects of breaking bad news in an abrupt and insensitive manner can be devastating and long-lasting for both the patient and family. Delivering the unfavorable news to patients is a challenging task and is now getting the attention of medical professionals in many countries like India. **METHOD:** The purpose of this study was to investigate the effectiveness of a pilot

training program 'Delivering Unfavorable News to Patients Diagnosed with Cancer' conducted in Orissa province of India. A total of 44 oncologists-in-training from the state ( $N = 44$ ,  $n = 22$  [treatment],  $n = 22$  [control]) completed Self-Efficacy, Interpersonal skills, Empathy, and Physician Belief, and demographic instruments before, immediately after, and then two weeks after the training intervention. **RESULTS:** Results of MANOVA and bivariate statistical analyses revealed significant differences in self-efficacy, empathy, and Physician Belief scores within the experimental group, but not within the control group, from pre-test to post-test. **CONCLUSIONS:** The follow-up data analysis suggested that participants maintained the level of change that occurred immediately after the training intervention. It is recommended that such training should be an integral part of the course program for the oncology residents.

#### P-70

##### **Information Seeking Behaviors Among Breast Cancer Survivors with Limited English Skills**

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**OBJECTIVES:** Attempts to acquire information about their disease are very common among cancer patients and the Internet has become a major source of health information. Little attention has been focused on the use of Internet for breast cancer survivors with limited English skills. The purpose of this study is to describe the health information seeking behaviors and the use of the Internet by Asian American breast cancer survivors. **METHOD:** Chinese and Vietnamese breast cancer patients diagnosed within the previous 5 years participated in face-to-face interviews with a bilingual interviewer. Participants were recruited from media, hospitals, clinics, and cancer support groups. A total of 98 breast cancer survivors participated in the survey. **RESULTS:** The mean age was 56 years old. The mean time since breast cancer diagnosis was 29.8 months. We found that 42.9% of participants reported never using the Internet for health information. Internet users tend to be of higher socioeconomic status, acculturated, younger age and Chinese ethnicity. Only 9.2% of study participants have used email or gone to website to communicate with a doctor's office or to get advice from an online health care provider. **CONCLUSIONS:** Electronic communication may help patients to ask questions, facilitate understanding and reduce unnecessary appointment. However, health providers who want to reach non-English speaking cancer patients need to take into account the low use of Internet resources.

Findings from this study can be used to assist in the development of culturally appropriate and effective tools to encourage cancer survivors with limited English skills to learn more about their disease.

#### P-71

##### **Spirituality, Symptom Distress, Depression and Quality of Life of Advanced Cancer Patients**

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**OBJECTIVES:** To study Spiritual Well being (Sp WB) and its influence on symptoms of distress, depression and other dimensions of Quality of life in advanced cancer patients undergoing palliative care. **METHOD:** The study was cross sectional in nature where 50 patients with advanced cancer from a Hospice were recruited and they have been assessed with Visual analogue scale for pain, M.D. Anderson symptom inventory (MDASI), Hospital Anxiety Depression Scale (HADS), Functional assessment of cancer therapy-Palliative Care (FACT-pal) and Functional assessment of chronic illness therapy-spiritual well-being (FACIT-sp). Spirituality was correlated with different variables of other scales. **RESULTS:** Depression is negatively correlated with Spiritual well-being (Sp WB). Sp WB was significantly correlated with fatigue ( $r = -0.423$ ,  $p = 0.002$ ), symptom distress ( $r = -0.717$ ,  $p < 0.001$ ), memory disturbance ( $r = -0.520$ ,  $p < 0.001$ ), loss of appetite ( $r = -0.399$ ,  $p = 0.004$ ), drowsiness ( $r = -0.400$ ,  $p = 0.004$ ), dry mouth ( $r = -0.381$ ,  $p = 0.006$ ) and sadness ( $r = -0.720$ ,  $p < 0.001$ ). Sp WB was strongly positively correlated with all the other aspects of QOL. Palliative care well-being ( $t = 2.840$ ,  $p = 0.008$ ), distress ( $t = -2.582$ ,  $p = 0.015$ ), sadness ( $t = -2.765$ ,  $p = 0.010$ ) were significantly correlated with SpWB after regression analysis. **CONCLUSIONS:** This study suggests that Spiritual well being is an important component of quality of life of advanced cancer patients, and is closely related to physical and psychological symptoms of distress. It should be addressed appropriately and adequately in palliative care settings.

#### P-73

##### **The Name of the Illness is Cancer: On Disclosures and Secrets in the Family**

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**OBJECTIVES:** Parents facing death need guidance and support when sharing the information with

their children. Most investigations focused on the impact of parental cancer diagnosis during early stage disease and rarely in advanced and terminal stages. We produced a film to encourage discussion about the gap between the unmet needs of the parents, and this lack of knowledge amongst professionals. **METHOD:** 'The Name of the Illness is Cancer: On disclosures and secrets in the family', is a 25 minute film, based on narratives of six families in which one of the parents has a terminal illness. It was produced by the Psycho-Oncology Unit in a comprehensive cancer center in Israel, for educational purposes. The film deals with dilemmas, fears and the complexity of telling young children about the imminent death of a parent. **RESULTS:** The film was produced within the last two years based on the narrative method and since then has been presented to a number of professional conferences and seminars. Although the film is free only few families have taken it home. **CONCLUSIONS:** The film has been enthusiastically embraced nation-wide by healthcare professionals who felt it filled a gap in their knowledge. The film emphasizes the need for further studies in this area emphasizing communication between professionals and families. The film is only one step in the process of exploring and debating painful and sometimes secretive issues. We believe that this film can help professionals from other countries and therefore added English subtitles.

#### P-78

##### **Designing an Online Training Platform for Promotors**

Haley Justice

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**OBJECTIVES:** In 2006, LIVESTRONG created an in-person cancer survivorship training curriculum for Promotors. The goal of the training is to provide Promotors the knowledge, skills and confidence to work with cancer survivors in their community. After disseminating the curriculum to Promotors and Community-based Organizations, we learned that Promotors oftentimes face barriers to completing in-person training, such as time to participate in an 8-hour training, lack of training in their communities and inability to travel to training. **METHOD:** LIVESTRONG created an online version of the training. The method of delivering the training was discussed among a group of Hispanic/Latino advisors, many of whom are Promotors or work with Promotors. Advisors determined that the online training needed to accomplish the same goals as the in-person training and also engage the participants to ensure that they complete the training. The most effective format to accomplish this would be a video training,

supplemental videos and quizzes. **RESULTS:** LIVESTRONG created a video version of the training using a facilitator and Promotors. We also created a supplemental video of interviews with Promotors and the cancer survivors they serve. Throughout the online training, users are trained using videos and key concepts are reinforced through in-session quizzes. Additional videos of cancer survivor's stories are also interspersed throughout the training. To successfully complete the training, users must pass a final, cumulative quiz at 70%. **CONCLUSIONS:** 100% of Promotors who have completed the training said the training would improve their work with cancer survivors and they would recommend the training to other Promotors. LIVESTRONG has also received requests from international audiences to complete the training. As the number of Promotors continues to increase, it is important to explore online modalities as a form of training delivery. This format is also provides an opportunity to educate a global audience on cancer-related topics.

#### P-79

##### **Struggling Without Relief from Inconclusive BRCA 1/2 Results: Psychological Impact on Individuals at Risk for Hereditary Cancer**

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**OBJECTIVES:** Currently, little knowledge exists on the psychological impact of receiving inconclusive results to BRCA1/2 among women affected with cancer. Current literature revealed the fact that genetic testing in the context of inconclusive results is mostly under investigated calling for research to explore the psychological consequences of continuing uncertainty. This study aimed to address the aforementioned gap by describing the emotional reactions of women affected with cancer to the receipt of inconclusive BRCA 1/2 results. **METHOD:** A retrospective descriptive interpretive design was used. Analysis consisted of identifying common themes among the 21 open interviews conducted with women at risk of hereditary breast and ovarian cancer who received inconclusive BRCA1/2 genetic test results. All women were recruited from one hereditary cancer program in Canada. **RESULTS:** Lack of relief from the receipt of inconclusive BRCA1/2 results was expressed by 17 of the women. Lack of relief came from not knowing the etiology of their own cancer diagnosis; why there were so many cancers in their family; not knowing if their family was truly at risk of hereditary cancers, and from not knowing if they had passed down an inherited cancer mutation to their children. **CONCLUSIONS:** Contrary to potential assumptions of clinicians that the

recipients of inconclusive genetic test results experience relief similar to people who test true-negative, the findings from this study revealed that even among those who felt relief, the relief was only temporary.

#### P-82

##### **Effect of Religion and Spirituality in Adjusting Quality Of Life of Patients with Cancer in Saudi Arabia**

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**OBJECTIVES:** The study's main purpose is to examine the role of religion and spirituality in adjusting quality of life of patients with cancer Saudi Arabia population. **METHOD:** Structured interviews will be conducted with 100 patients recruited from Oncology center at KFSH. Both positive religious coping (e.g. benevolent religious appraisals), negative religious coping and multiple dimensions of QOL (physical, psychological, existential and support) will be studied. This measures will be used: (McGill QOL questionnaire), Pargament Brief Religious Coping Scale, Multi-dimensional Measure of Religion/Spirituality, self-efficacy, socio-demographic variables, Functional Assessment of Chronic Illness Therapy-Spiritual Well-Being and Profile of Mood States-Short Form (POMS-SF). **RESULTS:** Expected Results: Significantly positive religious coping associated with better QOL as well as higher scores on the existential and support QOL dimensions will be observed. In contrast, greater use of negative religious coping will result in poorer overall QOL and lower scores on the existential and psychological QOL dimensions. Spiritual decline will be associated with poorer adjustment, greater depression and poorer spiritual well-being. Negative religious coping will be related to poorer overall QOL and psychological QOL dimensions. **CONCLUSIONS:** Expected Conclusions: Findings will show that religious coping plays an important role for the QOL of patients and the types of religious coping strategies used are related to better or poorer QOL.

#### P-86

##### **The Trajectory of Costs over the Participation in a Palliative Care Program: A Canadian Perspective**

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**OBJECTIVES:** The study aimed to highlight the trajectory of costs over the participation in a palliative care program in five Canadian urban regions. **METHOD:** A cohort of 160 patients newly enrolled in a palliative care program and their main informal caregivers were consecutively recruited. The participants were followed every two weeks until the patient's passing. They were asked questions on the goods and services they used related to the patient's health condition. Informal caregivers were also asked questions on the time they spent on providing care and assistance to the patient. **RESULTS:** The overall costs of care gradually increased from the fifth to the last month of the patients' life. Inpatient care constituted the largest component of this cost increase. Among outpatient care, home care sustained the largest increase in costs over time. Informal care costs were particularly high over the last three months of the patients' life. **CONCLUSIONS:** The study findings indicate that programs and services that offer some sort of financial assistance are most needed during the final three months of life. The knowledge gained from this study could be useful to policy makers when developing policies that aim to support families taking care of a terminally ill loved one at home.

#### P-90

##### **Nurses in Outpatient Chemotherapy Center May Have Difficulty in Assessing Their Patients' Symptoms and Supportive Care Needs**

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**OBJECTIVES:** Accurate evaluation of symptom severity as well as supportive care needs is crucial to the provision of optimal supportive care. The purpose of this study was to investigate how well nurses in an outpatient chemotherapy center recognize their patients' physical and psychological symptoms and supportive care needs in routine clinical practice. **METHOD:** Nurses and a sample of randomly sampled patients undergoing chemotherapy at an outpatient chemotherapy center participated. This study was approved by the Institutional Review Board and full written informed consent was obtained. Patients reported the severity of their symptoms and supportive care needs using validated questionnaires. Nurses

completed a survey in which they indicated their recognition of each patient's level of these problems immediately following their consultation. These two data were compared statistically. RESULTS: Complete data were available from 211 patients. Among them, 69% had advanced cancer. Prevalence of most of symptoms reported by nurses were much lower than that patients reported, resulting sensitivity was less than 50% and specificity was greater than 85% for all symptoms except fatigue, appetite loss and hair loss. Nurses recognized physical and psychological needs relatively better than other domains of needs. Kappa index was generally low ( $<0.49$ ). CONCLUSIONS: Nurses in outpatient chemotherapy center may not recognize their patients' physical and psychological symptoms and supportive care needs. Incorporating standard symptom and needs assessment in clinical practice may heighten nurses' awareness of their patients' symptoms.

#### P-93

##### **Psychological Aspects of Doctors Who Work with Oncology Patients**

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OBJECTIVES: This work had the objective to know which psychological aspects are present in the doctor who takes care of patients with cancer, and also to identify which personal and institutional strategies are used to support them, starting from that professional's perspective. METHOD: The methodology used was a qualitative research. It was used the procedures of the field diary and directed interviews with semi-open questions. The interviews were accomplished with doctors who takes care of oncology patients from a public hospital in Brazil. RESULTS: The results were analyzed from thematic content analysis, using theoretical references of the psychoanalysis and the public health. The main results were investigative and scientific interests, appreciation of the doctor-patient relationship, support in the multidisciplinary team, difficulty in communicating the cancer diagnosis and death possibility. The most of doctors found difficult to identify their own feelings, but some related feelings of impotence, anguish, fear of recurrence, difficulty to handle with death and for looking help. CONCLUSIONS: That is necessary training medical students and doctors in professional practice about psychological approach. Most of the results points to the need to create spaces of meaning production of medical practice in oncology. Like to speak in death, suffering and other feelings, communication in the relationship doctor and patient. Care for the caregiver can assist the professional in under-

standing the your own needs and the self-knowledge, understanding the illness process, reflecting in the quality care to patients with cancer in the public health system in Brazil.

#### P-94

##### **Depression, Anxiety and Decisional Regret in Cytogenetic Prognostication for Patients with Uveal Melanoma**

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OBJECTIVES: This study was undertaken to further understand the effect of cytogenetic prognostication in patients with uveal melanoma with regard to mood and anxiety. Further, to understand any decisional regret that these patients may experience either immediately after making the decision to have testing or later, after the results of the testing have been known. METHOD: Patients diagnosed with uveal melanoma were offered enrollment in an IRB approved study for cytogenetic testing of the tumor to determine prognosis. These patients were asked to complete the Hospital Anxiety and Depression Scale (HADS) along with a decision regret scale at three time points—pre-operatively, at post operative time points of 3 and 12 months. RESULTS: Results are currently being obtained and preliminary findings (i.e. pre-operative and 3 month follow up) will be available at time of conference. CONCLUSIONS: We suspect finding higher anxiety with low decision regret pre-operatively. Post-operatively, we believe there will be higher depression and continued low decision regret. Again, current findings will be presented at the meeting.

#### P-95

##### **Using a Logic Model for the Implementation of a Psychosocial Oncology Telehealth Program**

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OBJECTIVES: In response to the growing body of research that supports telehealth as a way to provide equitable, cost-saving, patient-centered cancer care, BC Cancer Agency, Patient and Family Counseling Services formed a working group with an aim to increase the use of telehealth with patients living in rural and remote locations. A logic model articulates the cultural shift involved in helping both clinicians, patients and referring professionals gain awareness and increase usage of this innovative technology. METHOD: A best practices review was conducted, a vision, goals and a logic model were developed to help articulate and evaluate the change process involved in

meeting desired outcomes. Several pilot projects were identified based on existing experiments with uses of telehealth to deliver psychosocial services. The working group meets to specifically to nurture the development of these pilot projects as well as promote the overall awareness and use of telehealth within multidisciplinary cancer care system. RESULTS: This initiative is currently in the early stages of fostering knowledge exchange among key stakeholders including practice leaders and staff within the program, other disciplines, administrators and the community oncology network. Four pilot projects have been identified. This initiative's success depends on an effective partnership between BCCA and referring professionals in the community to identify specific priorities for pilot projects establish work plans and draft protocols for the implementation of a psychosocial oncology telehealth program. CONCLUSIONS: The complexity of the cultural shift to increase the use of telehealth requires a tool such as a logic model to provide a framework for common understanding and measurable change. Initiating and supporting pilot projects which increase the use in 2 way video conferencing for patient and family counseling will add to the growing body of research that supports the effective use of telehealth in rehabilitation and supportive cancer care.

### P-103

#### Evaluation of Trait Anxiety as Predictors of Psychological Distress and Low HRQL Among Breast Cancer Patients

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OBJECTIVES: Cancer patients frequently experience multiple and co-occurring problems due to their illness and therapies. Only few studies have suggested the contribution of specific psychological factors during cancer therapy. We have focused on trait anxiety, which is a general tendency to exhibit anxiety, as an important factor when considering psychological distress in breast cancer patients. METHOD: A total of 157 women participated in this study. All patients that were referred to a medical oncologist were asked to complete five questionnaires (STAI, HADS, EORTC QLQ-C30, BR23, and KCSI) at baseline, three month, and six month. STAI-Trait score were divided into two groups with a median cut off point (41). Then, we performed one-way ANOVA to determine the STAI-Trait scores as independent variables for possible predictors of psychological distress and

low HRQOL. RESULTS: Our response rate was 99 percent (156/157 patients). The ANOVA results showed a statistically significant difference in low role functioning, cognitive functioning, emotional functioning, social functioning, future perspective and high fatigue score, which were high STAI-Trait scores when compared to the low STAI-Trait scores ( $p < 0.01$ ). Patients who had a high trait anxiety were found to have a low HRQOL compared to those with a low trait anxiety. CONCLUSIONS: In conclusion, our results suggest that patients with a high trait anxiety are at risk of a low HRQOL, and trait anxiety could be used to screen and identify patients at the highest risk of experiencing psychological distress during cancer therapy.

### P-106

#### Cancer in the Elderly: The Influence of Life Stage on Psychosocial, Supportive and Informational Needs

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OBJECTIVES: Elderly (<65 yrs.) cancer patients are perceived to be an under-served group but will become majority users of future cancer services. Research on the specific needs of older patients is needed. Study questions are: (i) Do psychosocial, informational and support care needs in the elderly (<65 years) differ from younger patients?; (ii) Is there evidence during the year after diagnosis that older patients' psychosocial, supportive and informational needs are being met? METHOD: Using a prospective questionnaire design, patients are approached at 3 and 9 months following primary diagnosis. Comparisons are between non-seniors (<64 yrs.) and seniors (65+) in the major diagnostics groups (Breast, Colorectal, GU, Lung cancers). Assessment is made using the Support Care Needs Survey and the Information Satisfaction Questionnaire. Co-morbidity data are collected using the EORTC QLQ Functional Status subscale. Patients with a prognosis of <12 months or inability to complete questionnaires are excluded. RESULTS: Recruitment and follow up is continuing.  $N = 191$  patients have been enrolled to date. The commonly reported needs across the sample are 'psychological support' (74%), 'Health systems and information' (62%) and physical and daily living (61%). Needs appear to be met in the area of patient care and support and sexuality. 47% of patients reported a need for easier access to services. Comparisons between senior and non-senior groups will be presented. CONCLUSIONS: The more commonly reported concerns were 'fears about cancer spreading' (50%), 'concerns about the worries of those close to you' (47%), 'fears about

cancer returning' (42%) and 'uncertainty about the future' (42%). Comparisons between senior and non-senior groups will be presented. Preliminary analysis across the whole cohort highlight several areas of unmet need. Age specific comparisons while not available at present will be reported.

#### P-109

##### Long-term Neurocognitive Outcomes in Adult Survivors of Childhood Medulloblastoma

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**OBJECTIVES:** Medulloblastomas are the most common malignant brain tumors that occur in childhood. This disease used to be fatal, but with the advent of craniospinal radiation (CSI) treatment, survival rates improved. However, CSI is associated with progressive neurocognitive and physical deterioration, and younger children are most vulnerable to these late effects. Survivors are thought to be at risk for accelerated aging, but little is known about the first generation of survivors as they approach middle age. **METHOD:** In this retrospective cohort study, we assessed 17 adults, 8–42 years (median 20 years) after diagnosis of medulloblastoma in childhood, treated with surgery and radiation. Six patients also received chemotherapy. We conducted a cross sectional analysis of their current neurocognitive and physical status. Data from prior neuropsychological assessments 1–31 years (median 6.6 years) after diagnosis were available for 15, and we used growth curve analyses to model individual change over time for those participants. **RESULTS:** All participants exhibited health problems including hearing impairment, second cancers, diabetes, hypertension, and endocrine deficiencies. Fourteen were single and living with their parents, only three were competitively employed. The group was below average across multiple neurocognitive domains (e.g. mean IQ = 87.13, SD = 15.03) and 88% required accommodations at school for learning disorders. Longitudinal analyses revealed stable verbal abilities and processing speed decades after treatment was complete, but working memory ( $\pm$ SE:  $-0.5 \pm 0.2$ ,  $p = 0.02$ ) and mathematics ( $\pm$ SE:  $0.96 \pm 0.18$ ,  $p < 0.0001$ ) continued to decline. **CONCLUSIONS:** Medulloblastoma survivors face ongoing physical, psychosocial, and neurocognitive challenges in adulthood, including progressively impaired working memory and persistently slow processing speed. They have limited resources with which to confront the challenge of aging, given diminished physical,

cognitive, and neural reserve. These survivors will require social and economic support when their aging parents are no longer able to care for them.

#### P-113

##### Anticipatory Mourning: The Unrecognized Grief in an Acute Care Setting

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**OBJECTIVES:** This poster presentation will focus on the process undertaken by our Palliative Care Social Workers to address the gap evident in our acute care hospital when helping patients and families deal with an anticipated loss. Our goal was to assist these individuals to decrease feelings of isolation, alienation and hopelessness. In addition, we hoped to facilitate their exploration and navigation of the meaning and significance of anticipatory grief. **METHOD:** Through our clinical experience, literature review and presentations we recognized Anticipatory Grief both as an instrumental component of mourning, as well as a process that lacks sufficient information for health care workers, patients and families. This is particularly evident within The Ottawa Hospital and the Champlain Local Health Integration Network (LHIN). After receiving information from various Canadian Palliative Care programs, we were able to ascertain the relevance of having clear and concise information readily available. **RESULTS:** Based on information from the Victoria Hospice bereavement package, we developed a psycho-educational pamphlet on Anticipatory Grief for use at The Ottawa Hospital that is user friendly. It was primarily designed to provide patients and their families facing terminal illness with a clear definition and understanding of this particular type of grief, how it might be impacting them, as well as preliminary coping strategies. **CONCLUSIONS:** The pamphlet entitled 'What is Anticipatory Grief' has been printed locally to be utilized by our Palliative Care team at The Ottawa Hospital. We will pilot this pamphlet over a six month period and obtain feedback from our patients, families and staff members. Our plan is to review and revise as required. It is being piloted with the intention of potential use throughout our Champlain Local Health Integration Network for all palliative patients and families.

#### P-117

##### The Effects of Chemotherapy on the Appearance of Delirium in Cancer Patients

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**OBJECTIVES:** Delirium is one of the most common neuropsychiatric complications seen in hospitalized patients with cancer, occurring in up to 90% of cancer patients in the last weeks of life. However, the mechanism of delirium has not been clarified enough. There are few patient-reported data regarding delirium after chemotherapy. The objective of this study was to investigate the effects of chemotherapy on the appearance of delirium. **METHOD:** This study was conducted by means of case control study. The subjects of this study were cancer patients who were hospitalized and died in our hospital between September 2007 and December 2009. The presence of delirium was analyzed between a chemotherapy group (Group 1) and a non-chemotherapy group (Group 2). We examined the diagnostic criteria of the delirium outlined by DSM-TR. We also excluded patients with delirium during the last week of their life, and hypoactive type of delirium. **RESULTS:** Between both groups, there were no significant differences in the age, sex and the use of opioids and steroids. In 151 cases, Group 1 were 99 cases, and delirium had developed in 32 cases(32%), and had not developed in 67 cases(68%) Group 2 were 52 cases, and delirium had developed in 8 cases(15%), and had not developed in 44 cases(85%). We found a significant difference between both groups ( $p = 0.04$ ). **CONCLUSIONS:** We did not investigate the difference among PS, the duration of the illness, coexisting illness, the combination of different medicine, the quantity and the duration of opioids and steroids, and the psychosocial background. Further studies should be undertaken to clarify these problems. However, our findings suggest that chemotherapy might be a risk factor of the delirium in the cancer patients.

#### P-118

##### **The Significance of a Specific Outpatient Service for Cancer Patients by Psychosomatic Doctors in Japan**

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**OBJECTIVES:** Psycho-oncological practice is carried out mainly by psychiatrists as a part of liaison psychiatry all over the world. In Japan, Psychosomatic medicine has been developed specifically in internal medicine. We set up a new outpatient service for cancer patients in our department. The aim of this study is to evaluate a specific outpatient service for psycho-oncology by psychosomatic doctors from the view of multidisciplinary team medicine. **METHOD:** Multiple factors such as age, sex, affiliation, cancer type, chief complaint, the reason for consulting, psychiatric diagnosis and

therapy of cancer patients who visited our specified outpatient service for psycho-oncology were analyzed. Both the advantages and issues concerning psychosomatic doctors and specific outpatient service for psycho-oncology that should be improved in the future, were discussed. **RESULTS:** Various types of cancer patients from both outpatient and inpatient departments such as surgery, gynecology and palliative care medicine visited our specific outpatient service for psycho-oncology. The reasons for consultation were various, for example: psychological support for receiving bad news, operation and chemotherapy, controlling of delirium, and for terminal care and family care. Physical and mental conditions and the relationship between patients and their main doctors were improved by the intervention by psychosomatic medical doctors. **CONCLUSIONS:** Psychosomatic medical doctors can serve an important role in this field in both the physical and mental aspects of cancer treatment. The advantages of a specific outpatient service for psycho-oncology are that it can provide an open door to patients who belong to other departments and hospitals and it can deal with cancer patients efficiently. However, the shortage of budget and trained staff, and authorization by the government should be further discussed.

#### P-119

##### **Influence of Perceived-Actual Risk and of Role Preference on Risk Management Interests Among Women at High Risk for Breast Cancer**

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**OBJECTIVES:** Perceived risk is central to health-protective behaviour models which assume that adopting such protective behaviour is based upon perception of being highly susceptible to a disease. These models predict that a high sense of susceptibility to breast cancer may motivate women seeking advice from high risk clinics. Our objective is to determine the influence of perceived and actual risk and of preference for participation in preventive decision on pre-counselling risk management preferences. **METHOD:** We retrospectively analyzed a pre-counselling questionnaire routinely administered. So far, 200 women consented. Items for calculating risk, questions concerning interests in risk management strategies, perceived risk ('What do you think the likelihood in %- is of you developing breast cancer in your lifetime?'), and role ('What role would you like to take in making your decision?' with 'I make final

decision, I and doctor make final decision, and doctor makes final decision') are reported. **RESULTS:** Actual risk had no effect. Perceived risk only affected women who wanted to make the final decision themselves. Their levels of interest in tamoxifen and trials were low and affected by perceived risk. These women had high level of interest in lifestyle choices which was also affected by perceived risk. Role preference also influenced interest in pharmacoprevention and in participation in clinical trials, women wanting shared-decision being more interested in these options. **CONCLUSIONS:** Breast cancer prevention decision making is complex. Our study is the first to demonstrate that pre-counselling role preference influences the breast cancer preventive strategies that high-risk women are considering. We also demonstrate the moderating effect of role on the impact of perceived risk on prevention decisions. When recommending risk management strategies, it may be particularly important to discuss risk perception with women who want to make the final decision about their cancer prevention options.

#### P-121

##### **The Impact of Menopausal Symptoms on Quality of Life Among Post-Menopausal Early Breast Cancer Survivors: The Role of Personality**

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**OBJECTIVES:** Menopausal symptoms (MenS) affect quality of life (QoL) and are common among post-menopausal early breast cancer (EBC) survivors. There is a paucity of data concerning the role of psychological factors on MenS and their impact on QoL. We prospectively evaluated whether trait anxiety (a personality construct) is a moderating factor of the influence of symptoms on QoL in 200 women treated for EBC or colon cancer. We report findings from the EBC cohort at baseline. **METHOD:** Eligible patients were postmenopausal (absence of menses  $\geq 12$  months) prior to diagnosis. Assessment was done prior to hormonal therapy and, for those receiving systemic therapy, within 1 month of completing chemotherapy. The Functional Assessment of Cancer Therapy-Endocrine Subscale was used to evaluate QoL and MenS and the Spielberger State-Trait Anxiety Inventory assessed anxious predispositions. The study began in February 2009 and of 70 patients currently enrolled, half have now completed the baseline questionnaires. **RESULTS:** Our preliminary analyses indicate that 61% of patients experienced MenS. Regression analyses confirmed the negative

association between the report of MenS and QoL ( $p < 0.01$ ). Trait anxiety had a considerable impact on symptom reports ( $p < 0.01$ ) and on QoL ( $p < 0.01$ ). Among women who experienced MenS, greater anxiety was associated with lower QoL ( $p < 0.01$ ). More importantly, there was no influence of symptoms on QoL for women who scored low on anxiety. **CONCLUSIONS:** Our key finding is that personality appears to minimize the negative impact that MenS have on QoL. Survivors with low anxiety reporting MenS had equivalent QoL as survivors who did not experience MenS. Clinician involved in follow-up care should take into account the personality of the survivor for the effective management of MenS. Support aimed at improving QoL may be most beneficial for highly anxious survivors with MenS.

#### P-123

##### **Screening Breast Cancer Survivors with the Hospital Anxiety and Depression Scale and the Distress Thermometer**

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**OBJECTIVES:** Screening for psychosocial distress, the Hospital Anxiety and Depression Scale (HADS) has been reported to have good sensitivities and specificities for breast cancer survivors. However, it has not been established for the Distress Thermometer (DT). This study evaluates the validity of the DT as compared to the HADS in breast cancer survivors. **METHOD:** The HADS is a 14-item instrument that has been widely used in psycho-oncology researches and practices. The DT is a one-item distress screening recommended by the National Comprehensive Cancer Network (NCCN) for cancer patients, but not yet for cancer survivors. 215 consecutive outpatient breast cancer survivors completed packets of questionnaires, including the DT and the HADS. **RESULTS:** Using a HADS total score (HADS-t) of  $\geq 15$  as the gold standard, Receiver Operating Characteristic (ROC) analysis identified a DT score of  $\geq 3$  as the optimal cut-off, with sensitivity and specificity of 80% and 78%. The area under the ROC curve (AUC) was 0.85, indicating good discriminative accuracy. The concordant rate of these two scales is 78.6%. At this cut-off point, 38.6% of the patients were judged to be significantly distressed. **CONCLUSIONS:** This study demonstrates that, compared with the HADS, the DT can be a valid screening tool for breast cancer survivors with satisfactory sensitivity and specificity. A lower cut-off than normally recommended for cancer patients was identified.

## P-124

**Defining Mild, Moderate and Severe Distress on the Distress Thermometer—A Pooled Analysis of International Raw Data**

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**OBJECTIVES:** There has been much research on the DT but current cut-offs are somewhat arbitrary. In 2007 the NCCN suggested a cut-point of 4v5 for significant distress; in 2008 this was revised to 3v4. We wished to clarify appropriate thresholds for significant distress as well as defining minimal, mild, moderate and severe distress using the Distress Thermometer. **METHOD:** We pooled published raw data from DT validation studies and requested data from authors. Data was pooled from eight independent studies involving over 2000 people with cancer. We used previously reported large scale studies involving the HADS applied to 20,000 individuals to establish the most likely distribution of distress from least severe (but most common) to most severe (but least common). **RESULTS:** Across all studies 37.5% of patients would be defined as significantly distressed using the 2007 NCCN definition (46% for 2008). Applying a simple algorithm suggests that the following severities of distress are appropriate: insignificant (0–1); minimal (2–3); mild (4–5); moderate (6–7); severe (8–10). From the pooled raw data the proportion of patients in each category are as follows: insignificant—29%; minimal—25%; mild—21%; moderate—15%; severe—10% **CONCLUSIONS:** A simple categorical threshold on the DT can and should be improved. We suggest that definitions of minimal (2–3); mild (4–5); moderate (6–7); severe (8–10) are considered in future work. Insignificant+minimal can be considered below threshold and mild, moderate+severe combined above threshold.

## P-130

**Distribution and Severity Thresholds of Domains in Emotion Thermometers Screening Tool: Analysis of the First 700 Cases**Alex J Mitchell<sup>1</sup>, Karen Lord<sup>1</sup>, Lorraine Grainger<sup>2</sup>, Paul Symonds<sup>1</sup>*University of Leicester, Leicester, United Kingdom<sup>1</sup>, University Hospitals of Leicester, Leicester, United States<sup>2</sup>*

**OBJECTIVES:** The innovative 1998 Distress Thermometer helped confirm the value of simple screening tools in clinical practice. The Emotions Thermometer screening tool (Psycho-oncology 2009), a simple five domain patient-rated visual-analogue scale attempts to improve on the DT by incorporating additional domains of anxiety, depression and anger. Its completion time is less than 2 min. Although we previously reported validity data we

hereby report frequency distribution from the first 716 screened cases. **METHOD:** We analysed data collected from Leicester Cancer Centre from 2008–2009 involving approximately 1000 people approached by clinical nurses specialists for permission to apply screening. Screening was part of a self-report screening programme. 715 consented to complete the scale and gave full data. **RESULTS:** Insignificant levels of emotional difficulty are seen in the following proportions: distress 39%, anxiety 25.6%, depression 50%, anger 55.7%. Mild, moderate or severe levels are seen in 40.8% (distress); 51.9% (anxiety) ; 31.5% (depression) and 30.6% anger. Regarding need for professional help 30% want help, 12% slightly, 7% moderately and 11% severely. Combining all four emotional domains 59.4% had some significant emotional difficulty compared with 40.8% for distress alone. **CONCLUSIONS:** The Emotion thermometers scale offers valuable information beyond distress that includes anxiety, depression and anger. Approximately 60% of cancer patients have a significant emotional problem based on self-report although in this analysis only 201 of 425 such individuals wanted professional help for this problem.

## P-131

**Reliability of the Emotion Thermometers Screening Tool: Principal Component and Cronbach Alpha Results from the first 700 Cases**

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**OBJECTIVES:** We recently developed the Emotions Thermometer screening tool (Psycho-oncology 2009), a simple five domain patient-rated visual-analogue scale that can be applied by specialists and non-specialists. Its completion time is less than 2 min. Although we previously reported validity data we hereby report reliability data from the first 716 screened cases. **METHOD:** Principal components analysis (PCA) is based upon correlation or covariance, and Cronbach's coefficient alpha for scale reliability or internal consistency. Interpretation an alpha >0.7 = reasonable, >0.8 = good >0.9 = excellent internal consistency. If the deletion of an element causes a considerable increase in alpha then one subscale may be redundant. **RESULTS:** The overall scale reliability was Scale reliability alpha = 0.909 (95% lower confidence limit = 0.900). Dropping any of the domains had an insignificant change (change score –0.02 to 0.01) suggest all subscales should be preserved. In terms of principal components (covariance) the eigenvalue of distress was largest accounting for 73% of variance and that of help the least (4%). **CONCLUSIONS:** The Emotion thermometers scale in its original five domain

format appears to offer excellent reliability and all five domains should where possible be retained.

### P-132

#### Factors Related to Social Competence Outcomes in Survivors of Childhood Brain Tumors

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**OBJECTIVES:** It is now well established that survivors of childhood brain tumors develop social competence deficits. Little has been discerned, however, with respect to the source of these social competency deficits among this population. The purpose of the current study, therefore, was to identify factors that may be associated with social competence outcomes in survivors of childhood brain tumors. The factors examined were: 1) disease/treatment; 2) child; and 3) family factors; and the interactions among each. **METHOD:** Participants were 96 childhood brain tumor survivors (51 males, 45 females). The mean age of participants at time of study was 13.10 ( $SD = 2.90$ ) years. Disease/treatment (age at diagnosis, tumor type and location, treatment, time off treatment), child (age, gender, IQ, global-self worth [GSW]), and family (mother and father age, Socioeconomic Status [SES]) characteristics were obtained. Survivors and parents completed the Social Skills Rating System (SSRS) (Gresham & Elliott, 1990). **RESULTS:** Bivariate correlation analyses revealed a significant positive relationship for IQ ( $r = 0.37$ ) and negative relationships for SES ( $\rho = -0.37$ ) and time off treatment ( $r = -0.31$ ) for parent reported SSRS. Tests of moderation revealed an interaction between IQ and SES that was significantly associated with SSRS ( $t = -3.66$ ,  $p < 0.01$ ), with lower SSRS scores related to low IQ and low SES. No significant relationships were found for survivor reported SSRS. **CONCLUSIONS:** This is the first study to examine factors that may be related to social competence outcomes in survivors of childhood brain tumors. It identifies important child (IQ) and family factors (SES) as possible determinants of social competence deficits in these survivors. These findings suggest there is a need for targeted interventions addressing social competence deficits in childhood brain tumor survivors that consider cognitive and family variables as risk factors for social outcomes after surviving treatment.

### P-134

#### Mental Health of Different Healthcare Professionals in a Cancer Hospital

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**OBJECTIVES:** Cancer care professionals are prone to stress-related mental health problems. This study aims to identify the high prevalence groups for psychiatric morbidity among cancer hospital employees of different professions. **METHOD:** We used a 5-item Brief Symptom Rating Scale (BSRS-5) as a screening tool for mental problems. 751 employees including doctors, nurses, administrative and ancillary staffs in a cancer hospital were screened and also asked to identify their stressors. **RESULTS:** Nurses had a significantly higher prevalence of mental problems than other health professionals in the cancer hospital. Subgroup analysis showed that it was the nurses who worked at inpatient units, but not those at ambulatory care units, had a higher prevalence of mental problems. A higher prevalence of mental problems was associated with work-related stressors but not family-related stressors. **CONCLUSIONS:** This study indicates that in a cancer hospital, nurses working at inpatient units are more likely to suffer from mental health problems, which may be linked to work stress. This calls for our attention and intervention.

### P-136

#### Factors Associated with Psychological Distress in Early Breast Cancer Survivors in Taiwan

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**OBJECTIVES:** 38.6 % of breast cancer survivors (BCS) were screened to be significantly distressed in Taiwan. The objective of this study is to investigate the influence of demographic variables, perceived support and Posttraumatic Growth on Psychological distress. **METHOD:** 206 consecutive stage I and stage II outpatient BCS, who had completed treatment for 3 to 24 months, completed packets of questionnaires, including demographic data, the Hospital Anxiety and Depression Scales (HADS), Perceived Support and Posttraumatic Growth Inventory (PTGI). Chi-square test and logistic regression test were used to examine whether stage of breast cancer, marital status, perceived support and posttraumatic growth were associated with psychological distress, which was identified by HADS-Total  $\geq 15$ . **RESULTS:** Logistic regression analyses showed that less perceived support ( $P < 0.001$ ), low Posttraumatic Growth Inventory-total score ( $p = 0.002$ ) and being divorced or widowed ( $p = 0.008$ ) were significant factors associated with HADS-Total  $\geq 15$ . **CONCLUSIONS:** Taiwanese culture is regarded as a more collective

one in which interpersonal interdependent relationship plays an important role in one's coping with illness. The influence of perceived support on distress confirms this observation. Posttraumatic growth might indicate better coping strategies in post-treatment phase. Having breast cancer, going through treatments, and being divorced or widowed, may be considered as repeated experiences of loss. These factors appear to be associated with higher levels of distress.

#### P-142

##### **Does Diversity of Individual Coping Skills Relate to Psychological Adjustment in Breast Cancer Patients and their Partners?**

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**OBJECTIVES:** The end of treatments for breast cancer is a challenging period requiring a variety of coping resources in patients and their partners as well. Coping research suggests that diversity of coping is beneficial for adjustment, in addition to flexibility and using active strategies. This study addresses the association between (1) diversity of coping skills as reported by patients and their partners and (2) individual emotional adjustment. **METHOD:** In a cross sectional design, 74 breast cancer patients and their partners (37 couples) recruited from a cancer care unit in Paris (France) at the end of their treatment completed self-report measures of coping (WCC, Vitaliano *et al.*, 1985) and emotional adjustment (GHQ-28, Goldberg, 1978 and PANAS, Watson & Clark, 1988). Quantitative measures of coping diversity were elaborated, based on variance of coping skills scores at an individual level. **RESULTS:** We used hierarchical regression models to predict emotional outcomes by coping and coping diversity, adjusted for personal and clinical data. Results suggest that coping diversity was uniquely associated with adjustment, above and beyond coping itself. A higher diversity was related with higher distress and lower emotional well-being, although this was found in partners only. **CONCLUSIONS:** Contrary to expectations, results suggested that lower diversity of coping (as reflected by preference for one or two response modes) was associated with better adjustment. Moreover, results suggest a protective effect of active coping and a deleterious effect of avoidance coping in patients as well as in partners.

#### P-146

##### **Evaluation of the Implementation of a Systematic Screening of Distress with Ambulant Cancer Patients**

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**OBJECTIVES:** In 2006, a short screening instrument for distress, called 'the Distress Barometer' (DB) has been developed and validated in UZ Brussel. Beyond a good sensitivity and specificity of the instrument, a multicentric study indicated a good acceptability by doctors and patients as well. In a third step, this study aims to examine whether a systematic screening with the DB is enough to guarantee an efficient detection of distress in every day oncology practice. **METHOD:** Therefore it is necessary to evaluate if the proportion of correctly detected patients with distress is higher when making use of this instrument in comparison with 'practice as usual'. Also, does the referral behaviour of oncologists to supportive care have been influenced? Finally, what are the benefits for the patients? During two months, ambulant cancer patients will be randomly allocated to 'the systematic screening by DB condition' versus 'the clinic as usual condition'. **RESULTS:** Detection rate of distress in the two conditions will be examined as well as differences in referral behaviour to psychosocial and other supportive care. Facilitators and pitfalls in the systematic use of a screening instrument will be analysed. Also the compliance rate of patients to a referral will be looked at. **CONCLUSIONS:** This study will give further indications about how to improve the detection rate of distress. Furthermore, it could be expected that this study reveals some dynamics in referral difficulties and compliance. This may help to develop directions for oncologists on how 'to sell' a referral to their patients if necessary.

#### P-149

##### **Colorectal Cancer Screening in New Brunswick: How Often do Family Physicians Screen Their Adult Patients who are 50 Years of Age or Older?**

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**OBJECTIVES:** According to the Canadian Community Health Survey data, in 2005 only 14% of New Brunswickers 50 years of age and older were

in compliance with colorectal cancer (CRC) screening guidelines. The study objective is to assess how often family physicians order colorectal cancer screening for their asymptomatic adult patient population 50 years of age and older. **METHOD:** An 8 question survey of colorectal cancer screening practices was mailed to 760 physicians currently practicing in New Brunswick. Dichotomized variables 'yes' and 'no', allowed for basic statistical analyses utilizing frequencies. **RESULTS:** Forty percent of family physicians responded. Sixty-two percent reported that they order Fecal Occult Blood Tests (FOBT) every 2 years for their asymptomatic patients 50 years and older. Other screening procedures were ordered less frequently with 36% ordering a colonoscopy every 10 years for their patient population 50 years and older. The family physicians estimated that 46% of the patients in their practice over 50 years of age were 'up-to-date' with CRC screening guidelines. **CONCLUSIONS:** Comparing the population health data and responses of a sample of New Brunswick family physicians, we have found a discrepancy between CRC screening rates according to the Canadian Community Health Survey and family physicians' understanding of their own screening patterns for their patients 50 years and older. It is important to gain a better understanding of the nature of this discrepancy in order to enhance CRC screening rates.

#### P-155

##### **Psycho-Economic Impact of Cancer Diagnosis on Family Relationships and Coping Strategies Among Radiotherapy Patients**

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**OBJECTIVES:** The aim of study is to assess the economic impact of cancer diagnosis on the family relationships and identify the coping strategies among radiotherapy patients. **METHOD:** The study consisted of an interviewer-administered survey instrument of 213 patients who willingly participated in the study following a duly applied informed consent procedure. The questionnaire, called psychosocial, economic and family relationship assessment inventory, was developed by the researchers and validated. It has internal consistency reliability coefficient of 0.76. Brief cope instrument by Carver *et al.* (1997) was also used to assess their coping strategies. Data was analyzed using the SPSS software. **RESULTS:** The subjects consisted of 61 males and 152 females. The study found significant difference in the economic impact of cancer diagnosis on cancer patients and families based on their income.  $p = 0.0.000$ . While the economic impact of cancer diagnosis was found

to be the potent variable responsible for the prediction of coping styles of cancer patients. Religion was found to be the most significant coping mechanism used by the patients and their families. **CONCLUSIONS:** It was recommended that economic assistance in the form of treatment and accommodation subsidization for out-of-town patients be provided, and that psycho-oncotherapy services should consider marital status, involve religious considerations and spousal counseling. Psychologists are also encouraged to enter the field of psycho oncology to help in giving hope and meaning to life through counselling the growing population of cancer patients in the country.

#### P-156

##### **Creative Expressions of Loss and Healing: A Bereavement Support Group**

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**OBJECTIVES:** Expressive arts are used to facilitate the expression and exploration of grief, loss and healing within a group context. The 'Creative Expressions of Loss and Healing' bereavement support group creates a safe environment in which those who have lost a loved one can process their grief and move towards healing. The goal of the group is to invite participants to connect with their artist self and creatively explore their experience through a variety of mediums. **METHOD:** Through music (singing, improvisation, drumming), art (painting, collage, mandalas), writing (journaling, letter writing) and storytelling, group members connect with their creativity. Facilitators employ a heterogeneous, closed group model over a six-week period that is process orientated and member-driven. The time frame of loss for group admission is no less than eight weeks and no more than twelve months. The theoretical underpinning is based on relational and strength models with a focus on a experiential perspective. **RESULTS:** Clinical feedback through anonymous evaluations completed over the span of four groups indicates positive participant experience and self-identified movement through the loss experience and initiation of the healing process. Practice knowledge supports the value of expressive arts as a medium to process loss experiences, as well as create meaning and a healing environment. **CONCLUSIONS:** The use of expressive arts in the context of bereavement nurtures creativity, a sense of meaning, healing and connection to one's inner artist. The positive nature of clinical outcomes suggest a research project is indicated.

## P-164

**Social Support Buffers Against Emotional Distress Only if Support is Wanted: Evidence from a Large Sample of Newly Diagnosed Cancer Patients**

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**OBJECTIVES:** We know that perceived social support serves as a buffer against stress and helps patients with chronic and/or life threatening diseases better cope with their ill health. However, not all individuals low in support seek more support and this raises the question for health professionals whether or not lack of social support should automatically become a target for intervention. **METHOD:** To test this question we evaluated a match-mismatch model in a large sample of 9506 adult cancer patients who came consecutively into first contact with two large urban cancer clinics. We assessed perceived support, desired support, anxiety and depressive symptoms, and quality-of-life (QOL) with the PSSCAN questionnaire. **RESULTS:** High perceived and high desired social support were both independent predictors of emotional well-being. Respectively, these patients experienced fewer anxiety and depressive symptoms ( $R^2 = 0.12$  and  $R^2 = 0.11$ , respectively). In addition, patients who wished more social support than they experienced reported significantly higher anxiety and depression symptoms as compared to patients whose support needs were met ( $R^2$  gain = 0.01 and  $R^2 = 0.01$ , respectively) or those who neither received nor sought support. **CONCLUSIONS:** The results support the hypothesized match-mismatch model such that patients with unmet support needs experience the highest distress levels. With respect to practice recommendations, we advocate for routine assessment of patients' social support presence and support needs when they are faced with chronic and life threatening diseases. We posit that 'pushing' support onto patients who don't want or need it may be a potential waste of resources.

## P-168

**Psycho-oncology Referrals—A Single-Centre Review From Malaysia**

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**OBJECTIVES:** To recognize and treat the occurrence of psychiatric problems via psycho-oncology referrals in managing cancer patients. **METHOD:** This review is looking at all the referrals received

by the Psycho-oncology unit made by the Oncology unit in University Malaya Medical Centre, Kuala Lumpur, Malaysia over a 2-year period. All the patients filled in a proforma to indicate their distress level and problem checklist. The psychiatric diagnosis and treatment offered were obtained from patients' case notes. **RESULTS:** There were 43 referrals received. Of all, 58% had breast cancer and the rests had other types of cancer. The mean age was 53 years and 74% were females. Majority of them knew and understood their diagnosis and prognosis. The mean distress level was 7.1+2.5. There were high reports on worries, sadness, nervousness, fatigue, sleep and eating problems. 37% had a psychiatric diagnosis of major depression. Majority of the depressed patients received mirtazepine or escitalopram. **CONCLUSIONS:** Although the psycho-oncology unit was still at an infantile stage, the cancer patients had started to receive some form of psychological attention for a better quality of life at any stages of cancer.

## P-170

**The Experience of the End of Treatment: Interest of a Systematic Psychological Consultation**

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**OBJECTIVES:** This communication report a research whose purpose was to measure, at the end of the treatments, the impact of a systematic psychological follow up on the patients' subjective experience and the psychic process dynamics of his 'psychic recovery'. The main hypothesis of such a work confirms how important is for patients to be able to link the onset of their cancer with their history of life and with their social and cultural representations of illness. **METHOD:** We established a systematic psychological consultation at the end of treatments for women with breast cancer and for men with prostate cancer, both non-metastatic. The recruitment concerned 100 patients during 1 year. We took in consideration the psychodynamic determiners of this 'work of the disease' a month after the end of treatment and 6 months later, a new interview will be proposed in order return back to the entirety of his experience, work through and reformulate thoughts. **RESULTS:** This study highlights the important work of 'psychic digestion' which is necessary to patients at the end of their treatment. Considering the major anxiety and depressive symptoms' repercussions on the patient's social and personal life, this study provided recommendations in terms of public health, as a systematic psychological counselling at end of treatment, to improve the frame of the post treatments follow up, for patients who have been 'cured' of their cancer. **CONCLUSIONS:** Patients testify through out regular follow up their distress

and confusion that often occur at the end of their treatment. Some of them feel 'lost', 'abandoned'. 'How to live after the disease?' 'How is to live with the threat of a recurrence?' 'How to get back to work, social, cultural investments, even more, how to return to ordinary family life and sexual activity?' New practices, such as this 'consultation of closure', at the end the treatments are necessary.

#### P-173

##### **The Role of the Physiotherapist on the Psychosocial Oncology Team**

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**OBJECTIVES:** The purpose of this presentation is to highlight the role of the physiotherapist in the assessment, treatment and rehabilitation of people living with and surviving cancer and its management. It is also to establish the position of the Physiotherapist as a key member of a psychosocial oncology team, when requiring a multidisciplinary approach to care and support of patients. **METHOD:** A literature review of current Clinical Practice Guidelines and existing Frameworks for rehabilitation and the continuum of care will be presented. An identification of physiotherapeutic interventions specific to the requirements of the oncology population will be offered and defined. **RESULTS:** A better and more complete understanding of both the clinical and professional role of the Physiotherapist in the unique setting of oncology will be an objective. To justify a role for Physiotherapy on the Psychosocial Oncology multidisciplinary team will be the target. **CONCLUSIONS:** By including the Physiotherapist as a member of the Psychosocial Oncology team we are better equipped to minister to the holistic needs of patients as they navigate their way through a demanding and stressful time in their lives.

#### P-174

##### **Improving Outcomes for Families Facing Cancer: A Four Phase Treatment Approach**

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**OBJECTIVES:** In the past 30 years, the number of people surviving cancer has tripled, from 3 million to 9.8 million, and 14–96% of cancer survivors experience disabling fatigue. Chronic illnesses such as cancer, depression and disabling fatigue can be traumatizing, life-changing experiences. The Four-Phase Treatment approach helps patients, therapists and other healthcare providers integrate the new realities of chronic illness into cancer survivors' lives. **METHOD:** The Four-Phase model is

an empirically validated treatment model that recognizes the influences of cultural, psychosocial, and physical factors in assessment and treatment. It is a multi-phased approach that provides a narrative framework and cognitive map for understanding the adaptations in chronic illnesses and syndromes, including cancer, post-cancer treatment, and disabling fatigue. It addresses the complexity of cancer by matching interventions (medical, psychosocial, OT, PT, etc.) to the individual's phase of adaptation to illness. **RESULTS:** Traditional methods alone frequently fail in treating chronic illness because they create false dichotomies between mind and body, chronic and acute illness, and the patient's illness experience and the clinician's participation. However, when traditional methods and established techniques are used within the Four-Phase framework, they are more readily accepted and demonstrate increased effectiveness. **CONCLUSIONS:** The Four-Phase model offers a step-by-step approach grounded in clinical practice to help people with chronic illnesses solve problems and create positive change. Assessing the patient's illness phase and selecting interventions matched to the phase of illness lead to more effective coping and management and better overall outcomes.

#### P-176

##### **Existential Meaning Is Altered by Cancer Experience**

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**OBJECTIVES:** Existential meaning is supposed to constitute a stable trait characterizing individual's capacity to transcend daily life experience and to successfully cope with harmful life events. It is nevertheless unclear whether cancer experience could modify existential meaning and which variables could account for this potential modification due to cancer diagnosis and treatment. Our study aimed at answering this question by assessing twice existential meaning during the first year of follow-up in patients suffering from cancer. **METHOD:** 49 cancer patients aged  $55.4 \pm 10.5$  years (77.6% females; breast ( $n = 27$ ); colon ( $n = 10$ ); head and neck ( $n = 8$ ); ovarian ( $n = 3$ ); lung ( $n = 1$ )) were evaluated 2 to 4 months after the diagnosis (T1) and one year later (T2). Patients completed at T1 and T2 the Life Attitude Profile-Revised

(LAP-R-48) questionnaire (Recker, 1992), which comprises 6 scores (purpose, coherence, choice/responsibleness, death-acceptance, goal-seeking, existential-vacuum), pooled into 2 global scores: the personal meaning index (PMI = purpose + coherence) and the existential transcendence (ET = purpose + coherence + choice/responsibleness + death-acceptance + goal-seeking + existential-vacuum). RESULTS: From T1 to T2 most of LAP-R 48 scores changed. Impairments were observed for purpose, choice/responsibleness, PMI, ET, and an increase for existential-vacuum (all  $p < 0.01$ ); goal-seeking also decreased. No existential meaning change was related to cancer severity. Changes in coherence and PMI differed according to sex, with alterations in women and no change or a slight improvement in men. Existential-vacuum increased especially in young patients ( $r = -0.30$ ;  $p = 0.038$ ). Choice/responsibleness decreased only in patients who underwent chemotherapy. CONCLUSIONS: Findings suggest that a life-threatening experience like a cancer can alter existential meaning, at least one year from the initial treatment. Women and young people appear more sensitive to cancer impact. Despite no control group, the experience of cancer looks more important in these changes than the degree of disease severity. The burden of chemotherapy may also have a specific impact. Assessment of long-term evolution of existential meaning in cancer survivors would be warranted.

#### P-179

##### **Implementation of a Screening Programme for Cancer Related Distress: Part IV—What Determines Willingness of Nurses to Offer Help for Unmet Needs?**

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**OBJECTIVES:** It is generally accepted that cancer clinicians frequently overlook unmet needs and tend not rely upon their own clinical skills. We aimed to examine what factors influence clinicians' willingness to give professional help to patients for psychosocial or physical problems. This formed part of screening programme based on the Emotion Thermometer (DT) delivered by chemotherapy nurses. **METHOD:** Chemotherapy nurses gave their clinical opinion before and after screening patients for distress, anxiety and depression (score of 4 or higher on the ET). We asked nurses to record who they helped for unmet needs why. We report data on 269 nurse-patient interactions, where some form of help was given to only 24%. Of those helped 23 received a referral to a specialist

service which was 16.7% of those screening positive for an emotional complication. **RESULTS:** Of 204 not helped 150 had a 'meetable unmet need' but without treatment. The most powerful influences upon nurses willingness to offer help were 1. patient desire for help 2. number of unmet needs 3. clinicians confidence and 4. patient reported anger (all  $p < 0.01$ ). Anxiety, depression, distress, receipt of training, baseline clinical impression, impression after screening and stage of illness were not influential. **CONCLUSIONS:** About of people with cancer are not offered explicit help and about half have a meetable unmet need. Clinicians with greater confidence decide to help patients who most ask for help or who are angry as well as those with most needs.

#### P-180

##### **Does Clinician Confidence Influence Ability to Detect Depression, Anxiety or Distress in a Cancer Setting?**

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**OBJECTIVES:** It is generally accepted that cancer clinicians are unable to accurately identify distress in routine care. Yet some staff have high confidence and skills whilst others do not. We aimed to examine the influence of staff skills and confidence (with psychosocial issues) on their ability to detection patient reported depression, anxiety and distress. **METHOD:** We asked chemotherapy nurses to give us their clinical opinion on 269 patients who also rated their anxiety and depression or distress. Depression, anxiety and distress were defined by 4 or higher on the ET. Clinicians rated their own confidence levels and their own skill levels and returned the data anonymously for blind analysis. We stratified confidence into a 4 point scale: high > above average > average > below average > low. **RESULTS:** 15% of staff rated their confidence as 'high'; 33% as 'above average' and 37% as 'average.' Only 9% of staff reported receiving training to improve skills. In those with high confidence, detection sensitivity was 71.4% compared with 49% in the above average group and 27.8% in the average group. However detection specificity was 53.3% in the high confidence group versus 81.6% and 93.3% in the average confidence group. There was insufficient data to analyze skills. **CONCLUSIONS:** We conclude that confidence levels do influence clinical judgement by improving sensitivity but reducing specificity. In short high confidence staff tend to over-diagnose depression with more false positives whilst under-confidence staff tend to under-diagnose with more false negatives.

## P-182

**Internal Structure of Illness Cognition Questionnaire Depends on the Time Elapsed Since the Diagnosis of Cancer**

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**OBJECTIVES:** Illness Cognition Questionnaire (ICQ-18; Evers *et al.*, 2001) was developed for assessing illness perception and adaptation to illness. Its factorial structure led to 3 scores: helplessness, acceptance and perceived-benefits. Positive correlations were found in populations suffering from various chronic diseases between acceptance and perceived-benefits, and negative ones between these both dimensions and helplessness. Our study explored whether such an internal structure was replicable in cancer patients, according to the time elapsed since the diagnosis. **METHOD:** 64 cancer patients aged  $55.4 \pm 10.4$  years (75% females; 25% males; cancer site: breast ( $n = 33$ ); colon ( $n = 13$ ); head and neck ( $n = 10$ ); ovarian ( $n = 3$ ); other ( $n = 5$ )) were evaluated 2 to 4 months after the diagnosis (T1) and 51 of them one year later (T2). Patients completed at T1 and T2 the ICQ-18. Severity of cancer was divided in three classes: stage I ( $n = 24$ ), stage II ( $n = 21$ ) and stage III to IV ( $n = 19$ ). **RESULTS:** No significant change was observed from T1 to T2 for the three ICQ-18 dimensions. At T1, acceptance and perceived-benefits were positively correlated ( $r = 0.41$ ;  $p = 0.001$ ) and both were positively correlated with helplessness (respectively  $r = 0.33$ ;  $p = 0.008$  and  $r = 0.43$ ;  $p < 0.001$ ), whereas at T2, acceptance and perceived-benefits were still positively correlated ( $r = 0.53$ ;  $p < 0.001$ ) but both were negatively correlated with helplessness (respectively  $r = -0.28$ ;  $p = 0.043$  and  $r = -0.27$ ;  $p = 0.055$ ). Controlling for cancer severity did not change the patterns of these correlations. **CONCLUSIONS:** 14 to 16 months after the cancer diagnosis, the internal structure of ICQ-18 resembles to that found in different chronic but not life-threatening diseases: helplessness is opposed to acceptance and perceived-benefits, which are positively associated with each other. On the contrary, early after a cancer diagnosis, these three aspects of adjustment to illness are not opposed, but coexist in the same patients, possibly due to the trauma of the announcement and uncertainty.

## P-183

**The Dynamics of Factors That Facilitate or Hinder Volunteer Contribution to End-of-life Home Care for Seniors: Preliminary Results**

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**OBJECTIVES:** Volunteers play a key role in Community Action Organizations (CAOs) and are a mainstay of the palliative care movement. Despite their considerable involvement in health institutions, development of volunteering in home care remains challenging. This multisite study aimed to better understand the factors facilitating or hindering volunteer participation in end-of-life home care with elderly patients, while taking into account the context in which these factors arise and the dynamic that links them. **METHOD:** Qualitative methods were used, based on Giddens' theory of structuration, which takes into consideration the dynamic interactions between the actions undertaken by individuals and the socio-structural context within which these actions take place. Sixty-four ( $N = 64$ ) individual semi-structured interviews were conducted with four groups of social actors: 1) seniors receiving end-of-life home care; 2) informal caregivers of these seniors; 3) professionals giving home care or support; and, 4) volunteers that are members of a CAO. **RESULTS:** Factors that encourage or impede volunteer participation were identified. It was found that each factor has the capacity to either facilitate or hinder volunteer participation, depending on context. Further, it appears that equilibrium between factors is key to understanding volunteer participation. For example, two factors might seem to oppose each other (building trust and maintaining a distance), however it is the reaching a balance between both that facilitates volunteer participation. **CONCLUSIONS:** In order to improve the integration of volunteers into the health and social network of care intended for seniors receiving end-of-life home care, a better understanding of the dynamic relationship between factors that help or impede access to the support they provided must be gained. In this sense, the results of this study could contribute to decision-makers' and professionals' efforts to develop integrated, complete and coordinated end-of-life home care.

## P-185

**Relationships Between Existential Meaning, Coping and Perceived Social Support in Cancer Patients**

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**OBJECTIVES:** Existential meaning is supposed to moderate the adaptation to stressful life changes such as cancer. Potential mechanisms for such moderation are the ways of coping and the quality of social support according to individual's existential meaning. We aimed to study the relationships between these three types of variables in a population suffering from cancer. **METHOD:** 52 cancer patients aged  $55.6 \pm 10.5$  years (75% females; cancer site: breast ( $n = 30$ ); colon ( $n = 11$ ); head and neck ( $n = 9$ ); other ( $n = 2$ )) were evaluated 2 to 4 months after the diagnosis (T1) and 6 months later (T2). Patients completed at T1 the Life Attitude Profile-Revised (LAP-R; Recker) and at T2 the 21 item Cancer Coping Questionnaire (CCQ, Moorey), including measures of perceived stress and thoughts about cancer, and the 12 item Perceived Social Support Questionnaire (PSSQ, Blumenthal). **RESULTS:** Perceived stress was negatively correlated with LAP-R existential-transcendence and positively with existential-vacuum and goal-seeking. Thoughts about cancer were negatively correlated with LAP-R existential-transcendence and death-acceptance. CCQ positive focus was positively correlated with LAP-R purpose and choice/responsibleness. LAP-R existential-transcendence also predicted higher PSSQ total perceived social support and better support from family members and close relationships. Positive associations were additionally found between PSSQ scores and LAP-R purpose or coherence and negative ones with existential vacuum. **CONCLUSIONS:** Existential meaning is both associated with positive focus coping and higher perceived social support, potentially contributing to attenuate or avoid thoughts about cancer and to alleviate perceived stress in patients suffering from cancer. As predicted by LAP-R construct, purpose, coherence, choice/responsibleness play a favourable role, whereas existential-vacuum play an unfavourable one. It is however impossible to know if existential meaning scores reflect previous individual's characteristics or already an impact of cancer diagnosis.

## P-187

**A New Model of Cancer Follow-up Care for Young Adult Cancer Survivors in Atlantic Canada**

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**OBJECTIVES:** Young adulthood is often characterized as a transition period towards adulthood and is associated with the quest for emotional and financial independence. A cancer diagnosis during this time may present unique psychological, sexuality-related, financial, social and physical challenges. The purpose of this study is to identify the needs of young adult cancer survivors and to understand and address any gaps in the current model of cancer follow-up care for this population in Atlantic Canada. **METHOD:** The study will include young adults who are 1–5 years post-diagnosis and were between 18–34 years of age at the time of the diagnosis. This mixed methods research project involves an interview and a survey. The interview will focus on cancer follow-up care, psychosocial issues and suggestions for improvement in cancer follow-up care. The survey focuses on attitudes and the impact of cancer on sexual functioning. **RESULTS:** The study was reviewed and approved by the Dalhousie University Research Ethics Board. Recruitment via social networking websites, online message boards, and the distribution of information posters has commenced. **CONCLUSIONS:** This study will be the first step towards an evidence-based cancer follow-up care model in Atlantic Canada. The modified CFC model may be very applicable to other regions of the country, particularly in regions with rural areas.

## P-195

**Tobacco Exposure and Breast Cancer: Perspectives of Young Women**

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**OBJECTIVES:** Tobacco exposure during adolescence has been established as a risk factor for premenopausal breast cancer. The purpose of this study was to extend knowledge about young women as a target audience for health messaging regarding this new evidence. **METHOD:** Young women ( $n = 125$ ) aged 15–24, smokers and non-smokers, completed an online survey from September 2008–July 2009. Measures include questions about participants' smoking habits and SHS exposure, interest in and perceived importance of information about tobacco exposure as a risk factor for breast cancer, and young women's interest in risk reduction behaviours. Questions were included to assess perceived barriers for

raising awareness about this risk information and recommended strategies. **RESULTS:** The majority of participants reported that this risk information is important to them; with 78% considering reducing their SHS exposure and 28% of smoking women considering changing their smoking habits. Perceived barriers to raising awareness included women not thinking about the long term health effects and not being motivated to find out this information. Preferred strategies for raising awareness included hearing about it from breast cancer survivors and using TV ads. **CONCLUSIONS:** Results will provide guidance in developing tailored health messages and interventions about this modifiable risk factor for breast cancer, and provide direction to influence the tobacco choices and habits of young women.

#### P-198

##### **The Impact of a Child's Death on Family and Dyadic Functioning**

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**OBJECTIVES:** Families may undergo significant change following the death of a child. Family and marital relationships may decline as bereaved parents have reported increased parenting stress. Bereaved siblings have also reported less communication, availability, and support from parents. However, previous research is limited by ascertainment bias, the use of single informants, and retrospective design. Thus, we examined multiple domains of family functioning in bereaved and comparison families. **METHOD:** Three to twelve months after a child's death from cancer ( $M = 11.09$  months,  $SD = 3.66$ ), families with a surviving child ( $n = 55$ ) and matched comparison families ( $n = 48$ ) were recruited from three participating institutions in the US and Canada. Participants completed measures of family functioning (i.e. general, marital, parent-child) during a home based assessment. Bereaved siblings were 8–17 years old and, on average, attending 6<sup>th</sup> grade. **RESULTS:** Preliminary analyses revealed that bereaved and comparison families differed on measures of parent-child relationships, however, marital and overall family functioning were similar.

Bereaved siblings reported lower maternal warmth, and siblings and mothers reported less open and total communication. Small to medium effects were identified for bereaved siblings' and father's report of paternal openness, problems, and total communication. No differences were found on measures of marital functioning. Time since death was not associated with family functioning. **CONCLUSIONS:** Results indicate that there may be some decline in maternal warmth and parent-child communication following the death of a child. However, marital and overall family functioning may remain intact. These data support previous findings in the literature and may reiterate the notion that bereaved parents are preoccupied with their own grief, and thus 'overlook' their surviving children. The development and evaluation of interventions that target maternal parenting and family communication is needed.

#### P-199

##### **Coping, Information Preferences, and Mental Health in Men Newly Diagnosed with Prostate Cancer**

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**OBJECTIVES:** Individual differences in monitoring coping style (or orientation toward threat) have been proposed to underlie information seeking preferences aimed at uncertainty reduction when facing medical threats. Distress may result when information is unavailable to meet patient needs and uncertainty remains. There are also differences in the extent to which individuals find uncertainties intolerable- and this intolerance may impact mental health. The current project examines these relationships in men newly diagnosed with prostate cancer. **METHOD:** This longitudinal study includes two data collection periods. The first occurs after men are diagnosed with prostate cancer, at the time of treatment decision-making. The second occurs approximately four months later, after a treatment decision has been made. Patients complete a package of questionnaires including measures of monitoring coping style (Miller Behavioral Styles Scale), IUS (Intolerance of Uncertainty Scale), and depression, anxiety, and quality of life (the Psychosocial Screening Instrument for Cancer). **RESULTS:** Data indicate stability of anxiety ( $r = 0.449$ ,  $p < 0.001$ ,  $n = 72$ ), depression ( $r = 0.526$ ,  $p < 0.001$ ,  $n = 72$ ), quality of life ( $r = 0.504$ ,  $p = 0.052$ ,  $n = 72$ ), IUS ( $r = 0.767$ ,  $p < 0.001$ ,  $n = 60$ ) and monitoring ( $r = 0.489$ ,  $p < 0.001$ ,  $n = 72$ ). At treatment decision-making, monitoring coping style is a good reflection of patient information needs ( $r = 0.232$ ,  $p = 0.009$ , and  $r = 0.365$ ,  $p < 0.001$ ,  $n = 125$ ). Individual differences

in IUS may be related to patients' psychological distress ( $r = 0.350$ ,  $p < 0.001$  for anxiety,  $r = 0.329$ ,  $p < 0.001$  for depression,  $r = -0.184$ ,  $p = 0.052$  for perceived quality of life,  $n = 112$ ). **CONCLUSIONS:** Although monitoring predicts information needs at the time of diagnosis, monitoring is not a good indicator of information-seeking over time. IUS may be an important variable underlying men's psychological functioning at diagnosis. When men experience distress, it is sustained four months later, even after a treatment decision is made. It is important to continually evaluate the emotional status and information requirements of men throughout their cancer trajectory in order to best meet their changing needs.

#### P-200

##### **Psychological Tests in Oncological Patients: A Tool to Improve Communication with the Medical Team**

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**OBJECTIVES:** Making a complete psychological diagnosis in oncological patients, at the beginning of medical treatment enriches the approach of interdisciplinary teams. It gives important information that may be used to decide future interventions. In this study, we try to demonstrate that making psychological diagnosis is a tool that improves communication with the medical team, and to relate psychological characteristics with type of tumor or moment of illness. It also evaluates, the need of mental health assistance. **METHOD:** Instruments: Semi-structured interview, HTP test, Test de Persona Bajo la Lluvia, SCL-90 of Derogatis, EVS-25 y ESG of Zukerfeld, Test de Apercepción Temática. Sample: 40 patients (Ushuaia and Buenos Aires city) for the period from april, 2008 to april, 2009. **RESULTS:** Sample showed high levels of anxiety, anguish, disintegrated body image and somatic vulnerability. Anguish and anxiety were higher when patients finished their medical treatments and were on follow up. Mayor difficulties appeared in one test: Test de Persona Bajo la Lluvia. There were sinister, depressive and over-adaptated stories. The spontaneous reaction was to place the body under the rain and to not get protection. **CONCLUSIONS:** Psychological tests enrich communication between medical team and the psychoncology unity because they give empirical information for discussion. All of the patients accepted the indication of treatment: they report improvement in their life quality and tolerance to medical treatment. In our

experience, making psychological diagnosis to all of our patients becomes a great tool to make prevention, and to orientate and avoid that something that appears as a reaction get cronified.

#### P-202

##### **Exploring the Psychosocial Experience of Sexuality in Young Adult Cancer Survivors and Implications for Sexual Health**

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**OBJECTIVES:** To explore how a history of cancer in adolescence or young adulthood affects the psychosocial experience of sexuality in young adult cancer survivors. **METHOD:** A purposive sample of volunteer participants were recruited through online cancer websites and forums. The following criteria determined eligibility to participate: an English speaking, Canadian, female, male or transgender individual who was initially diagnosed with cancer between the ages of 13 and 30, and who were between the ages of 18 and 30 at the time of data collection. Participants also had to have completed their cancer treatment. Data were collected through semi-structured telephone interviews. **RESULTS:** Audio-taped interviews were transcribed verbatim, entered into qualitative analysis software and then analyzed using interpretive phenomenology. Major themes found in the interview transcripts will be discussed and implications for supporting the sexual health of young adult cancer survivors will be outlined. **CONCLUSIONS:** This study provides new information on how young adult cancer survivors experience their sexuality.

#### P-203

##### **Desired and Perceived Participation in Medical Decision-Making in Patients with Haemato-oncological Diseases**

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**OBJECTIVES:** Today, the field of oncology is experiencing a growing demand to actively consider the preferences of patients in the treatment process. This shared decision-making process appears most relevant for patients with malignant haematological illnesses, as their treatment options are protracted, risky, and burdensome. Being actively involved in decision-making can potentially diminish psychological stress, improve

medical compliance and patient satisfaction with treatment. However, it remains unclear as to whether haemato-oncological patients desire shared decision-making in practice. **METHOD:** Between 2005–2008, 177 adult patients were recruited and surveyed (on their desired decision-making role) at the commencement of their treatment (T1) at the hospital or haematological clinic in Germany. Three months later (T2) a follow-up survey was conducted, where information regarding patients' perceptions and experience of the decision making process were obtained. **RESULTS:** The majority of all respondents reported that at the beginning of treatment they desired to be in a passive decision-making role (60.2%), 28.3% reported a preference for a collaborative role, and the remainder of the sample (11.5%) reported a desire to take an active role. Approximately 56% of those at follow-up (T2) indicated accordance with their desired and realized role of decision-making preferences. **CONCLUSIONS:** The results coincide with other studies that determine limited patient participation in the medical decision-making process in haemato-oncology. Additionally, this study demonstrates that approximately 44% of patients reported disparity between their perceived and desired decision making role. These findings highlight the importance of further comprehension of patients' need for information about the medical treatment procedures, as well as their inclusion in the decision-making process, in an effort to enhance well-being and reduce conflicts regarding treatment.

#### P-206

##### **The Relationship Between the Self-esteem and Mood States in Patients Undergoing Hematopoietic Stem Cell Transplantation**

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**OBJECTIVES:** Hematopoietic stem cell transplantation (HSCT) is an alternative to conventional treatment for adults with hematological malignant diseases. Because HSCT is associated with life-threatening physical morbidity, lengthy convalescence, and social isolation, the potential for significant psychosocial morbidity is high. The aim of this study was to investigate whether it

would be possible to predict mood states after HSCT by self-esteem before HSCT in Japanese patients undergoing HSCT. **METHOD:** Subjects consisted of 77 adult patients with hematological malignancy receiving HSCT between September, 1996 and February, 2008 at the University of Tokyo Hospital. Patients were asked to complete the self-esteem scale before HSCT and Profile of Mood States (POMS) about one week after HSCT. POMS consists of tension/anxiety (T-A), depression (D), anger/hostility (A-H), vigor (V), fatigue (F) and confusion (C). Correlations coefficients of the self-esteem scores with scores of six subscales of POMS were calculated. **RESULTS:** The subjects were 51 male ( $M = 30.6$  years,  $SD = 6.8$ ) and 26 female ( $M = 31.2$  years,  $SD = 7.0$ ) patients. The self-esteem summary score had significant negative correlation with only confusion (C) ( $p = -0.406$ ) in female patients, while the self-esteem summary score was significantly correlated with depression (D) ( $p = -0.345$ ), anger/hostility (A-H) ( $p = -0.355$ ) and confusion (C) ( $p = -0.303$ ) in male patients. **CONCLUSIONS:** Overall, low self-esteem before HSCT may be associated with poor mood states after HSCT, which suggests that it maybe important to assess self-esteem before HSCT and low self-esteem could predict negative mood states after HSCT.

#### P-207

##### **The Development and Implantation of Psycho-oncology Training Program for Cancer Care Professionals in Taiwan**

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**OBJECTIVES:** Psycho-oncology is an important area in cancer treatment. However, there was no related training course in Taiwan. We developed the first training program in Taiwan to provide cancer care professionals with core knowledge in key areas of psycho-oncology. The program was granted by the Bureau of Health Promotion, Taiwan, and it was free to all participants. The objective of this poster is to report the development, implementation and assessment of the training program. **METHOD:** First, to establish topics suitable for cancer care staff in Taiwan, we collected available lecture curriculum from online

resources and previous similar lectures in other countries. Then we held two expertise consensus meetings to modify the course to fit in our country. Finally, after approval by all psycho-oncology experts, we developed a 14-hour-lecture program focusing on comprehensive introduction psychosocial oncology. We also designed satisfaction rating queries for evaluation of this program. **RESULTS:** Two lectures were held last year. Totally 285 cancer care professionals (166 and 119, respectively) participated in this psycho-oncology training program. More than 80 percents of the participants reported that they found the program helpful to improve their profession. Average satisfaction score was 3.9 points in a 5-point-rating scale. In the analysis of after-class questionnaire, the most helpful topic was Communication and interpersonal skills in cancer care, and Mood and Anxiety disturbance in cancer patients. **CONCLUSIONS:** The program produced significant knowledge uptake in a group of cancer medical staff. Future program should focus on the training necessary to achieve comprehensive skills and the knowledge of clinical care that may improve patient outcomes.

#### P-208

##### **A Case with Hodgkin Lymphoma and Front-Temporal Lobular Degeneration (FTLD)-like Dementia Facilitated by Chemotherapy**

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**OBJECTIVES:** Anti-cancer chemotherapy is accompanied by various adverse events including cognitive function impairment. In general, however, changes in cognitive function associated with chemotherapy are slight and temporary. We report the case of a 39-year-old man with Hodgkin lymphoma. He was finally diagnosed as having fronto-temporal lobular degeneration (FTLD)-like dementia facilitated by Adriamycin, bleomycin, vinblastine and dacarbazine (ABVD) chemotherapy. **METHOD:** We obtained an oral consent from the patient's family to report this case. **RESULTS:** The patient developed depressive symptoms after starting ABVD chemotherapy and later exhibited sexual disinhibition in addition to cognitive dysfunction (mainly executive dysfunction). An inspection of brain images revealed significant brain atrophy, and decrease in the blood flow to the frontal lobe and near temporal lobe. We diagnosed the patient as having FTLD-like dementia based on these imaging findings, the decrease in his social interpersonal skills, apathy, and his unawareness of his disease. **CONCLUSIONS:** The present case suggests that chemotherapy may cause executive

dysfunction and/or dementia. This case points to the importance of being attentive to the appearance of neuropsychiatric symptoms and evaluating brain functions properly when performing anti-cancer chemotherapy.

#### P-211

##### **Psychosomatic Consultation-Liaison Services for Patients with Melanoma at the General Medical Hospital—A Comprehensive Cancer Care Approach** Annett Koerner<sup>1</sup>, George Radiotis<sup>1</sup>, Kurt Fritzsche<sup>2</sup> *Counselling Psychology & Oncology, McGill University/Segal Cancer Centre, Montreal, Quebec, Canada<sup>1</sup>, Department of Psychosomatic & Psychotherapeutic Medicine, University Freiburg, Freiburg, Germany<sup>2</sup>*

**OBJECTIVES:** Individuals diagnosed with melanoma face significant practical and psychological challenges including existential fears, pain and discomfort associated with treatment, as well as body image change caused by disfiguring surgery. To enhance psychological adjustment, patients receive psychotherapeutic interventions from psychosomatic consultation-liaison services (C-L) within the general medical hospital. But little is known about the use of those services in routine clinical care. This study enhances the knowledge about psychotherapeutic C-L services provided to melanoma patients. **METHOD:** The study includes all patients referred to the psychosomatic C-L service of a large German university hospital between 2005 and 2008 ( $N = 3658$ ). Data were recorded using the C-L documentation form (CL-BaDo) developed by the German College for Psychosomatic Medicine, German Society of Psychosomatic Medicine and Psychotherapy and the General Medical Society for Psychotherapy. Descriptive and inferential statistics are employed to compare melanoma patients with other cancer patients and patients with other dermatological diseases. **RESULTS:** Melanoma patients differ significantly from the other groups in their reasons for requesting C-L services, psychosocial functioning, mental diagnoses, amount and kind of psychological interventions received and in the recommendations by the CLS team for further psychosocial treatment after the hospital stay. These findings contradict the common perception of dermatologists that melanoma patients are less psychologically distressed than patients with other dermatological diseases. **CONCLUSIONS:** When comparing the psychotherapeutic C-L services amongst patient groups, differences in clinical and sociodemographic characteristics are taken into consideration. Our results highlight the need for professional psychosocial support in individuals diagnosed with melanoma. These findings are discussed in regards of current models of integrated care. Furthermore the emotional distress and the

psychosocial needs of our melanoma patients are reviewed regarding their impact on health-related decision making.

### P-218

#### **Distress Management: Comprehensive and Humane Practices after Changes in Routine of Cancer Care**

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**OBJECTIVES:** The NCCN guidelines of Distress Management specify the standards of care and recommend intervention modalities. The aim of this research was to make a retrospective and comparative study between two different moments of the routine (Before and After changes) of an oncology center, in Brasília, Brazil. Thus, the changes correspond to a monthly meeting between psychologist and assistant doctor to discuss level of distress and interventions, as well as changes in the technical/administrative management. **METHOD:** The incidence of distress was recognized through the use of the Distress Thermometer in three stages: beginning, middle and last day of chemotherapy; relating them to two different moments of routine. The first group (Before) consisted of 100 patients, between 17 and 86 years, 39% male and 61% female, from July 2007 to April 2008. The second (After) comprised 100 patients, 18 and 86 years, 35% male and 65% female, from January to October 2009. **RESULTS:** Before: In the first stage of evaluation most participants (82%) presented a severe distress; that percentage progressively decreased to 36.4% at the middle, and to 18.2% at the last day. After: The incidence of distress at the beginning (52%) decreased over the first moment of routine evaluation; these decrease trends were maintained in the middle (25%) and in the last day of chemotherapy (16.7%). **CONCLUSIONS:** The high incidence of distress showed in the first group (Before) brought the need for changes in the health team routine and the technical/administrative management. Thereafter, the distress management becomes an integral part of cancer care. After changes, the low incidence of distress was attributed to screening and monitoring routine for identifying the level and nature of distress; medical and psychological intervention tailored to each case. A humane practice was observed from this comprehensive assistance.

### P-223

#### **Sense of Coherence and Survival Among Brazilians with Head and Neck Cancer: Is There an Association?**

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**OBJECTIVES:** Head and neck (H&N) cancer is often considered a burdensome disease. The literature suggests that both biological and psychosocial factors may affect H&N cancer survival. Sense of coherence (SOC), a psychosocial measure, has been associated with cancer survival. However, no study on SOC and H&N cancer survival has been conducted. This study aimed test the hypothesis that people with H&N cancer with higher (SOC) have longer survival than those with lower SOC. **METHOD:** A prospective study was conducted at a Brazilian hospital among a convenient sample of 162 subjects with newly diagnosed H&N cancer. SOC, sociodemographic, psychosocial, and clinical characteristics and smoking and drinking habits were collected at baseline. Survival data was collected at the end of the study. One-year survival analysis and Kaplan-Meier curve were conducted. **RESULTS:** 162 subjects were recruited, 152 were followed for up to 39 months from cancer diagnosis. 1-year survival status was obtained for 140 subjects. No association was found between SOC and either 1-year survival status or survival length. Higher survival probability was observed for those who had a partner (compared to not having one), those who were at early stage cancer (compared to late stage), and those with oral cancer (compared to other cancer sites). **CONCLUSIONS:** The results of this study indicate that a high SOC, compared to lower SOC, does not seem to improve 1-year survival or survival length among this sample of Brazilians with H&N cancer.

### P-225

#### **Adjustment to Cancer: Association Between Age and Distress**

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**OBJECTIVES:** Studies suggest that adults find the diagnosis of cancer more traumatic than elderly patients, but they are able to adapt as well as their older counterparts once the initial stress has subsided. Furthermore, elderly patients may be less likely to suffer extreme or prolonged emotional distress. In view of such reality, the present study examines the association of age and emotional distress in patients from an oncology service, located in the capital of Brazil. **METHOD:** 200 patients participated in this research answering to the Distress Thermometer in three stages of the chemotherapy protocols: beginning, middle and last day. The sample was shared in two groups specified by age range. A sample of 100 patients for the first group (Adult), between 40 and 59 years of age, 30% men and 70% women; and another 100 patients, for the second (Elderly), between 60 and

86 years, 39% men and 61% women. **RESULTS:** In fact the present study replicates findings that an adult with cancer shows more distress during the treatment. In this group, the incidence of distress in the beginning of chemotherapy was 73%, 31% at the middle stage and 25% at the last day of treatment. Already, among the elderly cancer patients the incidence was lower – 57% presented a meaningful distress at the beginning, 30% at the middle and 11% at the last stage of evaluation. **CONCLUSIONS:** Many considerations can be made from these findings. Unfortunately, it is necessary to consider that, as the adults have a live ahead of them, the elderly patients live a phase in which there is a confluence of diminishing function, comorbid disorders, and decrease in social supports and economic resource. The quality of care must consider the differences between phases of life and the health team needs to integrate the areas of knowledge in comprehension of such phenomena.

#### P-226

##### **Determinants and Changes in Psychological Adaptation and Quality of Life During Chemotherapy for Diffuse Large B Cell Non-Hodgkin's Lymphoma in the Vulnerable and Frail Elderly**

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**OBJECTIVES:** The principal aim of the 'Psy-Frail' study is to assess the impact of psychosocial factors on responsiveness of treatment, the fatigue, the quality of life and psychological adaptation on older patients living with a non-hodgkin's lymphoma. We hypothesize that elderly patients with low depression, low routines, high fighting spirit, low helplessness/hopelessness and high perceived social support report higher quality of life, lower fatigue and better outcome during treatment and post treatment follow-up. **METHOD:** One hundred and twenty patients aged 70 years old and more will be included in 2009 to 2011. Depression (MADRS and MINI), fatigue (MFI), quality of relationships (QRI), routinization (EPR) and coping (WCC-R) are assessed before, during and after treatment by chemotherapy. Regression analyses will be carried out in order to explore the relation between patients' sociodemographics, psychological characteristics and responsiveness of traitement, quality of life and fatigue at each time of measure. **RESULTS:** If we demonstrate that coping strategies, anxiety, depression, routinization and social support have an impact of the responsiveness of

treatment and changes in quality of life and fatigue, this could be useful and relevant for the clinicians in discussing the effects of chemotherapy with patients and family. **CONCLUSIONS:** 'Psy-Frail' represents a major advance which would allow understanding the relationships between psychosocial factors and cancer outcome in older, frail and vulnerable patients. This research could allow a better comprehension of psychological predictors of a good quality of life and survival. Thus, the clinicians could adapt their global care in order to reduce anxious and depressive symptoms, if frequent during the hematological cancer.

#### P-227

##### **The Impact Of An MRSA Diagnosis On Patients In The Specialist Palliative Care Setting**

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**OBJECTIVES:** The purpose of this study was to gain a greater understanding of the impact that an MRSA diagnosis has on patients with advanced cancer and their families, as little is known about this phenomenon. To date, research on MRSA in the palliative care setting has had a quantitative focus. No study has yet focused on the psychological impact of MRSA on patients with advanced cancer. **METHOD:** This study used a qualitative approach. Interviews were conducted with a purposive sample: five with patients and four with family members ( $n = 9$ ). Patients with advanced cancer admitted to the specialist palliative care unit who were found to have a laboratory confirmed diagnosis of MRSA colonisation, were considered for inclusion in the study. Family members of these patients were also considered for inclusion. Data were then analysed using Framework Analysis. **RESULTS:** Data saturation was achieved. The key finding in this study was the magnitude of the psychological impact of an MRSA diagnosis, as many participants reflected the comparable devastation that both a cancer and an MRSA diagnosis could cause. Another key finding was the need for transparency when patients are found to be MRSA positive, as participants reflected that this helped them in dealing with the news. **CONCLUSIONS:** MRSA has a significant impact on advanced cancer patients and their families in the specialist palliative care setting. This impact may be underestimated but early and careful face to face explanation about MRSA and its implications can help patients and their families to cope better with it. This and other findings will aid policy development in relation to MRSA management and infection control in specialist palliative care settings.

## P-228

**Examining the Relationship Between Gender and Distress among Cancer Patients: Preliminary Finds**

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**OBJECTIVES:** Men and women create different structures in their caregivers roles. Women are more socio-centric and assembled, and the experimental content of their relationship with others are basic relevant. As men enter the world of instrumental and emotional care giving, all known rules change. The current study aimed to investigate the relation between gender and distress among patients in chemotherapy. **METHOD:** This study was developed in an oncology center, located in Brasilia, Brazil. The data of 267 patients, of median age 56 (14 to 86 years old), were assessed with the Distress Thermometer during three different stages of the chemotherapy protocol: beginning, middle and last day. This sample was shared according to the gender of the patients. Thus, two groups were formed: Men group, with 35.6% of the sample and the Women group corresponding to 64.4%. **RESULTS:** There were significant differences between groups in all stages of evaluation: beginning ( $p < 0.05$ ), middle ( $p < 0.01$ ) and last day ( $p < 0.05$ ). The men group reported 50.5% of severe distress at the beginning, 20.5% middle and 12.7% last day of treatment. By the time, the incidence of distress in the women group was higher: 66.9% at the beginning, 35.5% middle and 20.9% last day of chemotherapy. **CONCLUSIONS:** The findings showed that the women group had a higher incidence compared to the men group. The gender proved to be an important moderate factor, with effects on the ability to cope. Furthermore, it does not exist a sole determinant factor and neither one strategy that is the most efficient. The coping strategies chosen are related to the characteristic of the disease, reaction to the treatment, patient's dynamic and cultural and social context.

## P-230

**A Critical Discussion of the Application of Existential Thought in Palliative Care: Back to the Basics**

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**OBJECTIVES:** Several therapeutic interventions which draw on existential theory have been developed to support cancer patients. The objective of this poster presentation is to critically discuss the ways in which some of the current assumptions guiding existential interventions for cancer patients have diverged from some of the underlying principles of both existential philosophy and their manifestations in existential psychology. The benefits of moving towards a more integrated existential approach in treating cancer patients will be highlighted. **METHOD:** It is argued that the application of existential theory in a structured, time-limited, manualized and empirical context can be at odds with some of the major tenets of existential philosophy and psychology (Cooper, 2003). **RESULTS:** These tenets include: 1) 'Existence precedes essence': living in the moment defines who we are, with an emphasis on the pursuit of freedom, responsibility, making choices and authenticity. 2) Existentialism encourages self-reflection in the pursuit of an individual's genuine wishes and desires, as opposed to a preoccupation with obtaining approval from others. 3) Existential angst results from these pursuits and is acknowledged. 4) Emphasis is placed on living in the moment, relatively free of preoccupations with what was or what will be. **CONCLUSIONS:** The existential approach will be compared and contrasted with the current context of realism, science, research, RCTs and medicine. Clinical implications discussed will include an emphasis on respecting cancer patients' lived experience, the freedom of engaging (or not) in the process of existential reflection and the need for clinicians to create sufficient therapeutic space to allow for discussing existential angst. Limitations of the existential approach will also be considered.

## P-232

**An Examination of Changes in Relationship Dynamics and Roles Between People with Cancer and Their Primary Informal Carer**

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**OBJECTIVES:** The diagnosis of cancer can change the relational dynamics between people with cancer and their family members, in particular their intimate partners, which can have an impact on their subjective well-being and ability to cope. The aim of this study was to adopt a relational perspective to examine accounts of change in roles

and interpersonal dynamics between the person with cancer and their primary carer, from the perspective of informal carers. **METHOD:** Sixty two informal cancer carers (42 women & 20 men), across a range of cancer types, stages and relationship dyads, living in New South Wales (NSW), Australia, took part in the study, part of a larger mixed-method study examining the gendered experiences of cancer carers. Semi-structured interviews were used to examine relationship change, analysed through thematic analysis. **RESULTS:** Results indicated that cancer had precipitated a change in roles and in the dynamics of the relationship, including increased responsibilities in the home, carers having to take on quasi-medical tasks and decisions, changed patterns of communication, and changes to sexuality and intimacy. Negative consequences of the changed relationship included sadness, anger and frustration. However, many participants also reported increased feelings of love, closer together and reward from providing care, resulting in relationship enhancement. **CONCLUSIONS:** Cancer caring should be conceptualised within a framework of intersubjectivity, rather than separating the 'carer' and the 'cared for' into autonomous, unitary subjects. Women were more likely to mourn the previous relationship, whilst more men reported relationship enhancement, supporting suggestions that depression in women carers is linked to being obligated to care, in contrast to men who perform a role that is not expected of them and thus experience a greater sense of reward.

### P-233

#### **Self-Silencing and Psychological Distress in Informal Cancer Carers: A Gendered Analysis**

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**OBJECTIVES:** The pattern of communication adopted by couples living with cancer can influence their coping and psychological well-being. Couples who are mutually responsive, attend to each others needs, and talk openly about stress, are more able to engage in effective emotion and problem focused coping, whereas couples who adopt 'disengaged avoidance' report greater distress. This study examined gender differences in self-silencing, the relationship between self-silencing and psychological distress, and reasons for self-silencing, in informal cancer carers. **METHOD:** Using a mixed method design, 484 informal carers (329 women and 155 men), across a range of cancer types and stages, completed the Self-Silencing Scale (STSS)

and the Hospital Anxiety and Depression Scale (HADS), to examine communication patterns and psychological distress. 53 carers also took part in an individual interview to examine the patterns of self-silencing, with the qualitative data analysed using thematic decomposition, within a framework of positioning theory. **RESULTS:** Men reported greater self-silencing than women, however, women reported higher depression and anxiety, even though depression and anxiety were significantly correlated with self-silencing. This reflects gender differences in patterns of self-silencing. Both men and women reported self-silencing to prioritise patient needs, or to protect them from conflict. However, women also positioned self-silencing as a requisite for coping, demonstrating awareness of external judgement, whilst men positioned self-silencing as a normal aspect of masculine behaviour. **CONCLUSIONS:** The significant association of self-silencing with depression and anxiety confirms that it is not an adaptive behaviour for carers, supporting previous reports that avoidance of emotional discussion in couples living with cancer is detrimental to coping and to mental health. These findings also demonstrate the utility of self-silencing theory for understanding gender differences in cancer carer distress, and provide insight into reasons why self-silencing occurs in women and men.

### P-234

#### **Sexuality and Intimacy Following the Diagnosis and Treatment of Cancer: The Experience of Partners of a Person with Cancer**

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**OBJECTIVES:** Previous research findings have shown that a cancer diagnosis and related treatments can affect the sexual and intimate aspects of a relationship. Sexuality and intimacy issues are often unacknowledged as major and negative consequences of cancer, leading to unmet needs on the part of couples experiencing cancer. This study examined changes in sexuality and intimacy following cancer from the perspective of partners of people with cancer, across a range of cancer types and stages. **METHOD:** Using a mixed method design, changes in sexuality and intimacy following cancer were examined using a survey completed by 156 Australian carers (55 men, 101 women) who were partners of a person with cancer, across both reproductive and non-reproductive cancer types. Interviews were also conducted with

a representative sample of 20 participants to examine these changes in depth, analysed using grounded theory. **RESULTS:** 76% of those caring for a person with 'non-reproductive' cancers reported an impact on the sexual relationship, as did 84% caring for a person involving 'reproductive' sites (gynaecological, prostate, breast). 70% of Participants reported self-blame, rejection, sadness, anger, and lack of sexual fulfilment associated with such changes. 30% reported acceptance, increased closeness and intimacy. Only 20% of partners had discussed sexuality with a health professional, and only 37% of those were satisfied with the discussion. **CONCLUSIONS:** Sexuality is central to quality of life and to couple closeness in the context of cancer. Cessation or reduction of sexual intimacy following cancer is associated with distress, whilst sexual re-negotiation is associated with couple closeness. Health professionals need to acknowledge the sexual needs of intimate partners, as well as people with cancer. This is an issue across all cancer types, not simply those affecting reproductive organs, which have been the focus of previous research.

#### P-238

##### **Disclosing Cancer Genetic Information within Families: Perspectives of Counselees and Their At-risk Relatives**

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**OBJECTIVES:** The aim of the present descriptive study was to investigate the experience of sharing genetic information among cancer genetic counselees, and their at-risk relatives who had attended genetic counseling between 2003 and 2007. **METHOD:** In total, 147 counselees (133 female, 14 male), affected by cancer and/or with a familial history of breast, breast/ovarian or colorectal, and 81 of their at-risk relatives (57 female, 24 male) answered to a questionnaire and/or were interviewed. Counselees' communication of genetic information to at-risk relatives was assessed with regard to who they informed, how they felt, and how they perceived their relatives' reactions. In addition, at-risk relatives' experiences of receiving genetic information were studied. **RESULTS:** Most of the counselees had shared the genetic information with their at-risk relatives personally. The majority of the counselees (68%) reported positive or neutral feelings about sharing the information with their relatives, while 9% stated negative feelings.

Counselees mostly interpreted the relatives' reactions as positive or neutral, and in few cases as negative (14%). About half of relatives reported positive or neutral reactions (54%) to the received information, while about one-fifth reported negative reactions (22%). **CONCLUSIONS:** Sharing genetic information within at-risk families appears to be accomplished without any major difficulties or negative feelings. However, more assistance may be needed to optimize the communication of the genetic information within at-risk families.

#### P-241

##### **The Abbreviated PSWQ is a Reliable Screening Tool for Elevated Worry in Breast and Gynecological Cancer Patients**

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**OBJECTIVES:** The high prevalence of psychological distress among cancer patients (Zabora *et al.*, 2001) indicates a need for reliable distress screening, for intervention referral. We used item response theory (IRT) to evaluate the Penn State Worry Questionnaire (PSWQ), a 16-item questionnaire (with 5 reverse-scored items) which screens for excessive worry, and its abbreviated form (PSWQ-A). The PSWQ screens for Generalized Anxiety Disorder (GAD) since excessive worry across several domains is a primary GAD symptom. **METHOD:** Women ( $N = 333$ ) with breast (28%) or gynecological (71%) cancer completed the PSWQ at their initial post-operative appointment. The PSWQ-A contains 8 of the non-reverse-scored items. The average participant was middle-aged (mean = 56;  $SD = 10$ ), Caucasian (87.1%), and married (64.6%). A graded response model was used for IRT analyses, which tests each item's ability to reliably discriminate different levels of worry and levels of worry at which a measure is most reliable for screening. **RESULTS:** Mean PSWQ and PSWQ-A scores were 43.3 ( $SD = 13.1$ ) and 19.98 ( $SD = 8.29$ ) respectively. Analyses showed insufficient discrimination of worry level for the 5 reverse-scored PSWQ items. All other PSWQ/PSWQ-A items showed sufficient discrimination of worry. Both the PSWQ and PSWQ-A were most reliable for moderate to high levels of worry. **CONCLUSIONS:** Adequate reliability for the non-reverse-scored items of the PSWQ/PSWQ-A was shown. Both measures were most reliable at moderate to high levels of worry, which is crucial to differentiate between those who

may or may not benefit from intervention. The shorter form may be optimal to screen for general, excessive worry in oncology clinics.

#### P-242

##### **Breast Cancer Survivors among Young Francophone Women in New Brunswick: Impact of Diagnostic and Treatment on Various Aspects of Life**

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**OBJECTIVES:** The purpose of this study is to examine personal, marital, familial, professional, financial and psychosocial issues of young francophone women diagnosed with breast cancer between 2000 and 2006 and who received treatment (surgery and/or chemotherapy and/or radiotherapy) in a small and mostly rural province of the maritimes. **METHOD:** A retrospective study was undertaken. Audio-taped qualitative interviews were conducted with francophone women aged between 30 and 50 years. In a 5-month period, 15 women from different areas in New Brunswick were interviewed individually in French, using a semi-structured canvas and open questions. Women were invited to share their experience of illness. Verbatim was transcribed, a categorization scheme was developed and then coded in NVivo 8. Constant comparative process was used for data analysis. **RESULTS:** Major themes emerged, such as information seeking, positive thinking, body image, increased need of social support and the need to take more time for themselves. Contrary to what is found in the literature, alopecia is not a major concern for our sample of women, but is a source of preoccupation for husbands and children. Financial difficulties are a burden, especially for those who must travel long distances to receive radiotherapy. **CONCLUSIONS:** The experience of living with breast cancer seems to be as hard, if not harder, in young women than in older ones, mostly because of their unwanted but necessary leave of absence from work and ongoing family responsibilities, especially caring for young children. It is important to note again that their perceptions towards their body image are closely linked to the family circle perceptions' of their physical appearance.

#### P-249

##### **A Temporal Model for Optimizing Meaning-Making Interventions Along the Cancer Care Continuum**

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**OBJECTIVES:** To date, therapeutic approaches that promote existential meaning have not been synthesized into an integrative framework that recognizes the temporal course of the cancer experience. The cancer control continuum offers a descriptive template to conceptualize phase-specific psychosocial issues pertaining to primary, secondary, tertiary, and quaternary prevention (Miller *et al.*, 2008). The purpose of this poster is to explore how existing clinical approaches to meaning making can be organized and informed by the cancer control continuum. **METHOD:** A temporal model of meaning making is proposed based on a review of the current empirical evidence about therapeutic meaning making approaches within the context of cancer. A content analysis of the strategies contained within the Meaning-Making intervention (MMi) (Lee, 2004, 2006a,b, 2008) will be used for illustrative purposes. **RESULTS:** The proposed model highlights the critical meaning making issues that pertain to each phase of the cancer control continuum (i.e. predisease, early disease, clinical disease, and survivorship). The model also describes how therapeutic approaches to meaning making, organized by type, timing, and objective, can be applied to phase specific issues, such as during genetic counseling, at time of diagnosis, during treatment, post-treatment, and transitioning to end of life. **CONCLUSIONS:** The proposed temporal model of meaning making characterizes and organizes a range of innovative meaning making techniques that may provide useful guidelines to the clinical application of meaning making approaches, and the generation of propositions for further testing.

#### P-250

##### **Psychosocial Daily Difficulties in Japanese Childhood Cancer Patients after Discharge from Medical Treatment**

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**OBJECTIVES:** Advances in the treatment of childhood cancer led to dramatically improved long-term survival rates. Although the expected outcome is cure, cancer still remains a constant threat; it is experienced by young patients as a

major crisis at a biological, psychosocial, and spiritual level (Servitzoglou *et al.*, 2008). The purpose of this study was to explore the daily psychosocial difficulties in Japanese childhood cancer patients after discharge. **METHOD:** Subjects were 25 childhood cancer patients attending the pediatric outpatient clinics (8 male and 17 female, mean age at survey =  $17.0 \pm 3.6$  yrs.). Approximately 18 patients had leukemia and 4 each suffered from malignant lymphoma and bone tumor, respectively. They were asked to participate in a semi-structured interview regarding the difficulties they faced in daily life after their discharge. The data was analyzed with the content analysis, chi-square test, and correspondence analysis. **RESULTS:** A total of 19 attributes were extracted and categorized as follows: physical difficulties, interpersonal difficulties, behavioral difficulties, and uncertainty about the future. The attributes indicated by over 50% of the participants were 'feeling of unwellness,' 'painful treatment,' 'being physically active,' 'being absent from school or work because of illness,' and 'being left behind academically.' Some attributes of interpersonal difficulties and uncertainty about the future were significant differences among age, sex, and the type of diagnosis. **CONCLUSIONS:** This study identified the important components of daily psychosocial difficulties in Japanese childhood cancer patients after their discharge. Most patients suffered from physical and behavioral difficulties because of cancer treatment and its side effects. In addition, interpersonal difficulties were unique findings that had not been well revealed in previous Western studies. It is important for Japanese childhood cancer patients to get those around across their disease.

#### P-252

##### **Ovarian Cancer: Patients' Experiences with the Onset of Symptoms**

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**OBJECTIVES:** Diagnosis of ovarian cancer in an early stage significantly improves the chances of the five-year survival. However, the non-disease specificity of the early symptoms has made it very difficult to diagnose in time. By analysing data from research interviews dealing with the patients' personal and bodily experiences with the onset of their symptoms, it was possible to obtain a deeper understanding of the patients' health-seeking process and to rethink some of the diagnostic difficulties. **METHOD:** Participants were women, who underwent surgery on the suspicion of ovarian

cancer in 2008–2009. The informants were strategically selected representing the existing population of ovarian cancer patients concerning age, stage, socio-economic status and general health. Each informant was interviewed at the hospital the evening before the operation and eight weeks later in their private home, following a semi-structured guide. A phenomenological-hermeneutic interpretation methodology inspired by the philosophy of Ricoeur was used in the analysis. **RESULTS:** A number of 19 research interviews were conducted with 10 women. One informant was solely interviewed preoperatively due to postoperative death. All invited informants accepted to participate in the study. The theme constituting the patients' experiences with the onset of symptoms arose from the initial analysis. Subsequently three subthemes were identified: 'When the stomach started growing'; 'When you feel something is very wrong, not knowing what it is'; 'To react adequately to bodily changes'. **CONCLUSIONS:** The patients hold personal and embodied knowledge about the development of their symptoms which deserves systematic investigation and validation. As there is no screening procedure for the disease, it is the women's own reflections and response to that specific kind of physical discomfort preceding ovarian cancer, which initially brings her to the doctor. So the capability of doing so is crucial for her survival. The diagnosis-seeking process is involving both nature and culture.

#### P-254

##### **Prognostic Disclosure In The Palliative Phase Of Breast Cancer, Quality Of Communication From A Patient Perspective: An Experimental Study Protocol**

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**OBJECTIVES:** When receiving prognostic information, palliative (breast) cancer patients say they want complete information, but when receiving this, they are often overwhelmed by it. Additionally, they say they want realistic information, while at the same time they need hope. This often places oncologists for dilemmas: they do not know how explicit or general, and how hopeful or realistic they should be in their communication. This project will explore these communication elements from a patient perspective. **METHOD:** To study the effects of these elements, systematic controlled studies are needed. An experimental video-vignette study will be created in which oncologists' levels of explicit and hopeful prognostic information are either high or low. The different video-vignettes

will be role-played by actors and watched by analogue patients; breast cancer survivors and healthy women who put themselves in the shoes of the breast cancer patient in the video. Their perceptions of the communication strategies are assessed. **RESULTS:** This project has just started and empirical results are not yet available. Instead, we will discuss the (dis)advantages of experimental versus clinical studies. While clinical studies have ecological validity, conducting a proper RCT in this situation is difficult, communication is an interactive process, so cannot be standardized. Besides, clinical studies often use communication as a container concept, with little interest in the specific elements it consists of. The current experimental study overcomes these problems. **CONCLUSIONS:** By using this rigorous study design, we aim to provide oncologists concrete tools for how to discuss prognostic information in terms of explicitness of information and expressed hope to satisfy patients' high and ostensibly contradictory needs, taken into consideration the influence of personal dispositions and coping styles. More insight into the usefulness of experimental communication studies will be provided opposed to clinical studies. Additionally, more knowledge on the validity of analogue patients will be obtained.

#### P-255

##### **Mood State Profile and Coping Strategies During the Genetic Screening for BRCA-1/2 Genes: A Comparison between the Testing and the Outcome Disclosure Phase**

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**OBJECTIVES:** Cancer risk increasing due to BRCA1/2 genes together with the possibility of transferring genetic heritage suggest that undertaking a genetic screening (GS) for these mutations and receiving a positive response can provoke a peculiar emotional state and pattern of coping. The main emotional states and coping patterns of subjects undertaking the GS (T1) and receiving its results (T2) were registered and compared. **METHOD:** Thirty-seven users of a preventive diagnosis/genetic counseling service of a Cancer Institute were requested to fill out both a mood state (i.e. the Profile of Mood States) and a coping (i.e. the Coping Orientations to Problems Experienced) profile twice: during the genetic screening (T1) and a month from genetic testing disclosure (T2). **RESULTS:** From T1 to T2, the percentages of users overcoming the normality range (40–60) in

Anger-Hostility (11.8% vs. 16.2%;  $p = 0.034$ ), Depression-Dejection (11.8% vs. 21.6%;  $p = 0.004$ ), Fatigue-Inertia (14.6% vs. 22.2%;  $p = 0.018$ ), (less) Vigor-Activity (17.6% vs. 29.7%;  $p = 0.003$ ) increased, whereas no significant differences were found in Confusion-Bewilderment (14.7% vs. 13.5%;  $p = 0.084$ ) and Tension-Anxiety (17.6% vs. 13.5%;  $p = 0.071$ ). Small differences were found in comparing coping patterns of users in T1 and T2. **CONCLUSIONS:** Despite its limitations, present preliminary data show that not a marginal percentage of enrolled subjects displayed levels in negative emotional states that overcame normality ranges and that this percentage increased, progressing from T1 to T2. From a clinical point of view they manifest the relevance of psycho-emotional screening. Associations of clinical factors (e.g. proband/non-proband status, genetic results outcome) with the measured dimensions should be tested in more large sample research.

#### P-256

##### **Defining Cancer Survivorship: Clinical and Research Implications**

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**OBJECTIVES:** Definitions help in framing and understanding concepts and domains. The first datum on cancer survivorship literature regards the lack of a single definition of this condition. In addition cancer survivors are compared with general as well as oncological populations. The present work summarizes the definitions of cancer survivorship and discusses their main implications from both clinical and research perspectives. **METHOD:** Combinations of the words 'cancer', 'oncology', 'neoplasm', 'survivor\*' were used to select records in MedLine and PsycInfo databases. Files about children, school aged subjects and teens were dropped. **RESULTS:** Seven different definitions of cancer survivorship were identified; they can be visualized on a continuum from 'receiving a cancer diagnosis' to 'being a cancer patient's relative'. Both validity and reliability of the tools designed for cancer and healthy populations, the kind of norms (i.e. healthy or ill population) should be used in comparisons, the suitability of tools specifically tailored upon this condition are the main questions drawn from this scenario. **CONCLUSIONS:** Since cancer survivorship is nowadays a reality for a growing number of persons, research and clinical practice in this field would

benefit from more clarity and precision in terms and definitions.

#### P-257

##### **Psychiatric Disorders of the Bereaved who Lost Family Members Due to Cancer: Experiences of Outpatient Services for Bereaved Families in a Cancer Center Hospital-The Second Report**

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**OBJECTIVES:** With the aim of alleviating psychological distress in the bereaved, our hospital started an outpatient service for bereaved families. The purpose of this study was to examine patterns of referral, psychiatric disorders, background characteristics, and psychosocial interventions among the bereaved who lost a loved one due to cancer. **METHOD:** In this retrospective study, all patients who consulted the outpatient service for bereaved families in our hospital between April 2007 and September 2009 were reviewed. This study was approved by Institutional Review Board of Saitama Medical University International Medical Center. **RESULTS:** During the study period, 51 patients consulted the outpatient service for bereaved families. The ages ranged from 17 to 76 years (mean: 51 ± 15). The most common psychiatric disorder among the bereaved was major depression ( $n = 20$ , 39%), followed by adjustment disorders ( $n = 14$ , 28%). Six patients ( $n = 6$ , 12%) experienced dissociative disorders in addition to their psychiatric diagnosis. Females ( $n = 44$ , 86%), and spouses ( $n = 26$ , 51%), were the most common users of the service. **CONCLUSIONS:** This is the second report of consultation data regarding the bereaved who lost family members due to cancer. Most of the patients who consult outpatient services for bereaved families suffer from psychiatric symptoms related to the death of close family members, and need some help. Psychiatric interventions including psychotherapy and medications are required for these families.

#### P-258

##### **A Longitudinal Perspective on Post-Traumatic Growth Following the Diagnosis of Breast Cancer: The Mediating Role of Mindfulness and Attachment Security**

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**OBJECTIVES:** The current prospective longitudinal study examined the role of psychological resources (i.e. attachment security, Mindfulness) on the post-traumatic growth of women diagnosed with breast cancer employing multiple measurements over a period of two years. The diagnosis of cancer makes existential questions salient, and the current research demonstrates that women high in psychological resources (those who are high in attachment security and/or in mindfulness) are able to reconstruct meaning and experience growth following a traumatic crisis. **METHOD:** Two groups of women were followed over two years: The study group consisting of 45 women between the ages of 40–65 who were diagnosed with stage I or II breast cancer in the preceding 12 months. A matched control group of 45 women were examined to determine that changes occurring in the study group are unique to cancer. Both samples completed self-report questionnaires and were interviewed on two occasions. Medical and demographic information were obtained from hospital records. **RESULTS:** The results of this research are currently being analyzed and will be presented at the conference if accepted. **CONCLUSIONS:** The results of this research are currently being analyzed and the conclusions will be presented at the conference, if accepted.

#### P-261

##### **Assessing Caregiver Experiences For Modeling Team Interventions—An Evidence Based Approach To Palliative Care Planning And Delivery**

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**OBJECTIVES:** The diversity of palliative care services has important implications for the design of an assessment system of quality of care. Rather than a 'cast-iron' approach, palliative care assessment needs to be receptive, responsive, adaptable, multi-pronged and tailor-made to individual needs. The aim of this project was to integrate family caregiver feedback in comprehensive quality assessment and care improvement, allowing care teams to identify distinct needs, customize interventions and establish networks to bridge gaps in

comprehensive care. **METHOD:** A caregiver feedback form was developed after review of international literature and inputs from palliative care professionals, cancer patients and their caregivers. This 30-item questionnaire assessed overall care coordination and solicited response under six core categories; whether care was (1) Patient centered and family oriented (2) Beneficial (3) Sensitive (4) Safe (5) Timely (6) Effective. In a pilot survey, volunteers interviewed family caregivers of deceased cancer patients looked after by Home Care teams. **RESULTS:** The survey provided detailed and unbiased caregiver feedback. A graphic representation of the core categories, especially 'benefits' in terms of symptoms, function, interpersonal, well-being and transcendent (perceived as dimensions of quality of life) revealed areas of strength as well as unmet needs and deficiencies in quality of care. The study reinforced that certain process elements of team functioning are influenced by caregiver involvement, especially assessment, care planning, implementation of plans and networking for holistic care. **CONCLUSIONS:** The project recognizes that retrospective information by caregivers is an effective intervention in palliative care allowing continuous quality improvement. Integration of such evidence-based guidelines challenges and steers care teams to bridge identified gaps through personal capacity building, palliative care education for healthcare workers, and effective networks in community for mobilizing resources. Assessing caregivers proves to be a translational tool as it is based on the practical implementation of a theoretical framework of their experience.

#### P-263

##### **Teaching Communication Skills in Southern Europe: Preliminary Report from a Pilot-Program in Portugal**

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**OBJECTIVES:** Communication skills training programs for oncologists (CSTO) in Southern European countries are poorly developed. In spite of the scientific evidence for the benefits of an adequate doctor-patient communication, provision of this training has been reported as being none or minimal during medical education. To overcome this gap a model of CSTO has been developed and applied as Pilot-Program in Portugal under the umbrella of the National Coordination for Oncological Diseases, Ministry of Health. **METHOD:** Medical doctors working in cancer care over the country were invited to attend a Symposium on the importance of communication skills training in clinical oncology. International specialists

presented its scientific evidence and practical benefits. Attendants were invited to register for free workshop on CSTO, in any of 3 sites and dates. The CSTO model consisted of 4 modules (12h), on basic and advanced skills, how to recognize distress and SPIKES for BBN. **RESULTS:** From 103 participants expressing willingness to participate at workshops, 24 attend it. Attendants were mainly oncologists and surgeons. Satisfaction with workshops was high (4.7/5), and its interactive and practical methodology the most appreciated features. All participants consider trained techniques relevant and beneficial for their clinical practice. Data from pre and post workshop questionnaires on clinical variables namely, confidence in communication skills, psychosocial beliefs, communication dilemmas, is being analysed and will be presented. **CONCLUSIONS:** From preliminary data showing an improvement in most of the variables assessed and in the high satisfaction with the workshops we are encouraged to proceed with this program and enlarging it to include other professionals.

#### P-267

##### **Psychosocial Intervention and Prostate Cancer – What Do Danish Men Operated for Primary Prostate Cancer and Their Spouses Need to Cope with Disease and Treatment Related Side Effects?**

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**OBJECTIVES:** To explore psychosocial needs among men operated for prostate cancer and their spouses in relation to diagnosis, treatment and treatment effects. On basis of reported psychosocial needs we sought to clarify which types of psychosocial interventions were appealing to men and spouses. The aim was to develop a psychosocial intervention to men surgically treated for prostate cancer and their spouses to improve coping abilities and strengthen patients and spouses adaptation to their different life situation. **METHOD:** Six patients were recruited from the surgical department, purposefully selected to obtain information about the first year following prostatectomy. Patients were operated 3, 6 and 12 months before the interview and ages ranged from 48–70 years. The interview guide focused on themes related to diagnosis and treatment of prostate cancer and qualitative semi-structured couple interviews were conducted. Interviews were transcribed and analyzed primarily using grounded theory and secondly within theoretical framework combining coping and rehabilitation. **RESULTS:** After initial analysis of the interviews eight different themes emerged: 1) diagnosis and treatment decision, 2) communication with health professionals, 3) incontinence, 4) impotence, 5) dyadic communication,

6) PSA-control, 7) CAM (complementary and alternative medicine), 8) use of patient organizations. Second cycle of analysis resulted in following coping related themes: to strive for control, to strive for appreciative relations, to adapt to a different life situation, together reflecting the psychosocial rehabilitation needs of the couple. **CONCLUSIONS:** Interviews revealed patients and spouses need of detailed information about disease and support in relation to treatment decision. Incontinence and impotence influenced men's self-esteem and patients reported loss of manhood. Spouses experienced difficulties in dyadic communication concerning disease and sexual problems and stressed need of support to facilitate couple communication. Some couples experienced problems in taking up sexual activity and healthy dyadic communication was a crucial factor in promoting sexual recovery after prostate cancer.

#### P-268

##### **Assessing The Awareness and practice of Papsmear Screening Among Christian Women**

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**OBJECTIVES:** Cancer of the cervix is the second most common cancer among our women. Most women with this disease present late for treatment. Women from different works of life often dominate most religious gatherings and this study set out to assess Christian women's awareness of cancer of the cervix and their practice of papsmear screening as a way to detect cancer of the cervix early. **METHOD:** Subjects for this study were females selected by random sampling from an interdenominational congregation of Christian worshippers from different parts of the country attending an annual convention. The researchers went from woman to woman during breaks between sessions assessing the women's awareness of cervical cancer and their practice of papsmear screening using a structured questionnaire. Those who filled the questionnaires were educated on what cancer of the cervix and papsmear were all about. **RESULTS:** 101 women participated in the study. Their average age was 31.50. 71.3 percent of them had tertiary education. 47.5 percent have not heard of cancer of the cervix before. 83.2 percent did not know what test to do to detect cancer of the cervix early, 80.2 percent did not know where to go for the test, 93.1 percent have never done a papsmear test and 89.1 percent did not know anyone who had cancer of the cervix before. **CONCLUSIONS:** Though women's awareness and practice of papsmear screening have been variously assessed, no assessment has been directed at the Christian religious woman who seeks hope and meaning in life from her religious practice. The findings of this study indicate that the Christian

woman is not empowered with enough information for preventive and curative care against cancer of the cervix. The church should educate women who make up her larger proportion on issues related to their health.

#### P-270

##### **Which Physical and Social Problems Predict Distress in Ethnically Diverse Cancer Patients: Comparison of two Cultural Groups**

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**OBJECTIVES:** Distress is well documented in cancer settings but its underlying predictors are less understood. We examined 32 potential predictors of distress in a large sample of British White (BW) and British South Asian (BSA) (largely Indian) according to self-rated ethnicity. **METHOD:** We analysed data collected from Leicester Cancer Centre from 2008–2009 involving approximately 1000 people approached by a research nurse and two therapeutic radiographers. There were 277 BW and 80 BSA individuals. Patients completed the Emotional Thermometer (ET) tool and a problem list. 95% BSA completed the questionnaires in English; the remaining completed a Gujarati version (back to back translation). **RESULTS:** Using a checklist locally adapted from the distress thermometer, in the larger group, work/school issues; mouth sores, nose dry/congestion, faith, pain and sleep were associated with distress. In the ethnic minority group only mouth sores, issues with God and problems getting around were significant. Surprisingly most checklist items were not predictive of distress. **CONCLUSIONS:** There appear to be significant differences in the influence of physical and social complaints on perceived distress according to ethnicity. Many items were not predictive. Our results could be influenced by low sample size in the minority group.

#### P-273

##### **The Psychosexual Effects Of Treatment Modality in Gynecological Cancer**

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**OBJECTIVES:** Gynecological cancer and various oncological treatments often cause psychological trauma and sexual dysfunction, which need to be identified and quantified for appropriate support and rehabilitation. **METHOD:** 300 women from age 25 to 55, who had undergone various oncological treatment were studied. The psychological stress factors were quantified by standard psychological tools and questionnaire. The sexual factors were

quantified by the frequency of intimacy with partners after treatment and this frequency was compared with their self reported frequency of intimacy at their prediagnosed state (considered as the control group). **RESULTS:** Stress level was acute at diagnosis, but was moderate to mild even after 3-8 years of disease free state. Fear of recurrence came down with increased duration of disease free state. Patients who had primary curative surgery had minimum problems. Patients receiving chemotherapy (Ca ovary and GTT) were less affected psychosexually. Radiated patients (generally cancer cervix) were more affected. Worst affected were those who had undergone surgery, radiation and chemotherapy combined. Sexual morbidity was 34%. **CONCLUSIONS:** Most patients suffered from anxiety and fear of recurrence, which diminished with increase in duration of disease free state. Patients with sexual dysfunctions needed medical (vaginal dilation, use of hormones, lubricants) and psychological intervention and support. Patients undergoing fertility preserving surgery needed extra psychological support during pregnancy. Nulliparous patients having radical surgery also needed extra support. The psychosexual problems when identified and addressed properly with necessary measures, the patients were able to lead a better and normal life at disease free state.

#### P-274

##### **Naturalistic Course of Distress, Depression and Anxiety following initial Cancer Treatment—Influence of Treatment-As-Usual**

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**OBJECTIVES:** There is considerable potential for psychological treatment to improve wellbeing in cancer. However such interventions have to show benefit above and beyond 'treatment-as-usual'. Here we aim to document the extent of improvement in emotional domains under routine clinical conditions. **METHOD:** We analysed data collected from Leicester Cancer Centre from 2008–2009 involving approximately 1000 people approached by a research nurse and two therapeutic radiographers. Of those approached 225 consented to a baseline interview soon after the start of oncology treatment, 221 consented to a re-interview at about 3 months and 194 consented to a follow up interview at 9 months. The mean time from diagnosis to the first interview was 7 weeks. **RESULTS:** Emotional symptoms improved over 9 months. The most significant improvement was in depression measured by the PHQ9 which improved by 64%, compared with 59% on the HADS-D and 25% on the DepT. Anxiety improved by 56% on the HADS-A compared with 33% on the AnxT. Distress improved by 25% on

the DT. However MDD did not improve 13.1% had MDD at baseline (mean PHQ9 = 17.3) and 14.7% at 9 months (mean PHQ9 = 18). **CONCLUSIONS:** Symptoms of distress appear to improve more than the syndrome of MDD. Substantial improvement of at least 25% and up to 65% in emotional domains can be anticipated over the first 3 months of treatment even under routine conditions, involving treatment-as-usual.

#### P-277

##### **The First Two Years of A Newly Settled Outpatient Unit of Psycho-oncology**

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**OBJECTIVES:** In 2002, the Psychiatry Clinic Ankara Oncology Research and Training Hospital was established to serve as a general psychiatry clinic. 6 years later the psycho-oncology unit was established to reach the target population with a psychiatric approach, evaluation, treatment, and psychosocial intervention. The purpose of this study is to show some data about cancer patients and to investigate this data impact on the quality of psychological care of cancer patients. **METHOD:** Eighty-eight patients attending the unit between November 2008 and January 2010 were to have participated in the study. The clinical data of the patients were taken from the hospital outpatient questionnaires retrospectively. **RESULTS:** The most common cancer diagnosis was breast carcinoma (42.1%) and genitourinary carcinomas (18.4%). The overall level of psychiatric morbidity in this sample was 70.6%: Of these diagnosis, 50.0% were major depression, 11.8% anxiety disorder, 5.9% adjustment disorders., 25.3 % of patients had previous psychiatric diagnosis. The mean total HADS score of the patients was  $16.59 \pm 9.85$ , the mean distress thermometer score of the patients was  $6.65 \pm 2.28$ , the mean HAMD score of the patients was  $14.08 \pm 9.25$ . **CONCLUSIONS:** The establishment psycho-oncology unit is very important development in our hospital. Obtaining information about the patients psychosocial difficulties could lead to further clinical interventions.

#### P-279

##### **The Giocamico Project, Project Of Expressive-playtime-relationship Active In Paediatric Wards**

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**OBJECTIVES:** The project, inside a model of global care in Paediatric and Oncohematology department, is aimed to: Activate gratifying and pleasant elements for hospitalized children; Encourage socialization and social integration; Offer continuity with 'normal' everyday life; Activate moments of playtime also with therapeutical goals; Prepare children that undergo surgery, MRI, CVC applications, lumbar puncture, bone marrow aspiration and scintigraphies through playtime that is oriented in information preparation; Form hospital volunteers. **METHOD:** The Giocamico project is the result of a collaboration of a social cooperative, the paediatric medical staff and local administration. The project is composed by 7 play specialists and more than 200 volunteers. The main activity is free play with the presence of a volunteer or operators and it takes place in the hospitals child's room 7 days a week. Preparatory activities instead are carried out only by the play specialists. **RESULTS:** 13348 children in the year 2009 met with the operators of the Giocamico project. The Giocamico project formed 915 volunteers from the year 1998 until now. 25249 the number of hours in the year 2009 that operators and volunteers were present in paediatric wards and 197835 hours since the year 1998. In 2009 the operators prepared 120 children for surgery, 150 children to use non-pharmacological pain management techniques and 140 children for MRI. **CONCLUSIONS:** The Giocamico project highlighted how playtime for hospitalized children can mitigate the distress associated to extended hospital stay and how through play the child can show his fears, anxiety and emotions using imagination. The Giocamico project has shown how the population can participate actively towards the wellbeing of the patients. The project has shown the way to integrate medical staff and non medical staff without hampering the normal life of the hospital.

#### P-281

##### **A Demographic and Thematic Overview of the Brain Tumour Patient and Caregiver Support Groups at the Princess Margaret Hospital, Toronto, Canada**

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**OBJECTIVES:** The diagnosis of a brain tumour imposes an extraordinary burden on patients and their families. This disease is often associated with neurological sequelae, including cognitive, psychological and functional impairments, that create unique challenges for patient and their caregivers. Few studies have examined the role of psychosocial support in this population. In this presentation, we

identify demographic and medical information about PMH brain tumour support group participants and common themes of group discussion. **METHOD:** Monthly, open, separate support groups for patients and caregivers have been conducted at PMH since 1999. A retrospective review of patient medical records, in addition to attendance and process notes recorded by group facilitators were analyzed from 1999–2006. Characteristics of group participants were identified in relation to attendance frequency (ie. those who attended 1 versus > 1 session). Common themes of discussion were extracted and comparisons made between the patient and caregiver group themes. **RESULTS:** 137 patients and 238 caregivers attended the group with ~50% attending only once. Male patients and female caregivers attended the groups more frequently. Most attendees were married. 54% of patients were diagnosed with glioblastoma multiforme, and most patients attended their first group within 3 months of diagnosis. Themes of discussion in the patient group emphasized physical, cognitive and emotional changes associated with the disease, while the caregiver themes focused on self care and caregiver burden. **CONCLUSIONS:** Content of discussion in patient and caregiver support groups appear to be different, with patients focusing on symptom management and caregivers on the emotional and practical implications of the illness. This finding suggests that there is benefit in maintaining separate groups for patients and caregivers. To further understand differences in attendance rates, the benefits and barriers to support group attendance for both patients and caregivers is currently under investigation.

#### P-282

##### **The Experience of Control Related to the Procedure of Non-pharmacologic Pain Management in Paediatric Oncology and Hematology**

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**OBJECTIVES:** Give information and instruments to patients, from 0 to 18 years old, undergoing invasive painful medical procedures (ex. Lumbar puncture, bone marrow aspiration) suitable to conduct non-pharmacologic techniques to control anxiety, fear and pain (distraction, relaxation, hypnosis and guided imagery); Unite patients and parents to become active subjects in medical treatments; create an environment where the child and his family can find help and comfort. **METHOD:** The intervention is carried out with the collaboration of the paediatric medical staff and four specialists in play and imaginative

techniques. The project has two different procedures: invasive procedures (lumbar puncture, bone marrow aspiration) undertaken by specialists; medication and 'standard' injection undertaken only by the medical staff. We collect information 'self-report' about the child, valuation of his distress and about his behaviour before and after the procedure with behavioural checklists. **RESULTS:** From 2005 until 2009 we have carried out 532 procedures with non-pharmacologic pain management. Behavioral checklist data have shown low anticipatory anxiety before invasive procedures and self-report data highlight that distress perception is very low. We noticed a decreasing distress in children undergoing repeated procedures and a better 'awakening' from sedation that was used when the anesthetist believed it was necessary, rather than children that didn't undergo the procedure with non-pharmacologic techniques. **CONCLUSIONS:** The techniques related to a non-pharmacologic pain management procedure are associated to an adequate pharmacological pain control, became very important to control invasive procedures in paediatric oncology; children have shown low distress levels and seems to be decreasing the impact that those procedures could have in the hospitalization life of our little patients. The use of non-pharmacological pain control techniques didn't hamper the hospital organization and the anesthetists job.

### P-283

#### Factors Influencing Academic Achievement in Survivors of Pediatric Brain Tumors

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**OBJECTIVES:** To evaluate the academic achievement of survivors of pediatric brain tumors relative to case-control classmates and determine the extent to which deficits are moderated by type of treatment, family socioeconomic status, parental education level, and quality of family environment. Survivors are known to be at risk of cognitive and academic impairments following treatment, however the degree of impairment varies and limited research examining the role of these factors and possible interactions between them exists.

**METHOD:** Survivors, ages 5–18 and 1–5 years post treatment, were recruited from tumor registries at four pediatric hospitals in the US and Canada to participate in data collection in each child's school and home. A case-control classmate matched for age, gender, and race was identified for each survivor. Measures included the Wide Range Achievement Test, parent demographic questionnaire, and Family Environment Scale. Medical data was obtained via chart review. Preliminary analyses include 164 pairs. **RESULTS:** Survivors demonstrated significantly lower achievement than controls in reading, spelling, and arithmetic, ( $p = 0.01$ ). Survivors who received chemotherapy (with or without neurosurgery) demonstrated lower reading and arithmetic scores than survivors treated with neurosurgery only. Results also suggest that the discrepancy in academic achievement scores between survivors and controls across all 3 academic domains may be moderated by family support and conflict. Final analyses will also examine possible interactions between family environment and treatment. **CONCLUSIONS:** This study supports frequently noted concerns about the potential impact of treatment for pediatric cancer on survivors' quality of life. Findings substantiate the documented detrimental impact of cranial radiation; we also find evidence that survivors who do not receive radiation may also experience academic difficulties and could benefit from support services and collaboration between medical and school systems. Finally, aspects of family environment may impact survivors' achievement, which offers tremendous potential for targeted interventions.

### P-284

#### Needs and Discomforts Of Oncology and Haemato-Oncology Patients Undergoing Chemo or Radiation Treatment

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**OBJECTIVES:** Purpose of the present survey was to assess needs, discomforts, and consequent issues related to therapies in a sample of patients undergoing chemotherapy or radiation therapy at the Treviso Ca' Foncello Hospital. In July 2009, 262 questionnaires were administered to patients referring to Oncology (102), Radiation Therapy (100) and Haematology (60). **METHOD:** A purpose built—three section—questionnaire was designed to inquire into patients' needs. The first set of items focused on their social-relational setting, on the health system and care, and on media information. Economic, organizational and transport discomforts were inquired in section two, whereas the last

section dealt with side effects, pain, nausea-vomiting, fatigue, anxiety, depression, sexual and sleeping disorders. **RESULTS:** Results show that patients' needs are primarily oriented to a good relation with nurses and paramedics (97%), good communication with medical doctors (95%), and family support (92%). With regards to discomforts, work organization is a major concern, strongly felt by 36% of patients. At last, in the third section, relative to treatment, fatigue is the most recorded at 51%, while sleeping disorders account for 31% of patients. **CONCLUSIONS:** Peculiarity of our work is that through a short questionnaire we were able to investigate into patients' needs relative to a numbers of fields (GP, family, acquaintances, religious faith, psychologist, informational material, medical doctors, voluntary associations, friends, mass media, nurses, testimonials), and to discomforts and issues related to undergoing treatment. Furthermore, questionnaires were administered in the same period in three separate units of the same hospital.

#### P-285

##### **Enhancing The Quality of Life For Patients And Families Through Raised Awareness**

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**OBJECTIVES:** The treatment of cancer is bordered by psychosocial, functional and palliative considerations requiring interprofessional team expertise. To meet these needs, social work, psychology, psychiatry, spiritual care, occupational therapy, physiotherapy, speech language pathology, nutrition, drug reimbursement and palliative care amalgamated forming the Patient and Family Support Program. Creating four task groups to achieve our mutual goals, the 'Increasing Awareness' group's purpose is to educate staff, patients and families regarding the unique skill set of each discipline. **METHOD:** Each year our cancer centre treats over 11,000 new patients annually. In an effort to increase the visibility of our program to each of these patients and their families, our task group embarked on an awareness raising campaign. Our method to increase the transparency of the program and its distinct roles encompassed three strategic themes: visual awareness, education and technology. **RESULTS:** While results of our newly amalgamated strategic efforts are pending and methods of evaluation are being considered, we hypothesize our efforts will result in identifying and improving access to the vast and complex needs of our patient and family population. **CONCLUSIONS:** Our presentation will conclude

with shared experiences and lessons learned in pursuit of enhancing our current profile as a comprehensive and interprofessional program, which extends beyond the traditional medical model.

#### P-286

##### **The Prevalence of Demoralization Syndrome among Cancer Outpatients on a Medical Center in Taiwan**

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**OBJECTIVES:** We try to explore the characteristics of demoralization among cancer outpatients and try to understand the association among demoralization and psychosocial issues in Taiwan. **METHOD:** The survey was conducted in a medical center, 2060 beds, from October 2008 to May 2009. Three hundred and twenty cancer outpatients were invited to participate. The Demoralization Scale Mandarin Version, Patient Health Questionnaire, Beck Hopelessness Scale, McGill Quality of Life Questionnaire were used as the instruments. All the data was analyzed using SPSS 16.0. **RESULTS:** The sample of 320 patients comprised 61 men and 167 women. The cancer type were breast 39.2%, cervical 26.6%, head and neck 15.9%, gastrointestinal 10.3%, lung 3.0%, hematologic 3.0%, testis 1.0%, skin 0.3% and others 0.7%. For the Demoralization Scale, the mean total score was 30.75 (*SD* 15.38), and range of results 0–77. The results of the ANOVA of Demoralization Scale showed a significant effect of education  $F(8.298) = 2.983$ ,  $p = 0.003$ , occupation  $F(5.298) = 8.134$ ,  $p < 0.005$ , income  $F(4.302) = 4.532$ ,  $p = 0.001$ , and diagnosis  $F(8.279) = 2.123$ ,  $p = 0.034$ . **CONCLUSIONS:** The results of current study show that, demoralization seems to associated with psychosocial issues and different physical illness. It proved the further viewpoints to manage the cancer patients with demoralization.

#### P-290

##### **Supply and Demand in Psycho-oncology: How the Psycho-oncologist Can Support the Patients and Respect Their Choices?**

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**OBJECTIVES:** The question of supply and demand is the main point in psychology. In oncology, this interest is quiet different. The patient just want to fight this serious illness, the psychological aspect comes after. Getting better is the patient's first

worry. Moreover, a psychological support is often interpreted as a weakness. That's why we wanted to propose a systematic consultation to allow the patients to formulate their latent demand. **METHOD:** A systematic psycho-oncology consultation is proposed in Cliniques Saint-Luc in Brussels. After this one, the patient can decide if he wishes a follow-up. It permits the patient's demand to emerge. Two studies assess that kind of consultation. The first one consists to send a survey to 300 patients suffering of a breast cancer. The second one consists to submit anxiety, depression and coping questionnaires to patient some days after they receive the diagnosis of cancer. **RESULTS:** The result of the first study shows us the interest of 85 percent of the women for that kind of consultations. They need a consultation with a psychologist to talk about the announcement of the diagnosis, the anxiety related to the treatments, the body image and their life after the cancer. The second study has not been finished yet. We will collect results soon. **CONCLUSIONS:** In Cliniques Universitaires St LUC in Brussels, the cancer's centre is composed of 15 multidisciplinary teams. Six Psychologists are included in these teams. Actually, we propose a systematic consultation after the announcement of the diagnosis of cancer in every multidisciplinary teams. We would like to prevent as far as we can considerable consequences in patients and his family's life.

#### P-291

##### **Appraisal of a Systematic Psycho-oncologist Consultation with Patients who Suffer of a Breast Cancer**

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**OBJECTIVES:** Since 2008, a psychologist is integrated in the multidisciplinary consultation for women who have a breast cancer. The patient meet a psychologist after the operation and during the others potentials treatments. We ponder on the interest of a systematic follow up with the psychologist. Across our survey, we would like to study the percentage of patient who call a psychologist after their first contact and understand why they would like to have another consultation. **METHOD:** We sent our survey by mail to the patients who met a psychologist during the multidisciplinary consultation of the breast cancer clinic. This survey include questionnaires relating to socio-demographic and clinic informations and questionnaire relating to the evaluation of the systematic follow up. The survey was sent to 150 women who was diagnosed a breast cancer and who was operated in 'Cliniques Universitaires Saint Luc'. This survey is anonymous.

**RESULTS:** 94% of this population received their first diagnosis of cancer, 56 % had a mastectomy and 59% get other treatments for their cancer. During this consultation, these women want to talk about the diagnosis of cancer and the anxiety about surgical operation and chemotherapy. Moreover, They need to assure a potential support if necessary. 85 percent of these women are satisfied with the proposition of a systematic follow-up. **CONCLUSIONS:** Our aims was to evaluate the psychological needs of the patients who have a breast cancer. Actually, we propose a systematic assistance of a psychologist to improve adaptation of patients to cancer and prevent them from suffering from psychiatric ailments.

#### P-297

##### **Influence of Anaemia on Clinical Symptoms, Quality of Life and Cognitive functions in Chemotherapy Naïve Cancer Patients**

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**OBJECTIVES:** Anaemia, bad Quality of Life (QoL) and cognitive dysfunctions are commonly present in cancer patients (pts). Previous studies mainly evaluated these problems during chemotherapy (CHT) or under influence of eritropoetic agents (EPO). We evaluated influence of anaemia 'per se' on QoL, clinical symptoms and especially on cognitive functions in chemotherapy naïve cancer patients and if correction of anaemia could improve this functions. **METHOD:** 200pts (100 anaemic and 100 without initial anaemia) in very early phase of diagnostic procedure which finally resulted in diagnosis of malignancies were evaluated by FactAn QoL Questionnaire and five point scale for subjective clinical symptoms. Cognitive functions have been measured by Complex Reactimeter Drenovac (CRD). Patients without malignant disease presented control group. All parameters have been measured twice: before and after therapy for anaemia. **RESULTS:** Haemoglobin level significantly influence on QoL, clinical symptoms and cognitive functions. Haemoglobin level (more than gender, age and education) is the most effective variable on cognition functions analysed by beta weights. Anaemia and cancer have additive negative effect. Correction of anaemia significantly improve QoL and cognitive functions but not in all categories (visual orientation and memory). Subjective feeling of cognitive disturbances are not in correlation with real cognitive achievement measured by CRD. **CONCLUSIONS:** Anaemia in cancer pts profoundly affects cognition, psychological well-being and QoL. Correction of anaemia in cancer patients has positive influence on their cognitive functions and QoL.

## P-314

**Evolution of Cancer-Related Psychological Symptoms Over An 18-Month Period**

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**OBJECTIVES:** Cross-sectional studies have revealed high rates of depression, anxiety, insomnia, fatigue and pain in cancer patients. However, much less is known about the natural course of these symptoms throughout the cancer treatment trajectory. In addition, the contribution of medical factors such as cancer site, stage and treatments in explaining changes in these symptoms has yet to be established. **METHOD:** As part of a larger epidemiological research, this study investigated longitudinal changes of these symptoms in patients scheduled to undergo surgery for cancer ( $n = 828$ ). The patients completed the *Hospital Anxiety and Depression Scale*, the *Insomnia Severity Index*, the *Multidimensional Fatigue Inventory*, and a pain questionnaire developed by our research team at six time points: at baseline (T1), as well as 2 (T2), 6 (T3), 10 (T4), 14 (T5) and 18 (T6) months later. **RESULTS:** Analyses of variance showed reductions of depression, anxiety and insomnia levels over time ( $ps < 0.0001$ ). Fatigue was fairly stable whereas pain increased progressively ( $ps < 0.0001$ ). Prostate cancer patients had lower levels of anxiety, insomnia, fatigue and pain ( $ps < 0.001$  or less). Patients having received chemotherapy displayed the greatest levels of insomnia and fatigue ( $ps < 0.05$  or less), whereas patients treated by surgery only showed the lowest levels of anxiety and insomnia ( $ps < 0.001$  or less). **CONCLUSIONS:** In summary, cancer patients reported an overall decrease in depression, anxiety and insomnia symptoms, stable levels of fatigue and an increase in pain over the 18-month period following surgery. This study also revealed some differences across cancer sites and treatment regimens received, but not between cancer stages. Further longitudinal investigations are needed in order to identify additional factors associated with changes in cancer-related symptoms over time.

## P-315

**Fear of Recurrence in the First Year After Diagnosis: Results of a Registry-Based Study**

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**OBJECTIVES:** Previous studies have shown that dealing with fear of cancer recurrence (FCR) is one of the most prevalent areas of concern amongst cancer survivors. Few studies have examined unmet need for help (UN) with FCR. The aims of this study were to a) describe the prevalence of UN with FCR in a representative sample of patients b) to explore the course of UN with FCR and c) identify factors associated with UN with FCR. **METHOD:** Participants were 1442 adult cancer survivors who were diagnosed with the most incident forms of cancer. A secondary analysis was undertaken of data gathered as part the Cancer Survival Study, a prospective study of the needs and adjustment of Australian cancer survivors. Participants completed mailed self-report questionnaires approximately 6 and 12 months post-diagnosis. This analysis included selected items from the SCNS-SF34 and the Mini-MAC. **RESULTS:** Lung and breast cancer patients had the highest proportion of patients reporting moderate to high UN with FCR at both 6 and 12 months post-diagnosis. Overall, 10% percent of patients report high or increasing levels of UN with FCR between 6 and 12 months after diagnosis. Factors that were consistently associated with UN with FCR included: receiving chemotherapy or radiotherapy, being a public patient, lower family income and younger age. **CONCLUSIONS:** Although many cancer survivors experience FCR, compared to studies of prevalence of FCR, relatively fewer patients report high levels of UN with FCR. Results identify groups of patients who need help with FCR, which can in turn assist the development of FCR interventions. Future data collection in this study will document the course of UN with FCR in the first 5 years after diagnosis.

## P-317

**Too Young For Breast Cancer! Providing Meaning To Breast Symptoms**

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**OBJECTIVES:** This study investigated breast cancer diagnosis in young women under 40 years of age. Its purpose explored women's health seeking behavior, determine if delay occurred and whether it differed by race/ethnicity. **METHOD:** A descriptive, qualitative design was used to interview thirty women using narrative analysis to analyze the women's breast cancer stories. The women were recruited from the San Francisco Bay Area and interviews were conducted in a location convenient for each individual woman. **RESULTS:** The women's stories revealed they self discovered their

breast symptoms, gave meaning to them, and sought immediate medical attention. Breast symptoms prompting a response were categorized as physical, visual, or emotional. Pain, an uncommon symptom, was the number one symptom identified leading to medical attention. For the same reason, it led to health care provider delays. Although African American women sought early attention they experienced longer delays, were diagnosed younger, and at a late stage. **CONCLUSIONS:** The narratives revealed that women reacted quickly to self-discovered breast symptoms and sought medical attention. This was especially true if their discovery coincided with that of a friend or celebrity, was discovered with a visual cue, or they found a breast change. However, women and their health care providers interpreted breast symptoms as normal or diagnosed with other breast health conditions, as they believed the women were 'too young to have cancer.'

#### P-318

##### **The Cédric Hèle Institute: Flemish Institute For Psychosocial Oncology: A Reference For Professionals In Oncology**

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**OBJECTIVES:** In Belgium the need to expand and to improve psychosocial care in oncology was great. A lot of caregivers wished to enhance and to improve the quality of their interventions. In an attempt to respond to these needs, a small group of caregivers joined their strengths and knowledge by establishing a multidisciplinary Flemish institute for psychosocial oncology, called the Cédric Hèle institute (CHI). All of this found place in close corporation with care providers and policy agents. **METHOD:** A focus of CHI is to organize and coordinate training in psychosocial care and to create networks of caregivers. The CHI organizes several courses and workgroups for different target groups. Many information is published on the CHI-website. In contacts with the caregivers CHI often observes needs in psychosocial care. Another focus is to indicate these needs to policy agents. CHI was involved in coordination platforms and workgroups of the National Cancerplan of the Belgian government. **RESULTS:** 131 onco-professionals participated in one of the 12 CHI courses or workgroups in 2009. In association with the universities the institute organised again a

two-year training in psycho-oncology. In 2010 the government finances the subscription of 75 psychologists. CHI organised an event about burnout in oncology, 140 participants were present. The CHI website has 2400 visitors per month. The Belgian government provides funding so in 2010 CHI can organise free courses on developing and practicing communication skills for 150 onco-professionals. **CONCLUSIONS:** The CHI has become a reference for many professionals in oncology, for training and networking in psychosocial oncology. In 2010 the CHI wants to create an internet community and forum to further improve networking and to gather more knowledge and information. CHI also aims to become a reference for scientific research in psychosocial oncology in Flanders. We want to encourage more research in the clinic of oncology.

#### P-319

##### **A Study Of Burnout Among Oncology Professionals: Oncologists Are At Risk Of Burnout**

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**OBJECTIVES:** International research shows that oncology staff suffers more from stress and burnout than other health care professionals do. Burnout is common amongst oncologists. The prevalence of emotional exhaustion, depersonalisation and low personal accomplishment appears to be significantly higher among physicians. A national study on the prevalence of burnout in oncology was until now not conducted in Flanders (Dutch speaking part of Belgium). The Cédric Hèle institute, Flemish institute for psychosocial oncology (Chi), started a study. **METHOD:** The Chi spread questionnaires amongst 923 health care workers in oncology in Flanders. The questionnaire consisted of two parts. A first part contained questions concerning demographic and job features. In the second part, the Dutch version of the Maslach Burnout Inventory (UBOS-C), was used. UBOS-C is a valid and reliable self reporting scale to measure burnout. It contains 20 questions and is divided in 3 subscales: emotional exhaustion, depersonalization and personal accomplishment. **RESULTS:** 550 subjects participated in the survey (response rate of 59,5%). 51,2% of the medical oncologists suffer from emotional exhaustion and 31,8% from depersonalization. Univariate analysis confirmed a significant elevated level of emotional exhaustion and depersonalization in doctors compared to other health care workers. Logistic regression shows that the following variables have predictive value: gender, profession, combining

work in a university hospital with work in a private hospital and having the opportunity to perform research. **CONCLUSIONS:** The Chi-research shows a problematic level of burnout-components in onco-professionals, especially in medical oncologists. More research should be conducted on the factors which can cause and prevent burn-out. Also possible post-traumatic stress complaints should be investigated. Hospital management and policy makers should take into account that oncology professionals have a lot to endure and should be concerned about prevention and support in order to avoid burnout symptoms. Implementation of training could be an important action.

### P-320

#### Patient Reported Outcomes Among Women With Breast Cancer—A Population-based Cross-sectional Study In Central Sweden

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**OBJECTIVES:** The purpose was to describe health-related quality of life (HRQoL), anxiety, depression, and satisfaction with care among women with breast cancer shortly after diagnosis. Furthermore, the purpose was to investigate the influence (association and contribution) of medical, demographic and socio-economic factors as well as of social support on HRQoL, anxiety, depression, and patient satisfaction. **METHOD:** The study was conducted as a cross-sectional questionnaire study based on a breast cancer quality register in central Sweden. All newly diagnosed women registered within a one-year period (2007–2008) were included. Of 1574 eligible women 70% ( $N = 1094$ ) accepted participation. Participants completed a questionnaire including the EORTC QLQ-C30 and BR23, the HADS, a study specific instrument measuring patient satisfaction, and questions regarding individual characteristics. Descriptive statistics and sequential multiple linear regression were used for analysis. **RESULTS:** The women experienced problems in few HRQoL dimensions, clinically significant anxiety and depression were found among 13.8% and 5.7%, respectively, and there was a high degree of patient satisfaction. Certain medical factors and a younger age were related to more problems/symptoms and less satisfaction. Adding other demographic factors, social support, and socio-economic factors significantly improved the explained variances, but only a

few associations with age remained. The explained variances varied from 6–45%. **CONCLUSIONS:** The results provide new generalizable knowledge about patient reported problems/symptoms and satisfaction with care among women undergoing modern breast cancer treatment in Sweden. The results show that patient reported outcomes are complex phenomena as they are only partly explained by established medical and individual factors. The present study has created new hypotheses as part of a longitudinal study aiming at improving the care of breast cancer patients.

### P-322

#### Adjustment of Parents after the Death of a Child to Cancer

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**OBJECTIVES:** Bereaved parents are at risk for multiple psychosocial difficulties that can endure for years. Internalizing difficulties, such as depression, anxiety, guilt, and post-traumatic stress symptoms, have been reported frequently. However, research has often been limited by ascertainment bias, the use of single informants, and retrospective designs. Thus, during the first year after a child's death from cancer, we compared the adjustment of bereaved mothers and fathers to parents who had not lost a child. **METHOD:** Parents were recruited from three children's hospitals in the United States and Canada 3–12 months after their child died of cancer ( $M = 11.09$  months,  $SD = 3.66$ ). Fifty-five families with a surviving child (55 mothers, 37 fathers) agreed to participate (60%) along with 48 matched comparison families (48 mothers, 30 fathers). Parents completed measures of psychosocial adjustment (i.e. Adult Self Report, Impact of Events Scale) separately during an assessment in their home. **RESULTS:** Preliminary analyses revealed that bereaved and comparison families did not differ on demographic variables. Bereaved mothers and fathers reported significantly higher scores for friendships ( $d = 0.48$ ,  $d = 0.56$ ). Bereaved mothers reported more internalizing symptoms ( $d = 0.66$ ) and total problems ( $d = 0.52$ ) than comparison

mothers. Bereaved parents also had significantly higher post-traumatic stress symptoms. Parent age and time since death were generally not related to adjustment. **CONCLUSIONS:** Bereaved parents experienced significant post-traumatic stress symptoms in the first year after the death of a child to cancer. Bereaved mothers may have additional risk for other internalizing difficulties. Research should continue to focus on the development and evaluation of interventions to improve adjustment during the first year after the loss of a child, particularly among mothers. Healthcare providers should follow and reassess bereaved families to screen for difficulties and offer appropriate resources.

### P-326

#### **Validity of the FACIT-Spirituality (FACIT-Sp) Questionnaire's Use of 'Peace' with Arab Muslim Cancer Patients: A Qualitative Exploration**

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**OBJECTIVES:** To identify an appropriate instrument to describe the role of spirituality in the well-being of Muslim cancer patients in Arabia. Given that in Arabic the words 'peace' and 'Islam' share the same root, it was uncertain whether the word 'peace' in the FACIT-Sp, which assesses emotional and mental peacefulness, would carry the meaning necessary to refer to emotional and mental states or whether it would refer to theological ideas. **METHOD:** Qualitative exploration. Fifteen Arab Muslim patients at the King Hussein Cancer Center, Amman, Jordan, were interviewed during December 2009, to identify the references that came to mind for the word 'peace' as used in the FACIT-Sp. **RESULTS:** Mean age was 46.2 years (15.8); 8 were female; tumor types were breast ( $n = 3$ ), lung ( $n = 2$ ), and multiple others ( $n = 8$ ). Respondents identified the following meanings for 'peace': stability and security ( $n = 5$ ), freedom from problems ( $n = 2$ ), love ( $n = 2$ ), being cared for ( $n = 2$ ), freedom from fear ( $n = 2$ ), psychological rest, and the opposite of anxiety. No differences by cancer type or stage were noted, but more men ( $n = 4$ ) identified 'stability' and 'security.' **CONCLUSIONS:** While all references point to inner states, 'stability' and 'security' carry with them external, theological references: a theological understanding of the term 'Islam' is that Muslims experience stability and security because all Muslims alike submit to God, which ensures a stable and secure community. This poses no problems for the FACIT-Sp, as the notions of stability and security carry with them emotional and mental references as well. The difference in gender supports further study.

### P-338

#### **The Importance of Attachment in Adjustment to Cancer Diagnosis for both Patients and Their Family**

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**OBJECTIVES:** There is clear evidence that having a secure attachment relationship is associated with less stress following negative life events. It is suggested that secure familial attachments can help both the cancer patient and their supportive family network to deal better with diagnosis, and to adjust more positively in the long-term. This study aims to comprehensively review the literature to establish the extent to which familial attachment may be associated with cancer adjustment. **METHOD:** Any design of study investigating the association between attachment and a range of psychosocial outcomes (including anxiety, depression, coping, quality of life, continuity of relationship) are included in this review. Only studies of a dyadic relationship are included where at least one of them has been diagnosed with cancer. A number of electronic databases were searched including Medline, CINAHL, BNI, and PsychINFO. **RESULTS:** Electronic searches have been completed and searches are being scrutinised by two independent reviewers against pre-defined inclusion criteria. Data will be extracted from relevant papers and meta-analysed where possible (following the Hunter and Schmidt method). Each included study will also be systematically quality assessed. **CONCLUSIONS:** It is anticipated that the findings from this review will inform the development of evidence-based psychosocial interventions for cancer patients and their families. Support groups are frequently evidenced to help patients and their families cope with the demands of cancer and we expect the findings of this review to lead to evidence-based recommendations for how these may most effectively support the entire family unit.

### P-339

#### **Psychological Adjustment in Women After First Breast Cancer Diagnosis and Breast Cancer Recurrence Announce: A Comparative Study**

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**OBJECTIVES:** The aim of the current study is to compare the role of psychological factors which could be explained emotional distress and quality of life differences between patients with first breast cancer and with first breast recurrence. The

hypothesis is that the announcement of recurrence could revive same emotions but more intensively than the announcement of first breast cancer, with better control sense and patients could use more emotional and less problem coping strategies. **METHOD:** This study included 30 patients with breast cancer recurrence and 30 patients with first breast cancer. These are issued from a cohort study and were selected according to matched-up age, employment, familial status. They have completed one month after diagnosis validated self-questionnaires of optimism (LOT-R), control disease (C.L.C.S.), coping (MAC), emotional distress (HAD), and quality of life (EORTC-QLQC-30). Linear regression analysis permitted to test our hypothesis. **RESULTS:** There are no significant differences between groups in sense of disease control, optimism and emotional distress. But the quality of life of patients with recurrence breast cancer is lower than the patients with first breast cancer, and they use more emotional coping strategies (helplessness/hopelessness and anxious preoccupations) than patients with first breast cancer. Moreover, emotional distress is more predicted if patients use emotional coping strategies and less predicted if patients use control disease. **CONCLUSIONS:** Thus to study the psychological adjustments of women during different stages of treatment, the temporal dimension in first breast cancer or recurrence appears as fundamental. This research permits to glimpse the interest of a better qualification of emotional distress which can be considered as criterion, transactional variable or predictor. Another view to consider is the depression: more than 30 % of the patients said suffering of depressive syndrome before the announce of cancer.

#### P-342

##### **Quality of Life, Anxiety and Body Image of Patients with Breast Reconstruction: First Results of a Comparative Study**

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**OBJECTIVES:** The aim of the current study is to undertake a qualitative and quantitative evaluation of three factors: quality of life, body image, anxiety, throw through the different methods of breast reconstruction proposed to women after first breast cancer. The assumption is that these are not different methods of breast reconstruction proposed that determine the choice whether or not of breast reconstruction, but decreased anxiety, improved body image and quality of life. **METHOD:** This study included 50 patients who were seeking breast reconstruction and 50 patients who didn't

have breast reconstruction (six months to one year after the breast treatment). We used face to face, semi-structured interviews and patients also have completed self-questionnaires of quality of life (WHOQOL-26) body image (MBSRQ-AS) and anxiety (STAI). The transcripts of the participants' responses were subjected to a content analysis and ANOVA was performed in order to show differences between groups. **RESULTS:** Women with breast reconstruction are inclined to have better physical and psychological quality of life and lower anxiety. 56 % of them said that their choice of breast reconstruction was been done at the announce of cancer, 30 % would like find again sense of femininity and had a sensation of revival. More than 80% affirmed they have been sustained by theirs close relatives. Most of them remained traumatic dimension of the announce of cancer. **CONCLUSIONS:** Despite of the fact that the number of women seeking breast reconstruction after cancer has risen during the last decade from 10% to 30%, this percentage remains low. But nevertheless, outcomes from studies about mastectomy patients with or without reconstruction are mixed. This work shows that women who chose breast reconstruction seem to be more motivated by getting a better body image and quality of life than breast reconstruction methods.

#### P-345

##### **Exploring the Psychosocial Needs of Children Whose Parent Has Cancer: Child and Parent Perspectives**

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**OBJECTIVES:** The impact of cancer diagnosis extends beyond the patient. Little conclusive evidence exists on how children cope with the disruption caused by their parent having cancer. The literature is further confused by those using parental-report over self-report due to inherent psychometric biases. This study aimed to investigate the child's lived experience of parental cancer, and their psychosocial and supportive needs. **METHOD:** Three parent-child dyads were recruited. In each case, the parent had been recently diagnosed with breast cancer. The children were 8 to 11 years old. Semi-structured interviews were conducted with the parent and child independently. Interviews transcripts were analysed using Interpretative Phenomenological Analysis (IPA), a method particularly suited to exploration of how people make sense of their personal and social world. Play activities were used in the child interviews to help elucidate verbal responses. **RESULTS:** Results provide further evidence of disagreement between parent and child reports of

adjustment difficulties. Children's interviews revealed themes of internalised psychosocial problems including anxieties over the possible parental death parent, separation anxiety and worries regarding contracting the illness. Parent's interviews identified more practical issues including picking children up from school, ensuring the child continues with hobbies and other activities, and problems with initiating physical contact with children due to pain and other cancer symptoms. **CONCLUSIONS:** By highlighting the child's experience and needs from their own perspective, this work will form the basis for future research into effective and evidence-based supportive interventions for children of cancer patients.

#### P-348

##### **Breast Cancer Awareness for Young Women**

Lorna Larsen

*Team Shan Breast Cancer Awareness for Young Women, Woodstock, Ontario, Canada*

**OBJECTIVES:** To review the needs assessment, recommendations from statistics and literature reviews, results of the focus testing of draft awareness materials with young women (15–29 years of age) and the formal evaluation of a multi-faceted breast cancer awareness campaign targeting young women implemented in southwestern Ontario. To share the breast cancer knowledge level of young women both pre and post campaign, process outcomes, lessons learned and strategies identified to raise awareness with the targeted population. **METHOD:** A comprehensive social marketing approach was developed and implemented for the awareness campaign. Activities included print media, radio and television spots, dissemination of resource materials, billboards, bus ads and community presentation opportunities. Community partnerships with public health, community health, education and other professionals and media links were established. The theme of the project, Breast Cancer...not just a disease of older women, was reflected throughout the campaign resources and activities. **RESULTS:** Self reporting of some breast cancer knowledge increased post-campaign and significant increases in both breast cancer facts and risk factors were reported by the target population. The project was successful in developing a variety of strategies to inform young women about their risk of breast cancer. Young women responded positively to the information and the use of a specific person and her story made a difference in communicating the message to young women. **CONCLUSIONS:** The vast majority of comments from young women in response to the campaign were extremely positive and sug-

gested more awareness and education. Young women appreciated not being forgotten in breast cancer messaging. Young women need information and awareness about their risk of breast cancer. Knowledge of symptoms and self help strategies provide young women with the opportunity for self detection and earlier medical diagnosis. The multi-faceted approach undertaken addressed these needs.

#### P-352

##### **Evaluation of an End-of-Life Peer Support Group Intervention for Cancer Information Specialists at a National Cancer Information Call Center**

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**OBJECTIVES:** Cancer Information Specialists (CIS) who receive calls to cancer information call centers are trained to attend to a wide range of requests. Some of the most challenging calls involve end-of-life (EoL) issues for patients, caregivers, and family members. Previously conducted focus groups with CIS had indicated a need for specialized training in handling EoL calls. In response to this identified need, call center staff designed, implemented, and evaluated an EoL Peer Support Program. **METHOD:** 40 CIS met monthly for six months in hour-long sessions focusing on: Active/Reflective Listening, EoL Resources, Stress Management, Understanding Grief, Compassion Fatigue, and Self-Care. Social workers, counselors, and tenured CIS developed and delivered the curriculum. Pre and post-intervention surveys provided baseline and follow-up data regarding: skill-building, self-care, secondary trauma, job satisfaction, and workplace cohesion. An additional 39 CIS served as controls, completing both surveys, but not participating in the peer support sessions. **RESULTS:** Participants reported high satisfaction with the program and making valuable gains in handling EoL calls and self-care. There was some indication that the intervention group had greater gains in self-care compared to controls, but both groups improved over time in all domains. Possible explanations include increased call center-wide support and other organizational processes affecting all CIS equally. Sharing of information between intervention and control participants may have led to improvement over time in both groups. **CONCLUSIONS:** Handling EoL calls is a challenging, and at times, difficult job. Providing peer support may improve morale, reduce distress, and minimize burnout. Participants' reactions to this peer support program were overwhelmingly positive and a majority participated due to a desire for knowledge or support. For many, the peer support and normalization of their experiences were as

important as the curriculum content itself. Future research is needed to identify the optimal method of delivering such support.

### P-353

#### **The Importance Of Meaning Orientation For The Quality Of Life Of Women Suffering From Breast Cancer**

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**OBJECTIVES:** 12 women suffering from breast cancer were investigated in a qualitative study. Topic was the connection of meaning orientation according to the findings of Viktor Frankl for the quality of life of these women. Field of interest was also the relation between meaning in life and different coping strategies and the sense of coherence. **METHOD:** 12 women while or after medical treatment due to breast cancer were interviewed by the psychooncologist. Interviews were interpreted and based on a grounded theory. **RESULTS:** 9 from 12 women showed a significant connection between the inner attitude towards their disease and fate in dependence to the meaning in life they found during the time of treatment of breast cancer. Quality of life appeared to be strongly connected with the inner feeling of having meaning orientation towards future goals in life. 3 women presented importance of meaning orientation at least to keep their level of quality of life stable. **CONCLUSIONS:** Indications could be found that quality of life especially for women suffering from breast cancer depends in a significant way from the meaning orientation as Viktor Frankl postulated it in his Logotherapy and Existential Analysis. Having purpose in life helps these women to cope the special gynecological problems from the female point of view. Psychooncology in gynecology seems to have a special need of meaning orientated psychotherapeutic approaches.

### P-356

#### **Are Literature Reviews Stronger with a Multidisciplinary Approach?: Measuring the Impact of Collaborating with a Clinical Librarian**

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**OBJECTIVES:** Evidence-based practice integrates relevant and current clinical evidence with clinical practice. Garnering the relevant literature for a review or meta-analysis is dependent on the skills and knowledge of the researcher. However, are we doing due diligence in our search for evidence and literature reviews? Might working with a Clinical Librarian improve our outcomes and thus the evidence? This study examines and compares between the literature generated by researchers and a researcher - Clinical Librarian combination. **METHOD:** The topic in question was 'patient centered care' and the inclusion and exclusion criteria were set a priori. The control group contained the lead researcher and his research team, and the experimental group involved the same lead research in combination with the Clinical Librarian. The lead researcher served as a neutral subject expert for both groups and did not share the search techniques or the databases between groups. **RESULTS:** The study is an ongoing one and documents the apparent benefits of working with a Clinical Librarian. The impact of the involvement of the Librarian scientist was measured by the relevance of the literature retrieved, the extent of overlap and the proportion of variance between the two groups. Further analyses will demonstrate the impact a Clinical Librarian has on the output of a literature review. **CONCLUSIONS:** In this day of advanced technology and specialization, a single scientist cannot play a robust multi-dimensional role. The dividends of functioning as part of a multidisciplinary team is greater than working within the exclusivity of one's discipline. The present study measures the impact of this team work and collaboration in improving the quality of research outcomes.

### P-360

#### **Finding Hope and Meaning: Group Music Therapy for Women with Breast Cancer**

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**OBJECTIVES:** Psychosocial interventions have become an integral part of healthcare treatment in order to address cancer patients' emotional states and quality of life. Music therapy has gained significant recognition as a psychosocial therapeutic intervention in cancer care. This paper will describe how a six week music therapy program designed to support the needs of women living with breast cancer also fostered hope and meaning. Case vignettes will be used to illustrate the potential in this area. **METHOD:** This study is designed for twenty four patients diagnosed with breast cancer, who receive weekly group music therapy sessions over six weeks lasting for one hour. Data will be presented on seventeen participants who have

completed the program. Session data includes musical interactions, patient conversations, qualitative interviews and observable behaviour. **RESULTS:** Data on four music therapy groups will be presented. Qualitative data analysis indicates the following emergent themes: isolation, the impact of cancer on identity, the impact of cancer on relationships, the effects of treatment, living and coping with uncertainty, life after treatment and hope. **CONCLUSIONS:** Results indicate that group music therapy for women with breast cancer addresses and reduces feelings of isolation, it offers psychological and peer support, together with practical techniques for coping with the effects of treatment. The results also illustrate how women living with breast cancer find hope and meaning through participating in group music therapy with other women who also have breast cancer, irrespective of their cancer stage.

#### P-364

##### **HPV Knowledge, Health Value and Health Self-Efficacy and Men's Intentions to Receive the HPV Vaccine**

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**OBJECTIVES:** The aim of the present study was to determine whether HPV knowledge, health beliefs and health self-efficacy could predict intention to receive the HPV vaccine in an Australian male sample. **METHOD:** One hundred and twenty one males, aged 18 to 26 ( $M = 22.3$ ,  $SD = 2.06$ ) years and residing in Australia, completed an online survey assessing HPV-related knowledge, health beliefs and health self-efficacy. **RESULTS:** A multivariate linear regression analysis revealed that, as hypothesised, HPV knowledge and health self-efficacy were significant independent predictors of vaccine acceptance at the  $p$  less than 0.05 level. Contrary to previous findings, health value did not significantly predict vaccination intentions. In addition, a moderating effect was found between HPV knowledge and health self-efficacy. **CONCLUSIONS:** Previous research regarding HPV vaccination intentions has largely focused on females, and as a result the factors that influence males to undertake HPV vaccination were largely unknown. This study, despite its limitations, has offered some useful insights into some of the factors that are associated with HPV vaccine intentions in a sample of Australian men.

#### P-365

##### **Perception of Cancer and Symptoms: How Important are they in the Construction of Meaning and as a Determinant of Distress and Health Behaviour**

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**OBJECTIVES:** Distress is common in response to a diagnosis of cancer and its treatment. Individual variation in distress is not fully explained by demographic or disease variables. The subjective nature of symptoms and the contribution of illness perceptions as a determinant of distress and health behaviour have received little empirical attention but are shown theoretically to be an important variable in determining patient response to illness and the threat posed by cancer and related symptoms. **METHOD:** We conducted a systematic review of the literature using the following databases: HealthStar, Medline, CINAHL, Embase and PsychINFO through to 2009 using terms such as illness perception, beliefs, self-regulation, common-sense models, attributions combined with specific terms for symptoms (pain, fatigue), symptom distress, adjustment, chronic illness, cancer. **RESULTS:** A wealth of literature was identified demonstrating the role of illness perception in chronic conditions such as heart disease, diabetes and arthritis on important clinical outcomes including psychological adjustment, pain, and health behaviour. Of the few studies identified in cancer, illness perception was an important determinant of diagnostic delay, uptake of cancer screening, and psychological adjustment but its role on symptoms is less clear. **CONCLUSIONS:** An individual's interpretation and attachment of meaning and significance to cancer and related symptoms is a potentially important contributor to distress that requires further examination. The purpose of this paper is to present a descriptive synthesis of the findings of this systematic literature review on illness perceptions and highlight implications for practice and further research.

#### P-367

##### **Home Sweet Home: Safety For The Palliative Patient, Their Family And Providers At Home**

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**OBJECTIVES:** Providing end-of-life care in the home can often be a challenging time of transition for palliative cancer patients and their caregivers. The challenge is to bring this important piece of the full continuum of healthcare into the community. The purpose of this study is to explore experiences, challenges, and insights regarding the safety (i.e. physical, functional, and psychosocial safety) of those receiving and providing palliative home-care services in Quebec urban settings. **METHOD:** Informed by a socio-ecological perspective, this mixed-method study utilizes interpretive description to capture social, emotional, functional and physical contexts that influence the health-illness experience for palliative homecare clients. Spanning several sites in Montreal and Quebec City, data collection and analysis includes the use of audio-taped interviews, photographic walkabouts utilizing human factors techniques in the client's home, and focus groups with homecare providers. Interviews were conducted with clients, family member, caregivers, and providers. **RESULTS:** The unique nature of individual homes, family dynamics and collaboration with health care teams often comprised of multiple care providers, in addition to the challenges of documentation and communication, makes safety in palliative home-care complex. Findings are intended to contribute to further development of homecare standards. Preliminary findings highlight the importance of communication and decision negotiation as key components to safer homecare for all parties. **CONCLUSIONS:** The increasing expectation that the palliative population will remain at home is being met with the practicalities of caring for patients who may have end-of-life spans that are less predictable, longer and more complicated than the small window of time that many consider the dying phase. This mixed-methods research offers new pathways for researchers to discover and exchange knowledge about homecare safety with clients, family caregivers, practitioners, and health system decision-makers.

### P-369

#### **Group Interventions for Children Whose Parents Have Cancer: Results of an Environmental Scan of Canadian Cancer Institutions**

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**OBJECTIVES:** The psychosocial impact of parental cancer on children is well-documented, however little is known about the effectiveness of group support and education programs for children whose parents have cancer. Identifying the

practical challenges and successes of implementation, as perceived by program facilitators, will help inform future program development and evaluation. The present study is an environmental scan of group programs for children and adolescents whose parents have cancer, currently offered by Canadian cancer institutions. **METHOD:** The supportive care/social work departments of all major publicly-funded Canadian cancer care institutions ( $N = 32$ ) were first contacted via email or telephone. An interview was conducted with a program facilitator, or clinician most knowledgeable of such group programs offered at their institution. Information gathered during the interview included group format and content, and perceived program effectiveness. **RESULTS:** Out of 32 cancer centres, 10 are currently running group programs for children and/or adolescents. Programs are offered in multiple-session and single-session formats, however nearly all have been experiencing lower enrollment in recent years. Most provide a balance of education and support, and cover a range of topics related to cancer in the family. Several programs include a parent component. Based on facilitator observation and feedback from participants, programs are meeting a need for families. **CONCLUSIONS:** Most program facilitators identified that in order to optimize enrollment and effectiveness, group interventions for children and adolescents need to be flexible in terms of format, provide education about cancer and its treatment, normalize emotional reactions to cancer-related changes in the family, encourage open communication between parents and children, and incorporate creative arts modalities. Qualitative and quantitative needs assessments and intervention research are lacking, and would inform changes leading to enhanced program effectiveness and accessibility.

### P-373

#### **Revisiting the Shared Decision-Making Model for Cancer Patients**

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**OBJECTIVES:** Increasingly, shared decision-making (SDM) is replacing paternalism as the preferred model of the physician-patient relationship in cancer care. SDM is seen as the 'gold standard' because it enhances patient autonomy and encourages patient participation. Questions remain, however, concerning the meaning of 'participation' in the model and how participation is understood by cancer patients. This paper explores how participation in SDM has been conceptualized and develops a refined and morally defensible model. **METHOD:** Philosophical

inquiry methodology is used to gain conceptual clarification regarding how participation is understood within the health literature and across existing SDM models. Empirical evidence of SDM in the context of cancer is examined to increase understanding of how SDM is enacted within cancer care settings and to test the adequacy of the theory. A feminist lens is utilized throughout the inquiry process to gain insight into women's unique experiences of SDM and participation. RESULTS: 'Participation' has strong and weak meanings in existing SDM models. Whereas 'strong participation' involves the exercise of considerable authority on the part of the cancer patient, 'weak participation' merely involves the statement of preferences, which the physician then uses to make a final treatment decision. Empirical evidence suggests women living with cancer endorse a weak interpretation of participation and that their ability to participate in treatment decisions is hindered by a range of contextual factors. CONCLUSIONS: A moral model of SDM may require both strong and weak conceptions of participation. Including weak participation within the model provides room for genuinely autonomous decision-making, allowing patients to defer to physician authority. Acknowledgement is needed, however, that weak notions of participation may be the product of unjust social circumstances. In addition, gender differences, power relationships, and contextual factors are important to consider in revising the SDM model and understanding patient participation for clinical practice.

#### P-380

##### School-Related Difficulties After Discharge In Japanese Childhood Cancer Patients

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OBJECTIVES: Medical advances in childhood cancer therapy have brought about a marked improvement in survival rates. However, the health status of a significant number of long-term survivors suffers owing to cancer or its treatment

(Hudson *et al.*, 2003). In particular, after discharge from hospital, patients experience school-related difficulties (Barrera *et al.*, 2005). This study aims to explore the psychosocial difficulties concerning school life after discharge in Japanese childhood cancer patients. METHOD: Subjects included 21 childhood cancer patients suffering from who are outpatients for the pediatrics (6 male and 15 female, mean age at survey = 15.6 ± 1.7 yrs). Diagnosis included leukemia (*n* = 15), bone tumor (*n* = 3), and malignant lymphoma (*n* = 3). Through the open-ended questionnaire and semi-structured interview, they were asked to answer the questions about their school-related difficulties after discharge. The data was analyzed using a descriptive analysis by undergraduate and graduate students majoring in psychology. RESULTS: School-related psychosocial difficulties were classified into four categories: 'difficulties in education', 'difficulties in extracurricular activities', 'difficulties in relations with friends', and 'difficulties in relations with teacher'. The attributes indicated that over 30% of the participants were 'attending physical education,' 'lagging behind at school,' 'attending class except physical education,' 'joining club activities,' and 'attending school events.' CONCLUSIONS: These findings suggest that most of the patients suffering from childhood cancer face difficulties in education, extracurricular activities, and relations with friends. It is difficult for patients to adapt to school life owing to long-term cancer treatments. The category of difficulties in relations with friends was not seen in the previous study of foreign countries. In Japan, how patients communicate about their disease to friends is also important.

#### P-382

##### Psychosocial Effects of Mastectomy on Married Woman in Southern India

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OBJECTIVES: Background: Many studies have examined the psychosocial impact of Breast Cancer and its treatment on women who are from a poor and uneducated background in developing country. The aim of this study is to find out the psychosocial effects in married Breast cancer patients in southern India. METHOD: Semi structured Questionnaires were given to 118 consenting women treated with Mastectomy for an operable Breast cancer at our Institution. Questionnaires were answered at least 4 months after Mastectomy and the questions were about the conjugal relationship and how the woman's sense of femininity was affected. Marital status was also

traced up to 2 years. **RESULTS:** 4 months after surgery, the survey revealed 63 patients (53.3%) felt inadequate as a woman because of mastectomy, they also felt that their self esteem was also low. 35 patients (29.6%) experienced a decrease in frequency of their sexual relation ship due to mastectomy. 94 patients (79.6%) were still married and 24 patients (20.3%) were separated / divorced at the end of 2 years. **CONCLUSIONS:** This is one of the very few reports of the psychosocial aspects of Breast cancer and its treatment on women in this region of India. The results indicate that the married woman face significant physical, emotional and social changes following breast cancer treatment. Counseling should be established to help such women with Breast cancer and their families to understand, cope up with their disease and their long term health and quality of life implications.

#### P-384

##### **Development of Communication Skills Training Program for Oncologists Based on the Patient Preferences for Communicating Bad News in Japan**

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**OBJECTIVES:** To develop a communication skills training (CST) program for oncologists, on how to deliver bad news based on the patient preferences and to evaluate the program preliminarily by oncologists' behaviors, self-efficacy and satisfaction. **METHOD:** Sixteen oncologists attended a newly developed two-day CST. This program was based on the previous surveys on patient preferences, stressing the oncologists' emotional support. Participants were assessed their communication performances during simulated consultation at the pre- and post-CST. Participants were also asked to rate their own confidence communicating with patients at the pre-, post-, and 3-months after CST, burnout at pre and three months after CST, and the helpfulness of the program at post-CST. **RESULTS:** On the basis of a pre-post measure, oncologists showed improvement of their communication behaviors, especially skills of emotional support and delivering information. Their confidence in communicating bad news was rated higher after the CST and was persisted at 3-months after the CST. Emotional exhaustion scores decreased at 3-months after CST, however, personal accomplishment also decreased. In addition, participants were satisfied with all components of the program. **CONCLUSIONS:** A newly developed CST program based on patient preferences seemed feasible and potentially effective on communication behaviors of oncologists, confidence in communicat-

ing with patients, and emotional exhaustion. A randomized control study to conclude the developed CST program is effective was needed further.

#### P-386

##### **Problems Faced by Breast Cancer Patients Treated in Southern India**

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**OBJECTIVES:** The aim is to assess the problems faced by the breast cancer patients with regards to spousal support, the changes occurring in the family, psychological factors, effects on the body image and the attitude towards sexuality. **METHOD:** Totally 771 cases of nonmetastatic breast cancer were treated between 2001 and March 2009 at our institution. Out of which, 132 cases who came for follow up between October 2009 and December 2009 were taken up for analysis by using a semi-structured Questionnaire. It was designed to address the quality of life, in patients who had completed curative treatment. The follow up period ranged from 6 months to 8 years. **RESULTS:** Assessing the changes in their family revealed that 84(63.6%) patients had faced severe Economic crisis. 33(25%) patients had conducted urgent marriages for their children. 45(34.1%) patients were neglected by either the Spouse, Relative, Colleagues or friends etc. With relation to sexual attitude, 55(41.7%) patients had negative impact. 35 patients attributed to mastectomy. Interestingly, 24 patients out of this 35, were in the purview of breast conservation. 95(71.9%) patients felt their body image was affected. **CONCLUSIONS:** Problems faced by these patients in this part of the world is mostly due to Financial reasons, there is no support from the relatives or friends as well. Quality of life derangements are common in Breast cancer patients necessitating the provisions for patient access to psycho social services. Awareness about screening and Insurances should be taught as most of the patients in this study faced severe financial problems and negative impact on body image.

#### P-389

##### **Psychiatric Symptoms and Quality of Life for Patients with Terminal Cancer in Palliative Care Ward**

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**OBJECTIVES:** Patients with terminal cancer are distressed by variable psychiatric symptoms. However, psychiatric approach for the symptoms is not sufficient, and often overlooked. This study investigated the prevalence and negative effect of psychiatric symptoms in terminal cancer patients who hospitalized in palliative care ward (PCW) in Korea. **METHOD:** The subjects were patients hospitalized in the PCW at Chonnam National University - Hwasun Hospital. To investigate psychiatric symptoms and its negative effects, Psychiatric interviews, Montgomery Asberg Depression Rating Scale (MADRS), Socio-Occupational Functioning Assessment Scale (SOFAS), Confusion Assessment Method(CAM), EuroQol-VAS were carried out by one psychiatrist. Depression was diagnosed and defined severity by MADRS.( $< 9$ : No depression,  $9\sim 30$  : Mild to moderate depression,  $\geq 31$  : Severe depression) **RESULTS:** In all, 108 patients was participated research. They stayed PCW for mean 17 days. The form of discharge was expired(52.4%), transferred to another hospital(16.2%), and returned to home(31.4%). Only 9.9% of patients was not depressed, and prevalence of mild to moderate depression was 69.1%, severe depression was 21.0%. For other psychiatric symptoms, each was diagnosed by delirium 30.2%, insomnia 69.9%. Depression was significantly related with low quality of life( $p = 0.01$ ), functional disability( $p < 0.01$ ). **CONCLUSIONS:** Patients in terminal cancer undergo depression, delirium, insomnia which prevalence was so high. Moreover, depression has negative effect to quality of life and increasing disability. This study was limited by the small number of patients. Future investigations with more participants are needed. And clinically, more psychiatric approach for terminal cancer patients should be encouraged.

#### P-391

##### **Effect of Treatment Modality on Psychological Stress in Gynecological Cancer**

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**OBJECTIVES:** Various treatment modalities are utilised in treatment of gynecological cancer e.g. surgery,radiotherapy, chemotherapy etc.Objective is to find out whether treatment modality by itself modifies the psychological stress. **METHOD:** 300 patients & their next of kin were counselled about their options of treatment modality(where the option was possible) and the reason of choosing the option.They were interviewed before start of treatment & again after completion of treatment. **RESULTS:** 75 Patients had only surgery, 125 had concurrent chemoradiation,50 had chemotherapy

with or without surgery. 50 had all the three-chemotherapy,surgery,radiotherapy. Patients who had only surgery were most satisfied with the outcome. Chemotherapy patients suffered great psychological stress due to loss of hair and other side effects. Patients who had concurrent chemoradiation were also greatly distressed. Patients who needed all the three modalities were most affected psychologically. **CONCLUSIONS:** Gynecological cancer treatment does not usually affect the body image and many patients are not also keen to know the diagnosis of cancer. Often the loved ones want to hide the diagnosis from the patient.Surgical treatment for removing a diseased organ is less stressful. Both chemotherapy and radiation are synonymous with malignancy and the patient feels exposed. Early diagnosis & surgical removal of cancer causes minimum psychological stress to patient.

#### P-395

##### **A Community Care Model for Cancer Patients in Hong Kong: Mobilizing Public to Rectify Misconception and Soften Stigmatization**

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**OBJECTIVES:** We have a mission to provide psychosocial-oncology services to people touch by cancer in the community by mobilizing volunteers from different disciplines to create a public empathy to learn how hard a cancer diagnosis can be - emotionally, practically, and physically; and to advocate for public participation in prevention, early diagnosis as well as help make life better for anyone touched by cancer i.e. care by the community and care to the community. **METHOD:** Our model ensures the needy can obtain services and care & support in the community by: 1. mobilizing volunteers to take care of the needy; 2. training of the cancer survivors, family members and those has been affected by cancer to provide caring service back to the community. We have seven different types of volunteers: informative hotline operators; service ambassadors; peer counselor; home care supporters; program assistants; professional volunteers; and public campaign educators. **RESULTS:** We have more than 300 volunteers: 80% are cancer survivors; 10% are family members, 5% are public and 5 % are professional volunteers. We will share our well-defined structure of volunteers system, training standards of quality services and coaching & appraisal system. We have successfully utilized the ability and talent of volunteers; enhanced the growth and facilitated the life transcend process of volunteers; and built up and maintained caring values in the community.

**CONCLUSIONS:** Community care to people touch by cancer through 'care by' and 'care to' the community strategies is demonstrated to be a good community caring model in the past decade of service provided by CancerLink Support Centre in the community. By day to day interactions and services networking, the public and the people touch by cancer are well mingled in the community that help to reduce cultural prejudice and misconceptions of cancer in Chinese community.

#### P-399

##### **Comparison of Marital Satisfaction between Parents of Childhood Cancer Survivors and those of healthy Control**

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**OBJECTIVES:** Previous studies reported that parents of childhood cancer survivors experience increased marital distress during and even after the termination of treatment. In the present study, marital satisfaction of parents of childhood cancer survivors in Korea was compared with those of typically developing children and possible predictors for marital satisfaction were investigated. **METHOD:** Participants were 78 mothers of childhood cancer survivors and the same number of mothers of typically developing children. Survivors were recruited from a Long-term Follow-up Clinic at a hospital in Seoul, Korea. All mothers completed Beck Depression Inventory, Korean-Child Behavior Checklist, and Korean-Marital Satisfaction Inventory. 'General marital dissatisfaction' from K-MSI was dependent variable and mother's BDI score, K-CBCL total score and treatment related factors of survivors were independent variables in the hierarchical multiple regression. **RESULTS:** No significant differences were found in the general marital dissatisfaction scale of the K-MSI between parents of survivors and healthy control. The result of hierarchical multiple regression revealed that the overall model significantly predicted general marital dissatisfaction. It accounted 40.5% of variance.  $R^2$  significantly increased at each level when BDI score, Total behavior problems score, and type of cancer were added ( $p < 0.05$ ). **CONCLUSIONS:** Parents of child with cancer survivors showed no difference in marital satisfaction compared with parents of healthy child. Rather, marital satisfaction was more related to parents' depression and child's

behavioral problems. This result should be considered for more helpful psychological intervention in the field. The type of cancer was significantly related to the marital satisfaction. Further studies with parents of various cancer survivors should be proceed.

#### P-401

##### **Emotion Dysregulation As An Indicator Of Anxiety And Depression In Cancer Patients**

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**OBJECTIVES:** Patients who suffer from cancer frequently have to deal with stressful situations. Then, they have to implement emotion regulation processes so as to cope with stress. However, anxiety and depression are frequently observed in cancer patients and reduce patients' compliance with medical cares. This may be due to deficits of emotion regulation processes. This study aims to assess the links between emotion dysregulation and deficits of psychological adjustment (anxiety and depression) in cancer patients. **METHOD:** 47 cancer patients from the North of France participated to this study. All of them completed two questionnaires assessing their state anxiety (STAI-Y-A) and their depressive symptoms (CES-D). They finally filled out the DERS-24, a third questionnaire assessing six emotion dysregulation factors: non acceptance of emotional responses, lacks of emotional awareness and clarity, and difficulties to engage in goal directed actions, to control behaviours and to implement emotion regulation strategies. **RESULTS:** Five of the six factors of emotion dysregulation are highly positively linked to the scores of state anxiety and depression ( $R > 0.50$ ,  $p < 0.001$ ). However and not surprisingly, there is no link between the lack of emotional awareness and the scores of anxiety and depression: the self-assessment of emotional distress requires people to be able to tell how they feel and, accordingly, to be aware of their emotional state. **CONCLUSIONS:** As expected, emotion dysregulation seems to be an indicator of emotional distress in cancer patients: its early assessment after a cancer diagnosis may point out the relevance of specific psychological interventions for at-risk patients. Then, it may help to prevent emotional distress and to increase compliance with medical cares. Finally, comparisons with healthy people are being conducted to check how

situational emotional dysregulations are by assessing the impacts of cancer on emotion regulation abilities.

#### P-402

##### Psychosocial Adjustment of Childhood Cancer Survivors: Comparison among Brain Tumor, Wilms' Tumor and Healthy Control

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**OBJECTIVES:** Thanks to the medical and pharmacological advances, survival rates of various types of childhood cancer increased significantly in recent years, which have facilitated researches for their psychological adjustments. Previous studies have demonstrated inconsistent results across different types of cancers regarding their psychological maladjustment, academic underachievement, and functional impairment. The purpose of this study was to compare psychological adjustment of survivors of childhood brain tumor, Wilms' tumor, and age-matched healthy control. **METHOD:** Participants were 57 children (18 survivors of brain tumor, 19 survivors of Wilms' tumor, 20 control group), between the ages of 7 to 16 years old. Survivors were recruited from a Long-term Follow-up Clinic, at a university affiliated hospital in Seoul, Korea. Childhood Depression Inventory(CDI), Revised Children's Manifest Anxiety Scale(RCMAS), and Child Behavior Checklist(CBCL) were administered to measure psychological adjustment. **RESULTS:** Significant group differences were found across 3 groups for both depression and anxiety. Scores of the two cancer groups were significantly higher than control group ( $p < 0.05$ ), yet no differences were found between two cancer groups. On the other hand, no significant differences were found in the total score and all subscales of the K-CBCL among three groups except social-immaturity. The two cancer groups' social-immaturity scores were significantly higher than control group,  $p < 0.05$ . **CONCLUSIONS:** Regardless of cancer type, survivors experience more depression and anxiety than their healthy peers. However, any group difference was not reported on parental reports of their child's problem behaviors. These results suggest that psychological counseling to prevent survivors' depression and anxiety disorders and parental education to increase parents' awareness about their children's mental health issues. Replication

with large sample size and other cancer types are needed in the future.

#### P-403

##### The Efficacy Of Communication Skills Training: Is It Possible To Predict Assessment And Supportive Skills Learning Among Residents?

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**OBJECTIVES:** Assessment and supportive skills have been recognized as core clinical skills. No study has yet explored variables which may predict the learning of these skills. This study aims to determine which variables (among residents' characteristics and communication skills) may predict the learning of assessment and supportive skills in the context of a communication skills training. **METHOD:** Learning of assessment and supportive skills was measured in a simulated interview before and after a communication skills training. Simulated interviews were recorded and transcribed. Communication skills were tagged with a computer assisted program (LaComm). Residents' characteristics (sociodemographic, professional, and psychological characteristics assessed by questionnaires) and communication skills were measured before training. Linear regressions were conducted to assess the associations between baseline residents' characteristics and communication skills, and consequent learning of assessment and supportive skills. **RESULTS:** Fifty-six residents were included. Assessed variables explained 49% of the variance in assessment skills learning and 38% in supportive skills learning. At baseline, both poor assessment and supportive skills predicted the respective learning of these skills. Certain types of residents' coping styles (high level of social support coping) and certain attitudes (low level of depersonalization) predicted better assessment skills learning. A higher attendance rate and a lower professional experience predicted better supportive skills learning. **CONCLUSIONS:** Predictors of assessment and supportive skills learning are quite different. Future research related to the efficacy of communication skills training programs should consider these key predictors. Trainers and trainees should be aware that the learning process of assessment and supportive skills is quite different.

## P-404

**Validation Of The French Version Of The Maslach Burnout Inventory Among Physicians**

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**OBJECTIVES:** No study has validated the French version of the Maslach Burnout Inventory-Human Services Survey (MBI) among physicians. Moreover, many studies plead for the removal of some items from the 22-item original version of this inventory. This study thus aims to examine the psychometric properties (factorial validity, internal consistency and external validity) of the French version of the MBI among physicians. **METHOD:** One hundred and ninety-four physicians completed a sociodemographic questionnaire, the MBI and the Job Stress Survey (JSS). Factorial validity of the MBI was investigated with confirmatory factor analyses. Internal consistency was analyzed for each MBI factor. Correlations between MBI and JSS scores were analyzed to test external validity. **RESULTS:** Factorial analyses confirm the three-factor structure of the MBI (emotional exhaustion, personal accomplishment, and depersonalization) and plead for the removal of 4 items (6, 12, 16 and 22). This 18-item version presents similar factor correlations to those of the original version of the MBI and very good internal consistency indices. Moreover, the results confirm its external validity. **CONCLUSIONS:** This 18-item French version of the MBI has good psychometric properties among physicians and confirms the original three-factor structure. Although the 22-item and 18-item versions of the MBI have quite similar psychometric properties, it could be hypothesized that the removal of 4 items (6, 12, 16, and 22) may improve test-retest reliability and consequently sensitivity to change of each factor.

## P-408

**The Role of the Psycho-Oncologist with Head and Neck Cancer Patients: Difficulties and Specificities of His Work**

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**OBJECTIVES:** Cancer provokes an impairment of the body integrity and causes disturbances of the mental equilibrium. The aim of this presentation is to consider the specific work of the psychologist within a service allowing head and neck cancer patients (H&N). **METHOD:** We propose a brief

literature review about the specific difficulties and emotional symptomatology presented by H&N patients. We also discussed the necessity of a setting adjustment for the psychologist taking into account the patient's physical sequelae (speech, breathing, chewing...), pre-existing characteristics (depression, anxiety, alcoholism...) and possible cognitive impairment (alcohol related). **RESULTS:** A quarter of cancer patients will develop an affective disorder within 2 years after the diagnosis, these rates raise up to 57% for H&N patients. The most common troubles presented by these patients are adjustment disorder, major depression, alcoholism and delirium. They faced specific difficulties, including a significant impairment of quality of life due to the alteration of basic functions (speech, breathing) and their physical appearance, which requires appropriate care. **CONCLUSIONS:** In the Cliniques universitaires Saint Luc in Brussels, the psycho-oncologist is integrated into a multidisciplinary team, working in concert with surgeons, oncologist, radiotherapist and with a liaison psychiatrist and the alcohol unit. The psychologist propose a systematic consultation with H&N patients quickly after the diagnosis to assess the patient's emotional status and to provide an adapted psychological support.

## P-413

**'L'ospedale Lo Conosco Anch'io': Educational-didactic Journey Aimed At Kindergarten Children To Counter With The Fears Of The Hospital As A Place Of Suffering**

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**OBJECTIVES:** The project, inside a model of global care in Paediatric and Oncohematology department, is aimed to: help children to face with awareness the illness and an admission to an eventual hospitalization; promote the image of the hospital as a serene and care healing place; emphasize feelings and emotions related to illness; offer useful information to the family for an eventual child's admission; promote collaboration between school-family-hospital. **METHOD:** The project was carried out by the ward in collaboration with the School in Hospital and the kindergarten children's teachers and supported by a Voluntary Association. A story was written as a playful stimulation to embark on a journey of reflection and comparison with children, organized in single classes, under the supervision teachers. Children documented their own interpretation of the hospital world with drawings and written

thoughts that have been exposed in a traveling exhibition. **RESULTS:** The project was undertaken in two phases (2004–2005 and 2008–2009) and involved overall approximately 3400 children between 4 and 5 years old enrolled to kindergarten children. Large sections of society were involved and sensitized by meetings with healthcare operators, guided tours of the hospital, traveling exhibitions with children's drawings and written thoughts and the realization and distribution of a CD, a playful journey with steps to accompany children through the discovery of the hospital. **CONCLUSIONS:** The innovative aspect of the project is prevention of psychological distress related to the widespread image of the hospital as a place of fear and suffering. Children, their teachers and parents could experiment this concept while were in a psycho-physical well-being that allowed them a serene reflection around the topics of 'illness' and 'hospital'. Thanks to the awareness gained, it has been observed a positive behavioral feedback in involved children that then suffered an hospitalization.

#### P-417

##### **The Life End Information Forum (LEIF) in Belgium: Creation of a National Forum on End-of-Life Decision Making**

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**OBJECTIVES:** Since 2002, three important bills have been implemented in Belgium i.e. on patient's rights, palliative care and euthanasia respectively. Few health professionals were familiar with the content of these laws. In order to get both the professionals and the general public more informed, a Life End Information Forum (LEIF) has been launched in 2003 in Flanders and Brussels (Dutch speaking). **METHOD:** From 2003 onwards, 'LEIF- artsen' (Life End Information Forum - physicians) have been trained in end-of-life care issues in Flanders. They are also skilled to give the compulsory second opinion on a request for euthanasia. Since spring 2010, a similar training has been set up in Wallonia and Brussels (French speaking). **RESULTS:** Preliminary results of the impact of LEIF-physicians on the quality of end-of-life issues will be presented. **CONCLUSIONS:**

According to the third report of the Federal Committee on Euthanasia (June 2008), the existence of the LEIF-platform may contribute to the much higher willingness for registering euthanasia by Dutch speaking physicians (more than 80 %) in contrast with their French speaking colleagues. It is hoped that extension of LEIF towards the French speaking part of the country will improve these data.

#### P-419

##### **Depression And Quality Of Life In Hospitalized Haematological Patients**

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**OBJECTIVES:** Patients undergoing treatment for haematological malignancies suffer from high levels of undetected anxiety and depression. Increasingly, very intensive treatments are being proposed, namely chemotherapy and bone marrow transplant. Psychological adaptation to such treatments is highly individual, but a proportion of patients will experience a marked deterioration in quality of life (QOL) and/or will develop clinical depression that is the aim of our study. **METHOD:** 48 sequential haematological patients were admitted in a general university hospital, with an average age of 42.31, 60.4 % were male, 50 % had leukaemia diagnosis and 25 % had lymphoma diagnosis. These patients were observed by a psycho-oncology team (NIPSO), and were psychologically assessed by means of HADS, QLQ C30 and a socio-demographic and clinical questionnaire. **RESULTS:** We found high levels of depressive psychopathological symptoms (22.9 %) not correlated with length of disease. A significantly statistical correlation was found with some functional and symptom scales of QLQ C30. By means of multiple regression analyses, we found that the variables age, anxiety symptoms and global health status had the major influence on depressive symptoms. **CONCLUSIONS:** As expected the prevalence of depressive symptoms is high in this sample. These patients, besides having a diagnosis of a malignant disease, are hospitalized and undergoing aggressive treatments, enhancing psychological distress, particularly depressive symptoms that must be early managed.

#### P-423

##### **From Hopelessness to Being Hopeful for Advanced Cancer Patients: Fostering Hope for Palliative Care Patients through Home Care Support Services in Hong Kong**

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**OBJECTIVES:** Cancer is the leading cause of death in Hong Kong. The mortality is 50% of total new cases in 2007. (HK Cancer Statistic 2007). Process of dying is hopeless and helpless causing distress. Hope is a psychosocial and spiritual resource (Herth, 1990; Cutcliffe, 2002) help in improving life quality in advanced cancer. Purpose of the abstract is to illustrate how to run 'home care service' with strategies of hope to improve life quality of advanced cancer patients. **METHOD:** Home care service was established in 2008. Patients in palliative stage, isolated, without family support are being served. Research findings supported (Herth, 1990, Rando, T. 1984, Jevne, R.1993) that hope can be promoted by several strategies, including establishing interpersonal connection, setting attainable aims, being honest to individual's, supporting meaningful spiritual practices, uplifting of memories, affirming to worth, controlling pain and encouraging time refocusing. Those strategies are being adopted when carrying out service. **RESULTS:** 72 patients received the service of Home Care since April, 2008. A list of variety services with hope fostering strategies were tendered. Qualitative data were collected to evaluate patients' physical and psychological well-being. Over 60% reported they obtained timely and immediately care while 51% expressed that life quality was enhanced and life became more meaningful. Real stories will be elaborated of how clients can improve life quality and be instilled with hope in this presentation. **CONCLUSIONS:** Comparing with home-help services offered by local social service providers, we are much able to fill the service gaps and achieve the spirit of seamless care. It is tailored made, timely, flexible, irrespective of geographic locations, personalized and always clients centred that cannot be replaced by other home-help teams. Despite, limitation is existed as pain control in palliative patients is always a predominate problem. Join efforts with nursing profession will be the future direction.

#### P-426

##### Quality of Life of Parents with Cancer

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**OBJECTIVES:** A cancer diagnosis can seriously affect not only the patient but also the whole family system. Caring for underage children could increase the patients' distress. Thus far research has primarily focused on the perspective of the affected children paying little attention to the association between parenthood and cancer. Little is known

about the effects of parenthood on the quality of life (QoL) therefore, the aim of the current study is to address that gap. **METHOD:** Within the framework of a multicentre project a sample of 200 patients, their spouses and children up to 18 years of age will be interviewed at three time points (six months apart from each other). Patients with different cancer diagnoses are included. QoL is measured with the EORTC -QLQ and compared with an age-matched control group (patients without children). The influence of sociodemographic variables and characteristics of the disease are explored via an analysis of variance. **RESULTS:** Data is currently collected of 60 patients at the baseline. The results indicate that being a parent has negative effects on social and emotional functioning as compared to not having children. On the other hand, parental status appears to have a protective effect on cancer patients' QoL by putting the person in a clearly defined social role. Being confronted with familiar tasks of supplying and caring for minors might help patients refocus. **CONCLUSIONS:** The effects of cancer on the QoL of patients with children up to 18 years of age need to be differentiated from the QoL of those who have no children. The QoL of parents is characterized by major restrictions and lower functionality. Further analyses in our study explore the correlation of QoL of the patients and the psycho-social situation of their children and spouses in a longitudinal perspective.

#### P-427

##### The Distress Thermometer Translated into Serbian

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**OBJECTIVES:** Screening for Distress or using the DT in oncology practice. Cancer experience is a negative life event that requires an enormous amount of effort from patients and their families. Negative psychological states such as stress, anxiety, and depression are frequently associated with the diagnosis and treatment of cancer. Understanding the psychosocial aspects of cancer and its treatment has become an important and necessary part of cancer care treatment. **METHOD:** The investigation was conducted at the Institute for Oncology and Radiology of Serbia, Belgrade, during the year 2009. The sample consisted of 50 cancer patients (35 female, 15 male) (different diagnosis and stages of illness). We used DT. **RESULTS:** A significant majority of patients reported practical problems related to financial problems (45%) and transportation (30%). Patients also reported family problems like problems which can cause extremedistress (55% of patients). 45% of patients quoted sadness and

worry like most common emotional problems. The physical problems quoted by most most patient were eating, nausea, sexual problems and sleeping. **CONCLUSIONS:** Psychooncology is a relatively new scientific discipline in Serbia. Taking into consideration that assessment of different psychological reactions of cancer patients can be helpful for organizing adequate psycho-educational and psychosocial support, and psychotherapy for cancer patients and their families.

#### P-428

##### **Sense of Coherence and Acceptance of Illness by Patients with Head and Neck Cancer**

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**OBJECTIVES:** Research was planned to estimate components of coherence (comprehensibility, manageability, meaningfulness) and illness acceptance in cancer patients. Research questions concern: 1. Level of comprehensibility (belief that things happen in a predictable sequence) 2. Level of manageability (belief that patient has the resources necessary to take care of life events) 3. Level of meaningfulness (belief that things happening in patient's life are worthy to care about them) 4. Relationship between components of coherence and illness acceptance. **METHOD:** 30 hospitalized patients with head and neck cancer waiting for the surgery, voluntary took part in the research. There were used following assessment tools: Sense of Coherence Scale (SOC) and Acceptance of Illness Scale (AIS). In the statistical analysis we used a computer program SPSS. **RESULTS:** Level of coherence positively correlates with level of illness acceptance. However high level of coherence isn't always followed by the belief that life events are understandable and worthy manage them. **CONCLUSIONS:** The conclusion suggests, which elements could be advantageous for better functioning and patients' adaptation before the surgery and which elements could be disadvantageous. It is important in wisely planning the psychological and medical treatment, support and care in this particular group.

#### P-429

##### **Perceptions of Benefit Finding Following Childhood Cancer in a Sample of Spanish Adolescent Survivors**

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**OBJECTIVES:** Theoretical and descriptive accounts suggest that adolescents struck by cancer usually experience a number of good as well as bad consequences of the disease in survivorship with potentially different effects on their Health-Related Quality of Life (HRQoL). This study aims to describe the prevalence of perceptions of positive and negative consequences with regard to cancer in a sample of Spanish cancer survivors; and to explore whether these perceptions are related to their current HRQoL. **METHOD:** Twenty-two survivors (12 males, 10 females) aged between 13–19 years old were assessed in a cross-sectional study after being  $\geq 1$  year off-treatment. HRQoL was assessed with the KIDSCREEN-52, whereas perceptions of positive and negative consequences in survivorship with regard to the whole oncological experience were answered by means of a semi-structured interview based on categories proposed by Sundberg and colleagues (Sundberg, Lampic, Björk, Arvidson & Wettergren, 2009). **RESULTS:** Three participants (13.6%) reported only positive consequences, three participants reported only negative consequences (13.6%), and 16 participants (72.72%) reported both positive and negative consequences. There were no significant differences related to gender with regard to the number or the type of consequences reported. HRQoL scores were equivalent to normative values. Furthermore, no significant relationship between HRQoL outcomes and perceptions of positive and negative consequences could be identified. **CONCLUSIONS:** HRQoL results indicate that survivors are getting along quite well. The majority of survivors reported positive as well as negative consequences at assessment point. However, these perceptions have not shown to be significantly related with any values on HRQoL. Nevertheless, the present study is currently still in progress and the small sample size limits the scope for drawing any firm conclusions. These results can improve the knowledge about the psychological impact of cancer in survivors.

#### P-433

##### **Development Of An Online Psycho-Educational Group Intervention For Children With Cancer**

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**OBJECTIVES:** Considering the adverse effects of pediatric oncology treatments, the uncertainty about the further course of the disease and other psychosocial implications of childhood cancer, there is need for disease-specific interventions for

survivors of childhood cancer. Development of an online course would expand the accessibility for especially adolescents. Objectives are: to study whether the development of an online group program ([www.opkoersonline.nl](http://www.opkoersonline.nl)) is feasible and effective and how satisfied participants and trainers are with the program. **METHOD:** Children treated for cancer, between 12–18 years and having finished treatment were eligible. The course (6 sessions) utilizes the principles of cognitive behavioral therapy. Children completed questionnaires about disease related skills and psychosocial functioning before and 0–4 weeks after the intervention. They were asked about the sign-in procedure, the course, the home-work program and the chat-box utilities. Every session evaluation of the content and utility took place. Psychologists who provide the course were interviewed. **RESULTS:** Until now two courses took place with 6 participants ( $n = 4$  girls;  $n = 2$  boys). They were from different pediatric oncology centres. All participants participated during all sessions and were positive about the course. The four psychologists were also positive. Several adaptations were made to the course based on the reactions. Two next courses are scheduled, and another specifically for children with a retinoblastoma. Preliminary results show positive changes on the psychosocial outcome questionnaires. **CONCLUSIONS:** E-mental health technologies are developed over the past years, with most e-health interventions focussing on adults, and to a lesser extend for children. First results are promising for this online chat-course for children with cancer. This course will give many young childhood cancer survivors the opportunity to profit from this preventive chat-course intervention at home on an individual basis.

**P-436****The Modern Methodology of Psychological Help and Psychological Diagnostics in Breast Cancer Patients**

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**OBJECTIVES:** The improvement of breast cancer treatment and reduction of side effects change structure of the targets of the psychological help. Among the most evident psychological problems in breast cancer patients under the treatment course we should consider today the stress of diagnosis and possible prognosis; decision-making regarding options of treatment process; the psycho-emotional changes in patients with the post-castration syndrome after ovarian ablation or tamoxifen use. Psychological help includes psychotherapy and psychological diagnostics. **METHOD:** The complexes of diagnostics were a: multifactorial personality

test (Leongard-Shmishek), depressive scale (DSM-IV), anxiety scale (Spilberger), Level of Subjective Control test, Personal Defence mechanism Test; b: clinical conversation, partly formalized interview, projective methods. Using the results of diagnostics supportive psychological help was provided. The diagnostics and psychological help were managed before the diagnosis manifestation<sup>1</sup>, before the treatment options decision<sup>2</sup>, in the beginning of the treatment process in ovarian ablation (3.1) and tamoxifen (3.2). **RESULTS:** The use of complex b is related with higher level of reported psychological well-being in groups 2 and 3.1. In groups 1 and 3.2 complex a was more related with the patient's satisfaction. Experts match complex a with more effective psychological help in group 2. **CONCLUSIONS:** There is an evidence of the possibility to use the optimal complex of psychological help accordingly to the different target psychological problems and stadiums of treatment experience in breast cancer patients. The individual medical psychological diagnostics is the necessary background of the effective psychological help.

**P-437****Validation Of The Benefit And Burden Scale for Children (BBSC) In A Sample of Young Cancer Survivors**Martha Grootenhuis<sup>1</sup>, Anna Broek<sup>1</sup>, Jantien Vrijmoet-Wiersma<sup>2</sup>, Esther Meijer-van den Bergh<sup>3</sup>, Alice van Dijk<sup>4</sup>, Heleen Maurice-Stam<sup>1</sup>*Psychosocial Department, Emma Children's Hospital, Amsterdam, Netherlands<sup>1</sup>, Pediatric Department, Leiden, Netherlands<sup>2</sup>, Department of Medical Psychology, Radboud University Medical Center, Nijmegen, Netherlands<sup>3</sup>, Department of Medical Psychology, VU University Medical Center, Amsterdam, Netherlands<sup>4</sup>*

**OBJECTIVES:** Understanding of survivor-specific quality of life issues such as disease-related burden and benefits could yield a more complete picture of the impact of cancer on (daily) life of survivors. To date, a survivor-specific Dutch questionnaire is not available, which is why the Benefit and Burden Scale for Children (BBSC; Phipps, 2008) was validated in the Netherlands. The aim of the study is to find out whether the BBSC has good psychometric characteristics in Dutch population. **METHOD:** Children aged 8 to 18, who had successfully finished their cancer treatment six months to three years before the start of the study, completed eight questionnaires measuring psychological outcomes (benefit and burden of the disease, quality of life, self esteem, cognitions about the disease, PTSS, anxiety, behavioural functioning and coping). For measuring test-retest reliability of the BBSC, it was administered again after 2 weeks.

**RESULTS:** 127 Children were approached, 78 children responded (response rate 61%). Response rate for retest was 81%. Subscales of the BBSC demonstrated good internal consistency and test-retest reliability was high. Benefit finding and burden scores do not differ as a function of gender, race/ethnicity, socioeconomic status and treatment. Diagnostic category (brain tumour vs. other diagnosis) and short time elapsed since treatment were related to higher levels of burden. Especially burden was related to negative psychological outcomes. **CONCLUSIONS:** The BBSC appears to have similar characteristics as the original version. It has the potential to be used as a measure of benefit finding and illness-related burden in Dutch paediatric survivors of childhood cancer and possibly as a screener in clinical practise.

#### P-441

##### **Optimizing Team Members' Communication Skills in Radiation Oncology : Content and Feasibility of A Belgian Interuniversity Curriculum**

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**OBJECTIVES:** Radiation oncology treatment is administered by teams including various disciplines. In this context, optimizing communication with patients and their relatives requires optimizing multidisciplinary, interdisciplinary and transdisciplinary communication among team members. A training curriculum aiming at improving team members' communication skills (patients and relatives oriented skills and team members oriented skills) was therefore designed. The objective of this paper is to describe a Belgian training curriculum devoted to radiation oncology teams. **METHOD:** The 38-h training curriculum included two parts. The first 16 hours aimed to improve team members' communication skills with patients and their relatives through role plays organized for professionals of the same discipline. The following 22 hours aimed to improve team members' communication skills with their colleagues through role plays organized for professionals of all disciplines. The objective was to optimize communication by avoiding gaps or redundancy in information and support given by team members. **RESULTS:** Four departments of radiation oncology accepted to participate in this

randomized study. Forty-four percent of team members of these departments registered to the training (96/217): 74% registered for the experimental group (65/88) and 24% registered for the control group (31/129). Barriers to participation included time limitations, concerns about participating to role plays and team dynamic. The heterogeneity of motivation may also be explained by numerous reasons: attitudes of the hierarchy, different organizational contexts and work conditions. **CONCLUSIONS:** These data highlight the feasibility of implementing this type of curriculum. The different registration frequencies reported show the heterogeneity of healthcare professionals' motivation to participate to the curriculum. The efficacy of interventions designed to improve team communication needs to be tested.

#### P-442

##### **Improvement of Physicians' Patient-Centeredness: An Empirical Evidence of the Benefits of a Communication Skills Training Program**

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**OBJECTIVES:** No study has yet assessed the benefits of a communication skills training program on patient-centeredness. The purpose of this study is to assess the relation between patients' characteristics and physicians' communication skills before and after a communication skills training program. **METHOD:** Correlations between physicians' communication skills and patients' characteristics were categorized as absent or present: the number of present correlations indicates the level of patient-centeredness. Communication skills were assessed during a consultation before and after a communication skills training program. Consultations were audio-recorded and transcribed. Communication skills were rated according to the Cancer Research Campaign Workshop Evaluation Manual. Patients' characteristics (sociodemographic, physical and psychological) were measured before and after the training program. **RESULTS:** Sixty-three physicians were included. Before training, physicians' communication skills were associated with 2 patients' sociodemographic characteristics and with 1 psychological characteristic. After training, physicians' communication skills were associated with none of the patients' sociodemographic

characteristics and with 4 psychological characteristics. **CONCLUSIONS:** This study highlights that physicians' patient-centeredness may be improved through a communication skills training program. After training, physicians are more centered on patients' psychological characteristics and not on patients' sociodemographic characteristics anymore. This study underlines the need to design communication skills training which may further improve patient-centeredness.

#### P-444

##### **Women's Experiences of Encounters Regarding Return-To-Work After Breast Cancer**

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**OBJECTIVES:** To gain knowledge on women's experiences of encounters concerning return to work after breast cancer surgery. **METHOD:** Qualitative analyses of data from four focus group interviews of 23 Swedish women 2 to 8 months after breast cancer surgery. Groups were strategically composed with regard to treatment (chemotherapy/not) and age (<55, ≥55), respectively, to increase homogeneity. The interviews were audio taped, transcribed verbatim, and analysed inductively through content analysis. **RESULTS:** Three main categories were identified in the statements of encounters with professionals: Flexibility involved statements on relevant changes in e.g. matters of care planning or sickness benefits. Information concerned informational content in encounters, e.g. where to turn in matters of return-to-work, rehabilitation, and regulations regarding sickness benefits. Attitudes contained judgements of the woman's return to work and the women's perception of attitudes directed towards themselves. **CONCLUSIONS:** Flexibility, information and attitudes are experienced in encounters regarding return to work. The statements point to relevant areas and needs when returning to work. It is important to specifically discuss relevant adjustments, to ascertain that the informational content in an encounter is perceived and relevant, and there needs to be an awareness of the perceived attitude in such encounter as this may effect the future interaction.

#### P-445

##### **Screening, Assessment and Management of Distress in Breast Cancer Patients Having Chemotherapy**

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**OBJECTIVES:** Distress is a multifactorial unpleasant emotional experience of a psychological, social, and spiritual nature that may interfere with the ability to cope effectively with cancer, its physical symptoms and its treatment. Using screening tools for measuring distress like: Stress Assessment Questionnaire, Emergencies impact scale (Horowitz, Wilner and Alvarez 1979) and Distress Thermometer, we hope to do an early detection and treatment of distress leading to better adherence to treatment, avoidance of severe anxiety or depression. **METHOD:** A number of 60 women with local, advanced and metastatic breast cancer, stage II, III and IV was assessed for distress in the start of chemotherapy, during the chemotherapy, 4 times, and after they finished. We work in psycho-education and group therapy, psychosocial interventions, cognitive behavioral therapy, family and couples therapy, with Ericksonian hypnosis, relaxation techniques and controlled mental imagery. Patients was divided in 2 groups : first group 27–47 years old and the second between 47–67 years old. **RESULTS:** Preliminary results shows high levels of distress in younger patients versus older, need for a better evaluation, they reported significantly more and higher levels of needs for support and more psychooncological interventions techniques, more medications to manage symptoms like analgesics, anxiolytics, hypnotics, antidepressants, more family support and counseling. **CONCLUSIONS:** To meet patients needs screening instruments assessing distress and management in a multidimensional way should be routinely and repeatedly administered in clinical practice for all cancer patients hospitalised, out-patients or in palliative care institutions.

#### P-447

##### **Depression Screening Practices at a Tertiary Care Cancer Centre**

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**OBJECTIVES:** Depression is a serious problem affecting cancer patients, one which significantly influences patients' prognoses and outcomes. Consequently, international guidelines recommend that patients be routinely screened for depression. There is little research investigating the frequency of depression screening and treatment in cancer patients, thus this study will investigate these practices at a tertiary care cancer centre. The Theory of Planned Behaviour (TPB) will also be used gain a better understanding of these behaviours. **METHOD:** This research is taking place at a tertiary cancer centre that provides radiation and surgical oncology treatment. All oncologists and oncology nurses at this centre will be invited to take part in this study, which consists of a 20 to 30

minute structured interview. The interview will investigate clinician's current depression screening and treatment practices, and will also explore whether TPB can be used to better understand these practices. **RESULTS:** Given the exploratory nature of this study, data will be analyzed using simple descriptive and inferential statistics. T-tests will investigate whether profession affects participants' depression screening and treatment practices. Chi-square tests will be performed to determine if type of treatment varies by profession. Pearson correlations will explore whether TPB components are related to participants' past intention to screen and past screening behaviour. Thematic analysis will be used to analyze the results of open-ended questions. **CONCLUSIONS:** Preliminary results will be presented, including the quantitative analysis and the initial results of the open-ended questions. This study will serve as a case study of depression screening and treatment at a centre with no existing screening and treatment protocol in place, and will thus provide a benchmark for programs developing such protocols. Clinicians' attitudes and beliefs about depression screening, within the context of the TPB, will also be explored.

#### P-449

##### **The Experiences of Young Adult Cancer Survivors Resuming an Occupation**

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**OBJECTIVES:** Young adulthood is generally a time when an individual completes post-secondary education, decides on a career, and enters the workforce. When an individual is diagnosed and treated for cancer during this stage in life, returning to an occupation of school or work may be difficult. The aim of this study was to gain a richer understanding of the experiences of young adult cancer survivors who are returning to school or work following cancer treatment. **METHOD:** Ten Canadian young adult cancer survivors, aged 21 to 35 years, were interviewed by telephone. Participants included 4 males and 6 females, 5 of whom had resumed school and 5 of whom had resumed work. Interviews were audio-recorded, transcribed verbatim, coded, and analyzed inductively to develop emerging themes. An interpretative phenomenological approach was the qualitative research method of inquiry, as it allows for the study of individuals' lived experiences. **RESULTS:** An account of participants' experiences will be presented. Master themes, with sub-themes, will be introduced in turn, each described in rich and thick detail, supported by evidence from participants' verbatim transcript quotations. **CONCLUSIONS:** Findings may be informative for cancer patients

and survivors, as they often have access to limited resources. The findings may allow health professionals, employers, and school administrators to gain a better understanding of the challenges young adult cancer survivors are facing, therefore encouraging them to provide appropriate information for promoting healthy transitions when resuming occupations, as the workforce may be losing their labour and young adults may be losing much needed wages.

#### P-453

##### **Social Support Moderates the Relationship between Fear of Cancer Recurrence and Depressive Symptoms in Mothers with Breast Cancer**

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**OBJECTIVES:** Fear of cancer recurrence is one of the most prevalent sources of distress and a risk factor for depression. In this study, we hypothesized that social support would act as a protective factor and would lessen the strength of the relationship between concern of a recurrence of breast cancer and depressive symptoms. Mothers and non-mothers were analyzed separately given the finding that surviving mothers generally present more distress related to cancer. **METHOD:** A web-survey was completed by 3670 breast cancer survivors (Mean age = 55, range 20 to 89; average time since diagnosis = 6.5 years, range 1 month to 40 years; 75% were mothers; mean number of children = 2, range 1 to 6), predominantly American. Beck Depression Inventory, Concern about Recurrence Scale, and Northouse Social Support Questionnaire were used and the results analyzed via hierarchical linear regression analyses following the Aiken & West (1991) method. **RESULTS:** Results suggest that social support buffers the harmful relationship between fear of cancer recurrence and depression in mothers (Beta = -0.131,  $p < 0.01$ ) but not in non-mothers (Beta = -0.115, *p. n.s.*). When social support is high (Beta = 0.446,  $p < 0.01$ ), the relationship between fear of recurrence and depressive symptoms is lessened compared to when social support is low (Beta = 0.205,  $p < 0.01$ ) in mothers only. **CONCLUSIONS:** While a high fear of recurrence appears to be a risk factor for depression in both surviving mothers and non-mothers, low social support has a greater impact on mothers. Furthermore, analysis of the nature of social support indicates that all forms of social support are relevant to mothers but only spousal support in the case of non-mothers. These results emphasize the importance of identifying the specific needs of mothers and non-mothers separately.

## P-454

**A Large Scale Validation of the Emotion Thermometers as a Screening Tool for Distress in an Ethnically Diverse Cancer Population**

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**OBJECTIVES:** We previously reported initial validation of the Emotion Thermometers, a simple 5-domain visual analogue scale inspired by the Distress Thermometer (Psychooncology. 2009 Mar 18; Epub), against depression. Here we aimed to report a definitive validation in a large ethnically diverse sample against Hospital Anxiety and Depression Scale (HADS) defined distress. **METHOD:** We analysed data collected from Leicester Cancer Centre from 2007–2009 involving approximately 1000 people approached by a research nurse, research physician and two therapeutic radiographers. The researcher applied the HADS and used a HADS-T  $\geq 14$  to signify distress. We collated full data on 660 patient assessments of whom 12.9% had MDD and 14.8 were from ethnic minorities (largely British South Asian of India descent). **RESULTS:** In the parent sample of 660, sensitivity, specificity and AUC were as follows: DT - 71.9%; 78.4%; 0.814; cut point = 4 AnxT - 75.7%; 73.4%; 0.821; cut point = 5 DepT - 77.6%; 82.2%; 0.855; cut point = 3 AngT - 77.5%; 77.6%; 0.823; cut point = 2 HelpT - 69.1%; 80.8%; 0.809; cut point = 3. Thus DepT was optimal and has superior sensitivity and specificity to the DT. There was no significant difference by ethnicity. **CONCLUSIONS:** In this large scale validation of the ET against cancer related distress (on the HADS-T) the DepT may be the optimal thermometer. The optimal cut-point appears to be  $\geq 3$ . The DepT also performs well in those in an ethnic minority namely British South Asian patients.

## P-457

**Fatigue in Patients with Advanced Cancer and Social Support: An Explorative Research**

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**OBJECTIVES:** Fatigue compounds cancer patients and caregivers' quality of life as well as patients' survival. It can be considered a behavioural marker of the inability to cope with the stressors associated with cancer and its treatment. As previously

demonstrated, the nature and experience of Fatigue may vary across countries. The aim of this study is to investigate the definition of Fatigue in Italian cancer patients and explore the influence of social support on Fatigue's experience. **METHOD:** According to the method of Ethnoscience, 15 patients with advanced cancer in active treatment and/or palliative care were interviewed 2–3 times. In the first interview, patients were asked about their Fatigue experience and about their social support using the Inclusion-of-the-Other-in-the-Self Scale. In the second, patients sorted Fatigue-related key-words, emerged from the first interviews, into categories. The researchers merged the categories into a taxonomy of Fatigue which was checked with some patients in a third interview. **RESULTS:** Data analysis is still ongoing but preliminary results suggest that a lack of social support could increase Fatigue severity. **CONCLUSIONS:** Results will allow us to better understand the concept of Fatigue and the role of social support in experiencing Fatigue. Social support might have a protective function and decrease Fatigue severity by preserving the patient's psychological integrity. Our findings could be also useful to implement culturally based interventions to manage Fatigue.

## P-463

**Stress, Emotional Disorders and Quality of Life in Portuguese Breast Cancer Women Submitted to a Mastectomy or a Different Types of Chirurgic Intervention**

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**OBJECTIVES:** Our aim is to study the vulnerability of stress, coping, emotional disorders and the quality of the life of the women submitted to a tumorectomy and a mastectomy; understand in which way the time after the diagnostic makes a difference in the wellbeing. **METHOD:** We have followed a transversal investigation design, with 4 descriptive study's. The inclusion criteria in the sample were: women with breast cancer confirmed diagnosis followed in north area of Portugal health care services, submitted to a tumorectomy or a mastectomy. Instruments: 23QVS, BRIEF-COPE-R, BSI and WHOQOL-brief**RESULTS:** 103 participants, 60 -mastectomy and 43 -tumorectomy. 34% are vulnerable to stress and 27.5% have a criteria for emotional distress. The women who had been submitted to mastectomy make greater use of a pattern of denial coping, whereas women submitted to a conservative chirurgic intervention showed higher intakes of substances and higher exit behaviour. The time past to the diagnosis,

made a difference in the way how the stress was managed. **CONCLUSIONS:** The results empathize the importance of the breast cancer psycho-oncology services and show that this importance was not restricted to the disease beginning and the treatments phases. The time past after the diagnosis, seems have not a protect-function with these women's, comparing to the way how they interpret and build a meaning to their experience.

#### P-468

##### **The Contribution of Psychological and Spiritual Care to the Holistic Approach to Palliative Patients' Care**

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**OBJECTIVES:** Maintenance and development of spiritual well being is a key element of coping with terminal illness. Therefore in palliative care psychological and spiritual care are often included, which is one of the indicators of the quality of care. The main aim of our research is to identify the dimensions of psychological and spiritual well being. We also discuss the overlapping of psychological and spiritual approach to patient care and the contribution of both approaches. **METHOD:** We included 50 patients who received psychological and spiritual care from June to December 2009. We defined their psychological and spiritual needs through clinical interviews and patients' narratives. We used qualitative approach to categorize the patients' descriptions and quantitative approach for descriptive statistics. In relation to specific needs we discuss the intervention we used and through interviews we evaluated the benefit of the specific approach: psychological interventions and spiritual care interventions. **RESULTS:** The psychological and spiritual needs were recognized in 83% of patients. Results have shown association between psychological and spiritual symptoms of distress ( $\phi = 0.94$ ,  $p = 0.00$ ). The most common overlapping dimensions of psychological and spiritual well being were: fear, existential concerns/suffering, withdrawal, hope, denial, anxiety/worry, sadness, fighting spirit, humor, searching for meaning of being ill, for meaning of life, restlessness loneliness, anger, uncertainty, loss of dignity, distrust. **CONCLUSIONS:** The overlapping of psychological and spiritual approach (dimensions of psychological and spiritual well-being) to patients' care has a great meaning for the quality of care. A more holistic approach encourages hope and decreases the sense of abandonment. Dealing with symptoms only and not with the person as a whole in the context of patients' life represents a

danger to deal only with the particularity and therefore to miss the wholeness of the person.

#### P-472

##### **Facilitation of Health Behaviors among Individuals with a Family History of Cancer**

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**OBJECTIVES:** According to the Social Cognitive Process Model, health care providers' (HCP) communication style can impact patients' understanding, likelihood of taking action, and adjustment. Facilitative communication may invite patient thought and emotion, whereas directive communication may inhibit these. Facilitation of patient processing is especially important for patients with a cancer family history given the potential impact on screening, detection and other health decisions. Therefore, we analyzed two communication patterns and their differential impact on patient intentions. **METHOD:** 119 participants with a cancer family history were assigned to facilitative or directive simulated clinical HCP encounters to discuss stress management and cancer prevention strategies. Following the encounter, participants rated how likely they were to engage in the discussed health behaviors. Encounters were recorded and dialogue was coded using Roter's Interaction Analysis System. **RESULTS:** As expected, facilitative encounters had significantly lower nurse dominance, closed questions, and biomedical information, but more emotion and partnering statements ( $F_s > 4.17$ ,  $df = 1,105$ ,  $p_s < 0.04$ ), and marginally more patient emotion ( $F = 3.49$ ,  $df = 1,105$ ,  $p = 0.06$ ). Controlling for condition, HCP, and patient gender, multiple regression analyses revealed intention to follow stress/diet plans was significantly predicted by lower nurse dominance, closed questions and psychosocial information, more patient questions ( $t_s > 2.00$ ,  $\beta_s > 0.218$ ,  $p_s < 0.048$ ) and marginally predicted by greater patient emotion ( $t = 1.726$ ,  $\beta = 0.167$ ,  $p = 0.087$ ). **CONCLUSIONS:** Consistent with the Social Cognitive Processing Model, our findings demonstrate that for patients with a family history of cancer, HCPs are likely to promote adherence by asking questions, providing patients room to speak and express their emotions, rather than blocking discussion with closed questions or giving general information. Given that HCPs receive little training in how to facilitate patient health behaviors, these findings have implications for communication skills training.

P-477

### Psychological and Decision Making Impact of On Line Adjuvant! Software among Early Breast Cancer Patients

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**OBJECTIVES:** In France, 50000 new breast cancer cases per year are diagnosed. Risks/benefits ratio expected from adjuvant systemic treatment remain often unclear. Adjuvant! on line computer program allows physicians to assess risks and benefits at ten years regarding treatment options chosen. Till now, data are missing about the impact of this program in terms of psychological aftermath's and decision choice among women with an early breast cancer. **METHOD:** This study was done among 59 women with non metastatic breast cancer split in two different groups: one with 24 women received classical information about treatment procedure and side effects and the other one with 35 women received both classical and Adjuvant! on line program information shown during the consultation. Besides socio-demographic data, anxiety and depression dimensions were respectively assessed by Spielberger STAI scale and Radloff CES-D-scale. **RESULTS:** Results show the usefulness of Adjuvant! as a tool in clinical practice in order to encourage support, decision making by patients, discussion about risk of recurrence and facilitate informed consent while preferences of each other are taking into account. No differences between the two groups were found in terms of comprehension of medical information. Anxiety and depression parameters do not seem to influence patient's comprehension and decision choice. **CONCLUSIONS:** Despite the small size, Adjuvant! on line computer program might be an interesting tool from a clinical point of view in terms of decision making process help and facilitating discussion about risks and benefices expected from the treatment. Considering women's choices variability and their values, the medical relation with them remain paramount. The computer program remains a tool that must not ruled out the individual subjective patient choice which must always be respected.

P-478

### Quality of Life and Cognitive Functioning in a Sample of Survivors of Central Nervous System Tumours

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**OBJECTIVES:** Survivors of Central Nervous System (CNS) tumours are at risk of several sequelae in survivorship. For that reason, their Health - Related Quality of Life (HRQoL) has emerged as an important field of research. The aims of this study are: (1) to assess HRQoL in a sample of Spanish adolescent cancer survivors, (2) to describe their neurocognitive functioning, and (3) to explore the relationship between their HRQoL values and their neurocognitive outcomes. **METHOD:** The present study is still in data collection. Until now, a total of 10 Spanish CNS survivors (4 males, 6 females) aged between 12 - 19 years old (mean age = 15.40, *SD* = 2.71), were assessed in a cross - sectional design using the Wechsler Intelligent Scales and the generic HRQoL measure KIDSCREEN - 52, after being  $\geq 1$  year off - treatment. **RESULTS:** (1) Three dimensions of HRQoL such as physical well - being, mood & emotions, and bullying, showed lower mean scores than normative values. (2) Up to 80% of survivors experience neurocognitive impairment in 1 or more specific domains. Among them, verbal comprehension was impaired in 60% cases, perceptual reasoning and working memory in 40%, and processing speed in 50% cases. (3) At present, no significant relationship between HRQoL and neurocognitive functioning was revealed. **CONCLUSIONS:** Data suggest that in the sample of Spanish survivors of CNS tumours some HRQoL dimensions could be impaired as well as some domains of their neurocognitive functioning. However, a significant interaction between these variables could not be identified; it could be explained because of the small sample size. Nevertheless, some interaction might be showed with a larger sample.

P-482

### Breast Cancer Follow-Up Care: Breast Cancer Oncologists' Preferences for Knowledge Translation Regarding Arm Morbidity

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**OBJECTIVES:** According to Gigliardi *et al.*, 'There are clear gaps in our understanding about the care received by breast cancer patients so that the flow of knowledge from 'bench to bedside' may be incomplete.' This study addresses one of these gaps by discerning the information needs and media preferences of clinicians involved in the after-treatment care of women living with breast cancer in order to provide them with the latest research findings regarding arm this condition. **METHOD:** A qualitative study involving Grounded Theory. In-depth telephone interviews were conducted with fifteen breast cancer oncologists from across the province of Saskatchewan, Canada. Clinicians were recruited via letters of

invitation with the intent of creating a diverse sample with respect to gender, location (urban/rural/remote), seniority and area of specialisation (medical/surgical, radiation oncology). **RESULTS:** Differences were evident among clinicians in terms of their perceptions of the prevalence of arm morbidity and what they regarded as arm morbidity; the kinds of arm morbidity issues that were of interest to them (i.e. etiology, symptom management, psycho-social impacts); and the kinds of information media they used and preferred (pamphlets and journals vs. podcasts, emails and websites). **CONCLUSIONS:** A range of information media pertaining to breast cancer related arm morbidity needs to be made available to breast cancer clinicians in order to better facilitate knowledge transfer and uptake of arm morbidity findings into breast cancer practice. However, preliminary findings from our study also found that more awareness and education around the issue of arm morbidity and psycho-social impacts is needed.

#### P-484

##### **Evaluation of Alexithymia in Heavy Chronic Smokers Women Engaged in Smoking Cessation Therapy**

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**OBJECTIVES:** To help out the heavy chronic smokers women quitting smoking, healthcare proposed smoking cessation therapy. In association with smokers, practitioners determined events, cognitions and feelings, which came out smoking behaviours. Alexithymia describes inability expressing our own feelings. It's often associated with substance abuse. Nevertheless, studies found no association between alexithymia and tobacco abuse. Studies used to compare all smokers with non-smokers or ex-smokers. Our hypothesis was heavy chronic smokers are more alexithymics than the others. **METHOD:** A sample of 20 smokers women engaged in cigarette smoking cessation therapy filled a questionnaire on substance abuse (Fagerstöm, FACE), smoking behaviours (QCT 2), alexithymia (TAS 20) and prior smoking cessation. They were evaluated at the first meet with practitioners. Descriptive statistic, correlations among the measure, comparison of averages and hierarchical regression analysis were performed for determine if alexithymia predicts high level of nicotine dependence and high numbers of prior failure smoking cessation. **RESULTS:** As expected the results showed that heavy chronic smokers women scored higher prior failure smoking cessa-

tion than the others smokers. Alexithymia also appeared to be unrelated to nicotine dependence. As unexpected, considering each field of alexithymia, heavy chronic smokers women scored highest level in external oriented thinking scale than the others and more often used cigarette as a vector of social integration. **CONCLUSIONS:** Although the externally oriented thinking doesn't predict nicotine dependence, it remains associated with high level of nicotine dependence. Further studies have to be conduct among bigger sample of heavy chronic and hard score smokers women who received clinical service for treatment of nicotine dependence. Assess separately the 3 fields of alexithymia and carry out specific interventions may be useful clinically by assisting healthcare providers in helping those smokers to enhance outcomes.

#### P-489

##### **Assessing Psychological Well-being, Daily Functioning, and Quality of Life in Gynecological Cancer Patients**

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**OBJECTIVES:** The purpose of the study was to evaluate the psychological well-being, daily functioning, and quality of life of cancer patients recently diagnosed with various gynecological tumors who had undergone surgery, chemotherapy, or radiation cancer therapy. **METHOD:** The participants were fifty-two female patients who were recently diagnosed with cervical, ovarian, or endometrial cancer and who had undergone surgery, chemotherapy, or radiation cancer therapy. Psychological well-being, daily functioning, and quality of life were measured using the Psychological Well-Being Index (PWB), the Daily Functioning Activities Questionnaire (ALLTAG), and the Spitzer Quality of Life (QLI) before and after six months treatment. **RESULTS:** Psychological well-being improved significantly after treatment. Six months post treatment there was a positive correlation between psychological well being and quality of life and daily functioning. Stage of treatment was associated with decreased psychological well-being, declining ability to perform daily functioning activities, and reduced quality of life. Type of treatment was modestly associated with psychological well-being and quality of life. There was no significant change in daily functioning. **CONCLUSIONS:** Cancer treatment can significantly improve the psychological well-being of newly diagnosed gynecological cancer patients even though their ability to perform daily activities had not changed significantly.

## P-492

**Sister Survivor: African American Breast Cancer Coalition**

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**OBJECTIVES:** Five grassroots support groups and Dr. Ashing-Giwa formed the African-American Breast Cancer Coalition (AABCC). The coalition implemented this study using the CBPR framework and qualitative methodology with the following objectives: 1) identify the elements of structure and process for African-American peer support groups and 2) the most culturally-appropriate paradigm for developing AABCS peer support groups. **METHOD:** AABCS were interviewed in focus groups (5 with peer support group members, 4 with non-support group members); peer support group leaders were individually interviewed to get a clear idea of the structure and process of the groups. A preliminary guide on 'how to' develop AABCS peer support groups was developed. The coalition was involved in all study activities including study planning, instrumentation, study implementation, data interpretation and dissemination. **RESULTS:** 75 AABCS participated. The qualitative analysis unveiled 3 themes: 1) Emotional Impact of Breast Cancer, 2) Emotional Stressors, and 3) Emotional Boosters. The findings suggest the groups are critically important to the survivors' family functioning and emotional well-being. The importance of peer support groups becomes more evident in the post-treatment/survivorship phase when emotional and social support from family, friends and medical providers dwindles. The themes of acceptance, belonging, and validation were woven throughout the interviews. **CONCLUSIONS:** The support groups provide a cultural, empathetic, emotional and supportive care safety-net. These groups function as an extension of a prescribed way of life including spirituality and a fictive-kin-network woven together through the breast cancer experience. Our findings and Coalition outcomes demonstrate the community-research-partnerships' potential to address survivorship needs and health disparities through coalition-building, prioritizing direct community benefit, bi-directional training and capacity building when these values and practices are rooted in cultural and sociological contexts.

## P-498

**Psycho-social Needs of Breast Cancer Patients**

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**OBJECTIVES:** The objective of this research was to identify the psycho-social needs perceived by breast cancer patients, related to their social, cultural and religious situation, and also the assistance trajectory until they get the diagnosis. A deeper comprehension of these matters can help to enhance the patients care at the health system. **METHOD:** This research took place from June to October of 2007, with patients followed at the gynecological and breast cancer university hospital, reference for 4 million inhabitants. 21 patients were interviewed and the recommended ethical procedures for qualitative research were observed. The material was submitted to the thematic analysis of contents to capture the women's representations. **RESULTS:** The medium age of the patients was 55, the majority had an incomplete basic scholarship, were employed and without companion. Most of them missed to have a referral health professional. Financial difficulties to be treated were referred, although none have abandoned treatment. They expressed fear related to the chemotherapy side effects, depressive feelings and difficulties to develop home activities. Most of them associated the cancer to some strong and negative events, specially breaks and families losses. **CONCLUSIONS:** After diagnosis, the care process is demanding and needs emerge. It is important a coordinated action between the local and specialized health services to attend them, evolving resources to facilitate the timely and suitable treatment. It is also important the psychological support for the understanding of this life time, helping to keep the quality of life and the affective relationships.

## P-511

**Psychological Distress and Coping Strategies in Patients with Non-melanoma Skin Cancer**

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**OBJECTIVES:** Non-melanoma skin cancer (NMSC) is the most common type of cancer, often involving an area of the body that is visually conspicuous to self and others; 80% occur in the face. NMSC is a unique cancer in that the concerns are less about mortality and disease gravity but rather of disfigurement, discomfort, and illness perception. Surprisingly, few studies have investigated the psychosocial implications of the NMSC diagnosis on patients. **METHOD:** The current study was designed to provide an account of the distress experienced and coping strategies used by NMSC patients. One-hundred and two patients, at any stage within their illness trajectory, participated in this cross-sectional study. During their regular visit to the dermatology clinic, all participants completed

questionnaires measuring quality of life, distress, coping and psychosocial needs. **RESULTS:** The results of the current study show a significant level of distress is experienced by individuals suffering from non-melanoma skin cancer - especially when the NMSC is located on the face and head. Furthermore, the distress is associated with suboptimal coping strategies, and is dependent on where the patient is situated in their illness trajectory. **CONCLUSIONS:** To our knowledge, this is the first study to demonstrate a clinically significant level of distress in patients with non-melanoma skin cancer. Our findings highlight the importance and need of developing services to improve the clinical care for this patient population, as the majority of them are not presently offered psychosocial interventions.

### P-513

#### **Window to the Soul: Art and Meaning in Cancer Care**

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**OBJECTIVES:** In acute care, medical oncology, many patients experience physical discomfort as well as emotional and spiritual distress. The hospital environment is often drab and depersonalized. The literature suggests that visual art improves patients' sense of well-being, provides hope, and aids communication between staff and patients. This quality care project was designed to brighten patients' rooms with personalized art and to describe the paintings' effects on those living, visiting and working in this hospital environment. **METHOD:** A feasibility study described the impact of providing personalized visual art into hospital rooms, with the patients' glass windows acting as the painters' canvas. High school art students executed the paintings, the communication was facilitated by an occupational therapist, and the patient directed the process. Results were collected by questionnaire from the patients, their families and the staff. The occupational therapist also interviewed several patients and documented their responses. **RESULTS:** A pilot study is now underway to confirm the results in this feasibility study. The preliminary responses indicated that the paintings distracted patients, often anchoring them during distressing moments, providing hope. Patients who 'inherited' the paintings used them in their own unique way, and staff reported that the pictures facilitated communication beyond the patients' illness. For several patients their individualized paintings assisted in their transition from active cancer treatment to end of life care. **CONCLUSIONS:** Personalized art work is a significant adjunct to health, healing and the alleviation of suffering. Occupational Therapy is ideally situated to facilitate such a modality in an acute care setting:

Thus enhancing their clients' physical and psychosocial environments. These transformative, spiritual and emotional, processes will be described.

### P-514

#### **How Anxiety, Depression and Physical Side Effects Predict Fear of Recurrence in Breast Cancer Survivors in Taiwan**

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**OBJECTIVES:** Psychological and physical factors are associated with fear of recurrence in cancer survivors. The degree of their individual effect is unknown. The objective of this study is to examine the separate relationship of anxiety, depression and physical side effects to the fear of recurrence of breast cancer survivors (BCS) in the early stage of survivorship. **METHOD:** 211 stage I or II outpatient BCS who had finished treatments for 3 to 24 months, completed packets of questionnaires including the Hospital Anxiety and Depression Scales (HADS), the Rating of Physical Side Effects and Mini-MAC. The item of 'I worry about the cancer returning or getting worse' is used to represent fear of recurrence. Multiple regression is utilized to examine how anxiety, depression and the severity of physical side effects predict the outcome of fear of recurrence. **RESULTS:** The results indicated that the three-factor model can significantly predict fear of recurrence, explaining 23.4% of the variance ( $R = 0.48$ ,  $F(3, 207) = 21.04$ ,  $p < 0.01$ ). Although all three factors are associated with fear of recurrence (all  $ps < 0.01$ ), anxiety is the only one significant predictor of fear of recurrence ( $t(207) = 5.48$ ,  $p < 0.01$ ). **CONCLUSIONS:** Anxiety assessed by HADS can serve as a good predictor to BCS' fear of recurrence. Depression might be regarded as a different construct from fear of recurrence. When BCS perceive more severe side effects, they do not attribute them to the sign of recurrence. This might be due to the high survival rate in early stage of breast cancer. Other possible factors such as age, coping patterns, social support deserve to be tested in future researches.

### P-516

#### **Comparing Quality of Life Between Childhood Cancer Survivors and Healthy Control and Identifying Factors Affecting QOL**

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**OBJECTIVES:** The purpose of this study was to assess the QOL in childhood cancer survivors in comparison with the QOL in healthy peers. Also, relative impact of psychological variables as well as other treatment related factors on physical, psychosocial, and overall QOL was also investigated. Four variable groups were demographic variables (age at diagnosis, survival time), diagnosis and treatment (diagnosis, duration of treatment, combination of treatments), late effect (the severity) and psychological variables (self-concept and problem behavior). **METHOD:** Participants were 110 childhood cancer survivors ages from 8–18 years old and their parents, who were recruited from Long-term follow-up Clinic run by a cancer center at one of the major university affiliated hospital in Seoul. Also age and gender matched healthy control group was recruited via internet advertisements and school counselors/teachers. Youth completed the Korean Pediatric Scale of Quality of Life 4.0, and the Self Concept Inventory, and parents completed the Korean-Child Behavior Checklist. **RESULTS:** Survivors reported significantly lower QOLs than control group in all domains ( $p < 0.5$ ). Results of hierarchical multiple regression analysis showed that four groups of variables explained more than 49 % of variables on QOL though some differences were found across sub-domains of QOL ( $p < 0.001$ ). Also  $R^2$  was significant at all levels of analysis except demographic variable in physical QOL. Psychosocial variables independently accounted for 36–49% of total explained variance of QOL ( $p < 0.01$ ): physical ( $\Delta R^2 = 0.18$ ), psychosocial ( $\Delta R^2 = 0.273$ ), overall ( $\Delta R^2 = 0.282$ ). **CONCLUSIONS:** Relatively lower level of QOL among survivors suggested continuous efforts are needed to identify factors influence QOL. Unlike demographic and treatment related factors, psychological factors are flexible to change, hence become a promising domain to focus on to improve QOL among pediatric cancer survivors. Psychosocial support and education to survivors and their parents could be one of the options to try. More attention should be given to other psychological factors impacting on QOL.

#### P-519

##### Using a Short Range of Neuropsychological Tests in the Assessment of Cognitive Function Among Breast Cancer Patients

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**OBJECTIVES:** Assessment of cognitive function among breast cancer patients can be adversely affected when a broad range of neuropsychological tests is used, which may cause fatigue and increase the chances of a Type A error. In this fashion, the chance of finding significant differences between the control and cases increases. Thus, we wished to test the efficacy of a shorter battery to test for cognitive function among breast cancer patients. **METHOD:** Cognitive function of 20 women who were newly diagnosed with breast cancer, before the commencement of chemotherapy treatment were compared with 20 women survivors of breast cancer that had completed chemotherapy treatment 2 to 5 years earlier. The tests included: attention (simple reaction time), and the 'Doors and People' (D&P) test of visual and verbal recall and recognition. The overall score of the D&P test is a sensitive index of episodic memory performance. **RESULTS:** The two groups of breast cancer patients did not significantly differ regarding age, level of education, BMI and family status. The results indicated that women newly diagnosed with breast cancer and women survivors of breast cancer were not significantly different in general episodic memory performance ( $p = 0.675$ ) but were significantly different in non-verbal recall ( $P < 0.017$ ). There were no differences on attention tests measured by simple reaction time. **CONCLUSIONS:** The differences in cognitive function appear to be less profound than others have found in the past. There is a need to continue to collect data over time to see if cognitive differences appear at a later date after chemotherapy.

#### P-520

##### Narration In Psycho-Oncology Of Longtime Surviving Patients

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**OBJECTIVES:** The man shapes continuously his own world by narrating it and narration has fundamental role in defining the self-identity. Therapy can be seen as a tale and autobiographical narration can be a mean of change. The project 'Narration in psycho-oncology of longtime surviving patients' comes from the awareness of the therapeutic value of narration. Specifically in this research project are collected and narrated stories of women that have undergone to a partial or total breast. **METHOD:** For this study, a total number of 30 patients, women that have undergone to surgical breast ablation and have been tumor free for about 5 years, have been enlisted. They are gathered in groups, composed by an average of 5/7 women, a moderator a vice-moderator, specifically

a psychologist, and a counselor. The study, begun in 2009, is still ongoing. The evaluation tools used are autobiographic card, STAI ( State Trait Anxiety Inventory) and projective drawings. **RESULTS:** The descriptive and qualitative analysis of narrations and drawings has shown recurrent themes: seeking of religious consolation, early splits, adverse relation with their femininity, ' the crippled body' and the sexuality, anxiety of not being in control over their own body and the disease. These women feel a split in their life: a before and an after the disease, with frequent occurrence of experiences of abandon, sense of guilt and splits after the disease. **CONCLUSIONS:** This study has shown the importance of the availability of a personal space to reshape and process their own life experiences. To tell their own stories, to narrate themselves becomes a way to redefine the sense of self and enables them to integrate the experience of the disease in the contest of their lives in a more harmonic way, giving back a feeling of continuity to their existence and of psychological well-being.

#### P-526

##### **Managing Cancer-Related Symptom Distress and Improving Well-Being Through Human-Nature Connections**

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**OBJECTIVES:** Nature and the natural environment represent under developed resources that exhibit the potential to improve health and well-being for individuals who experience ill-health. In considering this potential, relationships between nature and decreased symptom distress in those treated for cancer and who experience the resultant side-effects may emerge. This presentation centres on the potential roles of nature in promoting health and well-being, and decreasing symptom-related distress in individuals being treated for cancer. **METHOD:** Current evidence highlighting the restorative potential of human-nature connections will be synthesized and presented. The applications of this evidence in clinical and rehabilitation settings will be discussed relative to promoting well-being and decreasing symptom-related distress in individuals being actively treated for cancer. Data will be presented from a proof-of-concept study that utilized home-based slideshows of natural restorative environments for individuals who were actively receiving chemoradiation therapy for head and neck cancer. **RESULTS:** Preliminary evidence supports the potential for human-nature connections to contribute positively to symptom reduction and improved self-perceived well-being and quality of life. Further,

human-nature connections have been reported to promote general restoration, improved directed attention, increased positive affect, and decreased stress in healthy populations. Improved clinical outcomes in hospital settings have also been reported. Therefore, fostering such 'green experiences' during treatment and rehabilitation could help to decrease the negative impact(s) of cancer treatment. **CONCLUSIONS:** Humans are inextricably linked to nature and the natural environment; however, current practices generally do not acknowledge the potential role of nature in promoting human health and well-being. Integrating human-nature experiences in clinical and rehabilitation contexts could provide valuable respite and help to decrease the negative impact of cancer treatment. This presentation will discuss how fostering human-nature connections can be integrated into treatment and rehabilitation contexts to promote enhanced well-being in individuals with cancer.

#### P-527

##### **Assessing the Awareness and Practice of Pap Smear Screening among Redeemed Christian Church of God Women in Nigeria**

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**OBJECTIVES:** Cancer of the cervix is the second most common cancer among our women. Most women with this disease present late for treatment. Women from different walks of life often dominate most religious gatherings and this study set out to assess Christian women's awareness of cancer of the cervix and their practice of Pap smear screening as a way to detect cancer of the cervix early. **METHOD:** Subjects for this study were females from an interdenominational congregation of Christian worshippers from different parts of the country attending an annual convention. The researchers distributed the structured questionnaire between sessions to all the women who were willing to participate in study after their consent have obtained. Data collected were analyzed by the use of SPSS. Those who filled the questionnaires were educated on what cancer of the cervix and Pap smear. **RESULTS:** 101 women participated in the study. Their average age was 31.50. 71.3 percent of them had tertiary education. 47.5 percent had not heard of cancer of the cervix before. 83.2 percent did not know what test to do to detect cancer of the cervix early, 80.2 percent did not know where to go for the test, 93.1 percent had never had a Pap smear test and 89.1 percent did not know anyone who had cancer of the cervix before. **CONCLUSIONS:** No study on women's awareness and practice of pap smear screening have been directed at the Christian religious woman. The findings of this study

indicated that Christian women do not have enough information to take actions for prevention and control of cancer of the cervix. Christian women seek hope and meaning in life through religious practice; there is need to empower them with enough information on cancer prevention and control when they come for such programmes.

#### P-529

##### **Decision-making About Inherited Breast-Ovarian Cancer Risk: Dimensions of Genetic Responsibility**

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**OBJECTIVES:** To describe how women's motivations for undergoing BRCA1 or BRCA2 testing is strongly influenced by notions of genetic responsibility. **METHOD:** 20 semi-structured interviews were conducted with women from three cancer genetics clinics serving Southern and Central Ontario. All had undergone genetic testing for HBOC and received results. Interviews covered broad topic areas including genetic test decisions, the impact of test results, and risk management behaviours. **RESULTS:** Qualitative data analysis revealed the pervasive significance of genetic responsibility in test decisions. We highlight three dimensions of genetic responsibility: 1) to know about the self for self; 2) to know about the self for others; 3) to know about the self to oblige others to know. **CONCLUSIONS:** Dimensions of genetic responsibility have implications for test decisions, family relationships and other family members' desire to know (or not know) and to act (or not act) with respect to their own genetic risk. In particular, genetic responsibility may play out as a framing of a relative's moral obligation to know their risk that could obviate any interest they might have in not knowing. Perceptions of responsibility should be thoroughly explored in genetic counseling sessions.

#### P-535

##### **Yoga for Women with Arm Morbidity after Breast Cancer**

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**OBJECTIVES:** Arm morbidity remains the primary cause of disability post breast cancer. Women

report both physiological and psychosocial implications that impact paid work, unpaid work, leisure activities and relationships. However, there are few rehabilitation programs in place for Canadian women. Our research uses a multi-method approach to quantitatively measure and qualitatively evaluate the physical and psychosocial impact of a gentle yoga program on the well-being of women with arm morbidity after breast cancer. **METHOD:** 17 women participated in one of two 8 week yoga programs. Three types of arm morbidity (pain, lymphedema, range of motion) were assessed using the McGill Pain Questionnaire, circumferential and goniometer measurements. Psychosocial impact of the program was gauged using the Profile of Mood States, Yoga Self Efficacy and Social Impact of Arm Morbidity questionnaires. Participant journals and two qualitative interviews generated data related to both physical symptoms and psychosocial well-being. **RESULTS:** With this poster presentation, we share the findings of the qualitative data, with an emphasis on the participants' journals. Key themes which emerged from the journal analysis include: 1) a need for rehabilitation addressing physical, psychological and social interventions; 2) positive experiences of group based exercise interventions; and 3) a growing and positive awareness of embodiment via yoga. While different aspects of these themes were discussed by participants, most journals demonstrated improvements in well-being. **CONCLUSIONS:** Gentle yoga programs offer much potential for improving the overall well-being of women experiencing disability after breast cancer. Our research shows an expansion of this exploratory study is warranted.

#### P-537

##### **Using Photovoice in Medical Communications with Women Breast Cancer Patients in Ontario**

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**OBJECTIVES:** The purpose of the project is to unearth significant factors in a short-term, non-structured and qualitative study of the experience of cancer from the patient perspective to improve our understanding of the psychosocial dynamics involved. Not only may these factors contribute to a holistic understanding of the illness treatment cycle, they may be used in quantitative, larger scale and longitudinal studies into quality of care and patient-based communication in the medical setting. **METHOD:** Participants drawn from a local breast cancer support group are chosen with the following criteria: female gender; aged from 18 to 65 (excluding amendments); diagnosis of malignant breast cancer or DCIS within six months to no more than five years; received chemotherapy,

and/or radiation, and/or radical tumour removal. Each participant will take 36 shots of whatever they wish and discuss in-group or individually their favourite five. Discussions are recorded and noted. **RESULTS:** Selected images and discussions are coded and analysed using Atlas.ti software with reference to the discursive framework developed by A. Burfoot (<http://www.queensu.ca/sociology/?q=people/faculty/full-time/burfoota>) on the basis of her study into mass communication and cancer. This work also forms part of an international collaboration with similar groups in Italy and Saskatchewan. The work here is to be compared later to initial results from the 2009 study by Jennifer Poudrier and Roanne Thomas MacLean on breast cancer. **CONCLUSIONS:** Building on previous research in media representation of cancer and Photovoice in medical communication, this research reports initial findings from a project based in a mid-sized Ontario city of women's experience with breast cancer. Discoveries include new factors in patient-based experience of breast cancer; facilitation of communication between healthcare workers and patients; greater compliance with proposed treatment; evaluation of patients' perception of healthcare effectiveness; patient reinsertion in everyday and family life, relationships and work.

#### P-543

##### **First Experiences With Psychosocial Care Of Children With Cancer In Croatia**

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**OBJECTIVES:** Croatia is a Central European and Mediterranean country with a population of about 4.4 million people. Each year approximately 150 children and adolescents younger than 20 years are diagnosed with cancer. Over the last decades, the cure rate in Croatian pediatric oncology achieved dramatic improvements, with overall survival of more than 75%. However, very little attention has been paid to emotional, spiritual and psychosocial care of affected children and their families. **METHOD:** In year 2007, Ministry of the Family, Veterans' Affairs and Intergenerational Solidarity of the Government of the Republic of Croatia started the national program of the psychosocial care of children with cancer and their families. The main goal is to assure that psychosocial care is integrated into routine pediatric cancer care in hospitals. The financial resources are provided by the The Croatian Health Insurance Institute and the Government of the Republic of Croatia. **RESULTS:** In the period of two years, only two of four centers follow the

program, with psychologists and occupational therapists being employed. These centers report benefits for the whole family and the staff. Psychologists collaborate with other health care providers and provide consultation to community partners and schools. Two other centers are still facing problems with their local hospital management administration. **CONCLUSIONS:** Although proclaimed as the national strategy, the progress of psychosocial care of children with cancer in Croatia is slow. An insufficient number of experts are willing to work in this area as providers and teachers. A particular concern is that Croatia lacks comprehensive childhood cancer treatment. The Ministry of Health and Social Welfare plays a crucial role in the strategic planning and policy development of pediatric psycho-oncology at the national level.

#### P-545

##### **Effective Conflict Management: Implications for Caregiver/Family Communication and Treatment Decision Making**

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**OBJECTIVES:** The topics of caregiver/family communication and treatment decision-making have been addressed through research and practice from a variety of perspectives. However, one domain of scientific investigation and professional application, with clear implications for each of these topics has received less attention than is warranted. This is the area of the management of interpersonal conflict as described by Contemporary Social Conflict Theory (CSCT) the potential value of which has been underestimated. **METHOD:** CSCT is contrasted with conventional views of conflict equating it with behavior (fighting), viewing it as 'bad,' and advocating avoidance to prevent violence. This view is likely to be the operating stereotype when caregivers and families interact and make decisions and may interfere with each of these processes. CSCT views conflict differently, considering it to be a cognitively based process deriving from individuals' beliefs about their needs and interests and their expectations for satisfying them. **RESULTS:** Conflict is defined as 'a perceived opposition of needs and interests.' From this perspective, conflict is ubiquitous, inevitable—even necessary for change—and thus not necessarily bad. It is the response to conflict that is 'good' or 'bad.' For CSCT, contention (e.g. 'fighting'), is just one of five patterns of response modalities or strategies - accommodation, avoidance, compromise, and problem solving—are the other 'conflict management styles' (CMSs). **CONCLUSIONS:** The use of each of these CMS's has implications for how caregiver/family issues are handled, the manner in which important

(e.g. treatment) decisions are made, and for communication in general. This poster will provide information on the CSCT perspective, contrasting it with conventional views of conflict, and indicating its implications for and applications to the issues of caregiver/family interaction, treatment and other decision making, and general communication.

#### P-548

##### **Psychological Distress Of Women After Mastectomy: A Follow-Up Study**

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**OBJECTIVES:** The principal aim of this work was to identify the psychological distress in patients with breast cancer after mastectomy surgery and breast reconstruction. Furthermore the impact on the quality of life of different treatments (chemotherapy vs hormonal therapy) was evaluated. **METHOD:** After a period of six months from the surgery, a sample of patients was assessed using Beck Depression Inventory second form (BDI II) and quality of life test (SF 12). The sample was split into due groups with different pharmacological treatments. By *t* Student test for independent sample we evaluated differences in the investigated subgroups. **RESULTS:** Of our 64 patients (mean age 46, 3±7, 3), 44 received chemotherapy and 20 hormonal therapy. We found high levels of depression only in the 20.3%. The cognitive aspects of depression (25%) are more relevant than the somatic ones (10.9%). At SF12 the sample reported a mean score of 58.6 in the physical index (PCS) and a mean score of 64.6 in the mental index (MCS). We didn't find significant differences between groups. **CONCLUSIONS:** 6 months after the surgery, there were depressive symptoms in a quarter of the sample according to the literature. However, on average the sample shows a good level of quality of life. This result probably is influenced by the fact that women were assessed during the final step of reconstruction surgery and they were free from any pathology and they had finished their therapy.

#### P-549

##### **Mediating Factors in the Relationship between Insomnia and Cognitive Functioning in Women Treated for Breast Cancer**

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**OBJECTIVES:** Recent data from our research team suggests that breast cancer patients with insomnia have poorer cognitive functioning compared to good sleepers, but little is known about the factors explaining this relationship. This cross-sectional study, conducted among women with breast cancer, aimed to assess the mediating role of PSG-assessed sleep architecture, psychological distress, fatigue and stress in the relationship between insomnia and cognitive functioning, measured objectively and subjectively. **METHOD:** Sixty-seven women treated for breast cancer with surgery, chemotherapy and radiation therapy and currently receiving hormone therapy completed a battery of neuropsychological tests and the following self-report scales: Cognitive Failures Questionnaire, Actual State Scale, Performance Rating Scale, Hospital Anxiety and Depression Scale, Multidimensional Fatigue Inventory and two measures of life events. Sleep was assessed using one-night of ambulatory polysomnography recording. **RESULTS:** Number of awakenings (sleep architecture) contributed significantly to the relationship between insomnia and objectively assessed verbal and visual memory (betas = 0.11 and 0.04, *ps*<0.05), while anxiety (psychological distress) partly explained the association between insomnia and subjective cognitive functioning (betas = 0.07 to 0.31, *ps*<0.05). Fatigue and stress were significant mediators in the relationship between insomnia and both objective (betas = 0.04 to 0.12) and subjective (betas = 0.07 to 0.24, *ps*<0.05) cognitive measures. **CONCLUSIONS:** These findings raise the possibility that insomnia may induce cognitive impairments in women with breast cancer through the influence of numerous variables, including sleep architecture, fatigue, psychological distress and stress. Moreover, mediators vary according to the cognitive variable measured, with objective cognitive functioning being mostly associated with objective sleep, while subjective cognitive functioning is mostly related to subjective indices of psychological functioning (anxiety, stress). Future research should assess the contribution of other potential mediators.

#### P-550

##### **Dyadic Coping Profiles and Adjustment in Couples at the End of Breast Cancer Treatments**

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**OBJECTIVES:** Experiencing breast cancer is a challenge for the patient and the couple, particularly at the end of treatments. This study explores the association of couples' coping processes with

breast cancer adjustment in patients and their partners. Marital relationship is conceptualized within systemic communication theory. This study aims at (1) determining dyadic coping profiles; (2) relating the dyadic coping profiles with dyadic adjustment (emotional distress and negative affects at the couple level). **METHOD:** In cross-sectional study, 37 breast cancer patients and partners recruited from a specialized unit in Paris (France) completed self-report measures. Coping was measured by the WCC, and psychological and emotional dyadic adjustment by mean of each partner scores from GHQ-28 and PANAS. We used cluster analysis to define groups based on individual coping reactions and hierarchical regression to predict dyadic adjustment by dyadic coping clusters and congruence/incongruence of individual coping skills between patients and partners. **RESULTS:** Results suggest the presence of 3 coping clusters in patients (well-balanced, passive, self-sufficient) and 3 other profiles in partners (well-balanced, active, emotional dominant feature), and therefore 9 possible dyadic associations. The association of 'self-sufficient' in patients x 'active' in partners was related with better psychological and emotional adjustment in the overall system. Association of individual coping skills explains a significant part of dyadic emotional distress. **CONCLUSIONS:** Dyadic functioning and coping skills should be considered in cancer care and research when dealing with breast cancer patients. If we wish to promote dyadic adjustment, it is necessary to take dyadic coping match into account to explain adjustment in the overall system.

#### P-551

##### **Parental Cancer and Caregiving: Burden, Traumatic Stress and Electrodermal Reactivity**

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**OBJECTIVES:** A diagnosis of cancer affects not only the patient but also their significant others, especially when caregiving tasks are involved. Some caregivers perceive care as a burden, while others consider it a challenge. The purpose of this study was to describe how parent's cancer affects adult children caregivers, particularly in terms of psychosocial and physiological variables including gender and perception of parent's dependency. **METHOD:** A total of 78 adult children of cancer patients, receiving chemotherapeutic treatment, participated in the study. The average age is 34.18 ( $SD = 9.32$ ), 77% were female. Instruments used were: Impact of Event Scale-Revised (Weiss & Marmar), Burden Assessment Scale (Reinhart & Horwitz, 1992) and Posttraumatic Growth Inventory (Tedeschi & Calhoun, 1996) and a

biofeedback display (Physiolab) using the International Affective Picture System (Lang, Bradley, & Cuthbert, 2008). **RESULTS:** A negative correlation between posttraumatic growth and skin conductance baseline ( $p < 0.05$ ) was found. Also, perception of level of parent' dependency was related to traumatic stress ( $p < 0.01$ ), burden ( $p < 0.01$ ) and post traumatic growth ( $p < 0.05$ ). Significant differences were found on adult children caregivers based on gender i.e. women presented higher levels of traumatic stress ( $p < 0.05$ ), burden ( $p < 0.05$ ), and electrodermal reactivity ( $p < 0.01$ ) compared to men. **CONCLUSIONS:** Caregiving has been associated with risks of stress-related psychological and physical illness over the life span. Skin conductance is considered a good indicator of perception of stimuli stressors and is associated with deregulated physiological stress responses that may represent a mechanism linking caregiving, especially on women, to health outcomes. These results reveal the importance of intervention on adult children of cancer patients, especially in terms of stress management and family burden.

#### P-558

##### **Knowledge, Attitude and Behavioural Practices among Illegal Immigrants Commercial Motorcycle Riders Towards Tobacco Smoking and Cancer in Ibadan**

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**OBJECTIVES:** To assess the level of awareness of tobacco smoking as a predisposing factor to cancer diagnosis among illegal commercial motorcycle riders. To determine the attitude of these commercial motorcycle riders to tobacco smoking as it relates to cancer diagnosis. To identify if there is any relationship between knowledge that tobacco smoking is a predisposing factor to cancer diagnosis and the behavioural practices of these commercial motorcycle riders. **METHOD:** Due to migration status, access to the population for the study was limited thereby bringing the total sample size to 41 participants. A 38-item-questionnaire was developed and used for the study, Knowledge, Attitude and Behaviour Questionnaire (KABQ). **RESULTS:** The study found 75–93% of participants to be ardent smokers. There was a significant linear relationship between knowledge and attitude at ( $p < 0.05$ ). There was no significant relationship between knowledge and behaviour at ( $p > 0.05$ ). **CONCLUSIONS:** This study reveals that, the illegal immigrants are generally illusive due to their problems with the law. A mode for intervention and counselling to aid habit cessation was recommended as most of these illegal immigrants indicated a desire for positive change in behaviour if there are supportive incentives.

## P-570

**A Randomized, Double-blind Placebo-Controlled Study Evaluating the Efficacy of lovaza (Omega-3-acid-ethyl esters) Compared to Placebo for the Treatment of Depressive and Anxiety Symptoms in Patients with Breast Cancer**

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**OBJECTIVES:** Depression in cancer patients has been associated with significant morbidity and devastating effects on quality of life. Evidence suggests a role for inflammation in the pathophysiology of cancer-depression. Anti-inflammatory effects of omega 3 FA are well documented and studies have reported beneficial effects of omega 3 FA on depression. In the present study, we plan to evaluate the efficacy of omega 3 FA compared to placebo to treat depression in patients with breast cancer. **METHOD:** This is a pilot, randomized, double-blind, placebo controlled study. Women, 18 years or older, with breast cancer are eligible if determined to experience clinically significant depression based on interview and Hospital Anxiety and Depression (HADS) depression subscale score  $\geq 10$ . Patients are treated over a 12-week period with flexible dosing for lovaza (2–4 gms) and escitalopram (10–20 mg). Primary outcome measures include HADS and the Montgomery-Asberg Depression Rating Scale (MADRS) assessed every two weeks. **RESULTS:** We plan to enroll 95 patients over a two year period. Patients are being enrolled and are randomized into one of the three groups i.e. the lovaza (omega 3 FA) group [ $n = 38$ ], the placebo [ $n = 38$ ], and the antidepressant control, escitalopram, group [ $n = 19$ ]. Samples (blood and serum) are being collected to measure cytokine and other markers of inflammation and salivary cortisol levels. Literature review supporting study hypotheses, study design, and preliminary findings will be presented. **CONCLUSIONS:** Evidence supporting anti-inflammatory effects of omega 3 FA and its role in the treatment of cancer-related depression will be discussed. Patient experiencing cancer are often unwilling to consider prescription antidepressants but are open to natural products such as omega 3-FA. To our knowledge, this is the first study evaluating the role of omega 3 FA in the treatment of depression in patients with cancer and is the first step towards larger, long term studies.

## P-572

**What is the Prevalence of Depression in Cancer and Palliative Care? A Meta-analysis of Studies Using ICD10 and DSMIV Definitions**

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**OBJECTIVES:** There have been several narrative reviews and many opinions about the prevalence of depression in cancer settings. In particular it is often thought that depression is substantially more common in late stage cancers. We aimed to undertake a definitive meta-analytic summary of such studies. **METHOD:** We searched for studies that used a robust DSMIV or ICD10 standard. For DSMIV a minimum of 5 symptoms is required for major depressive disorder (MDD) and in ICD10 a minimum of 4 symptoms is required for a depressive episode (F32). We identified 36 unique studies, although only 7 used ICD10 criteria. **RESULTS:** Across all 36 studies the prevalence of depression was 21.7% (95% CI = 17.4% to 26.3%). In mixed stages (mostly early) the prevalence rate was 21.6% (95% CI = 15.8% to 28.0%) and in late stages (mostly palliative) 21.8% (95% CI = 16.3% to 27.8%). For DSMIV defined MDD the prevalence was 20.9% (95% CI = 16.0% to 26.2%) and for ICD10 23.5% (95% CI = 16.9% to 30.8%). **CONCLUSIONS:** Large differences in prevalence according to stages of cancer may be a methodological artefact that no longer applies when examined by robust methods. We had insufficient data to look at type of cancer. There may be a slight difference according to the definition of depression in DSMIV vs ICD10.

## P-573

**Do Disease or Cultural Variables Influence Perceived Distress in Cancer? A Path analysis of Predictors from an Ethnically Diverse UK Setting**

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**OBJECTIVES:** Despite much research describing distress there is relatively little on predictors of distress. Here we aim to examine basic disease, demographic and cultural predictors of distress. Distress was patient rated by the Distress Thermometer (DT) and analysis adjustment for all suspected interactions between predictors using Path analysis technique (AMOS5). **METHOD:** We analysed data collected from Leicester Cancer Centre from 2008–2009 involving approximately 1000 people approached by a research nurse and two therapeutic radiographers. Of those approached we collected data on 469 presentations, that is people seen up to three times over 9 months during treatment for cancer. We had complete data on 444. We examined the following factors: treatment intent (radical vs palliative), gender, ethnicity, cancer type, cancer duration. **RESULTS:** After adjustment for internal inter-correlations, the most powerful independent predictor was ethnicity (estimate = 0.284;  $p < 0.001$ ), followed by gender (estimate = 0.175;  $p < 0.001$ ). Treatment intent (a proxy for cancer stage) had a small influence

(estimate = 0.122;  $p < 0.05$ ). Disease type and duration were not appreciable influences. **CONCLUSIONS:** In our clinically representative diverse sample, severity of distress appears to be related more to ethnicity and gender than disease related variables. Further work is required to understand why cultural variables strongly influence distress.

#### P-574

##### **Feelings, Coping Strategies and Health Behaviours After Breast Cancer Diagnosis**

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**OBJECTIVES:** To explore feelings, coping strategies and health behaviors after cancer diagnosis among a sample of Iranian breast cancer survivors. **METHOD:** This was a qualitative study. In-depth semistructured interviews conducted with 39 breast cancer survivors (at least one year after diagnosis) to collect data. Patients were no longer undergoing active invasive treatment. **RESULTS:** Almost all participants believed that anxiety, stress, a sensitive personality and stressful life events were responsible causes for their disease onset. However, most patients attributed their cancer to the will of God. In addition it was found that most participants held strong spiritual position and used this force to help them accept that their cancer might be cured. Most women indicated that they have been actively engaged and showed adherence to their medical treatment. **CONCLUSIONS:** Religiosity and spirituality play an important role for Iranian breast cancer patients to cope with their disease and even actively pursue their treatment. The idea of an external health locus of control was not supported in this study.

#### P-575

##### **Clinical Experience of the Modified Nurse-Assisted Screening and Psychiatric Referral Program**

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**OBJECTIVES:** We previously reported that the nurse-assisted screening and psychiatric referral program (NASPRP) facilitated the psychiatric treatment of depressive patients, but the high refusal rate was a problem even though referral was recommended all positively screened patients. We modified the program so that the nurses could

judge the final eligibility of referral using the result of the screening. This study assessed if the modified NASPRP led to more psychiatric referral of depressive patients. **METHOD:** We retrospectively evaluated the annual change of the psychiatric referral proportion, and compared the findings among the usual care term, the NASPRP term, and the modified NASPRP terms. **RESULTS:** The referral proportions of the modified NASPRP terms were 4.4% and 3.9%. These were not significantly higher than the usual care term (2.5%), and significantly lower than the NASPRP term (11.5%). **CONCLUSIONS:** The modified NASPRP did not facilitate psychiatric treatment of depressive patients and other approach is needed.

#### P-576

##### **Health Related Quality of Life of Children and Adolescents with Cancer Immediately after end of Treatment**

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**OBJECTIVES:** Health related quality of life (HRQOL) in children and adolescents with cancer, immediately after end of treatment, has only been studied to a limited extent. Aim of this study is to gain more knowledge in parent-reported and self-reported HRQOL of children and adolescents that have recently finished cancer treatment. **METHOD:** Children or parents aged 0–18 years were requested to complete HRQOL questionnaires 0 to 2 months after finishing treatment: 0–4 years: ITQOL, proxy report 5–7 years: CHQ PF-50, proxy-report; 8–18 years: Kidscreen, self-report. Parental impact is also measured for the 0–7 year olds. HRQOL data of children with cancer were compared with the Dutch norm populations by means of independent *t*-tests and one-sample *t*-tests. **RESULTS:** In total, 272 children with cancer from four academic medical centers in the Netherlands were approached. Eventually, 190 (70%) children ( $M = 9.2$  years of age, 47.9% girls) completed the HRQOL questionnaires. Young children have decreased HRQOL scores, however

older children and adolescents show no differences or even score better than the norm. This contrast between proxy and self-report, children scoring higher than parents is shown again. Moreover, parents report lower HRQOL on health perception, emotional and time scales. **CONCLUSIONS:** Parental worries are dominantly reflected in the ITQOL and the CHQ, and childhood resilience is mirrored in the Kidscreen. Parents have concerns about the future, while children seem to look back and are eager to continue their normal lives again.

#### P-584

##### **Psychological Distress in Patients with Benign and Malignant Breast Diseases**

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**OBJECTIVES:** To compare anxiety and depression among patients with benign and malignant breast diseases. **METHOD:** This was a prospective study of psychological distress among all women with breast diseases attending to the breast clinic of a large teaching hospital during one complete calendar year in Tehran, Iran ( $n = 316$ ). Psychological distress was measured using the Hospital Anxiety and Depression Scale (HADS) at two points in time: at attendance (pre-diagnosis) and 3 months follow-up. Scores for anxiety and depression range from 0–21, with higher scores indicating greater symptoms. **RESULTS:** 167 patients diagnosed with breast cancer and 149 patients as having benign breast diseases. At pre-diagnosis there were no significant differences in anxiety between two groups while breast cancer patients showed higher depression ( $p = 0.01$ ). At 3 months assessment, breast cancer patients showed higher scores on both anxiety and depression (mean anxiety score: 10.3 vs. 5.1,  $p < 0.001$ ; depression: 6.2 vs. 1.6,  $p < 0.001$ ). However, anxiety and depression remained unchanged among breast cancer patients before and after diagnosis whereas in benign breast diseases anxiety and depression decreased ( $p < 0.001$ ). **CONCLUSIONS:** The findings suggest that perhaps cancer diagnosis itself does not impose additional anxiety and depression and rather psychological distress might be a predisposing factor for developing breast cancer later in life.

#### P-588

##### **A Study of Compassion Fatigue, Compassion Satisfaction and Spiritual Health among Nursing Staff in Hospital Ward**

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**OBJECTIVES:** This study explored the compassion fatigue, compassion satisfaction, burnout and spiritual health among nursing staff in hospital ward. **METHOD:** The questionnaire was used to collect data. The 200 participants were recruited from hospice, pediatrics, intensive care unit and medical ward nursing staff that has been working in northern and eastern area of Taiwan. A total of 250 questionnaires were distributed and 200 of them were counted valid. **RESULTS:** The result of this study showed that participants have extremely high risk of compassion fatigue, extremely low risk of burnout, and modest potential for compassion satisfaction. There is significant relationship between compassion fatigue and self-appraisal state of health among nurse. Self-appraisal state of health, family support played significant impact on Compassion satisfaction. This research also revealed that a significant positive correlation between compassion fatigue and burnout; and a significant negative correlation between compassion fatigue and spiritual health. **CONCLUSIONS:** Further findings were compassion fatigue could increase burnout risk, but spiritual health could reduce burnout risk and increase compassion satisfaction. It indicated that compassion fatigue was a better predictor to burnout; and better spiritual health reduce burnout among nursing staff. Therefore spiritual health can buffered the burnout arise.

#### P-590

##### **Cancer Under the Radar: A Book Project to Raise Awareness About Young Adult Cancer**

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**OBJECTIVES:** Young adults are a minority population within the adult oncology world, therefore having their voices heard is paramount to them feeling a sense of hope with regards to increasing the resources available to them while in treatment. In response to this need a two part project was initiated, to first produce a book, then to publicly launch it. **METHOD:** This book is a collection of art, photos, poetry and prose submitted by 15 young adult oncology patients as a method of communicating in a creative way about the impact of cancer at this stage in their lives. The coordination of a book launch not only promoted

the book itself but also provided a platform for raising awareness regarding the unique psychosocial needs of young adult oncology patients. Attendees included multidisciplinary medical professionals and the Montréal community. **RESULTS:** Both qualitative and quantitative data will be provided to highlight the impact of this process for the contributing young adult authors but also to discover in what way this process increased awareness within the medical and public communities. **CONCLUSIONS:** Delegates will have an opportunity to view this creative resource and gain information about an effective medium for connecting the medical community and altering public perceptions about young adult cancer. Ultimately this will work towards providing a more tailor-made approach when working with this population.

### P-593

#### Benefit Finding In The Pediatric Oncology Experience - Caregivers and Patients

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**OBJECTIVES:** Due to new multimodal treatment approaches, survival rates for pediatric cancer patients have dramatically improved. Unfortunately, survivorship status comes with its own stressors for this population and their caregivers. Positive thinking is increasingly being appreciated for its ability to cope with stress and elevate mood. This study explores the impact of several positive psychology variables in caregivers and adolescent patients. Benefit finding as a predictor of good adjustment was explored in depth. **METHOD:** One-hundred fifty-six caregivers of pediatric oncology patients (aged 2 to 17 years) were recruited for this study. This sample is evenly divided into 'on' versus 'off' acute treatment populations, and 'urban' versus 'rural' populations, resulting in four subgroups ( $n = 39$ ). Forty interested adolescent patients also responded. Questionnaires sampled demographic variables, various types of positive thinking, and emotional adjustment. **RESULTS:** Caregivers and teens typically endorsed 'moderate' benefit finding ('BF'). BF scores did not differ according to treatment status or proximity of residence. Caregiver BF correlated significantly with feelings of mastery ( $r = 0.17$ ), hope ( $r = 0.34$ ), and happiness ( $r = 0.29$ ). After adjustment for demographic variables, BF together with perceptions of 'challenge', 'mastery', and 'hope' explained significant additional variance in happiness ( $R = 0.549$ ). Adolescent BF did not correlate with quality of life but did significantly correlate with caregiver-matched BF scores

( $r = 0.39$ ). **CONCLUSIONS:** Data support the association between positive thinking and mood enhancement. As for patient quality of life, more than positive thinking is likely needed to yield maximal psychological adjustment. Having one's needs met in areas of information provision, emotional and instrumental support, and resource allocation is likely critical. We also accumulated these data for future in-depth analyses.

### P-597

#### Impact of a Mindfulness-Based Stress Reduction (MBSR) Program on Posttraumatic Growth (PTG), Spirituality, and Mindfulness in Cancer Patients: A Waitlist-Controlled Study

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**OBJECTIVES:** Previous research suggests that Mindfulness Based Stress Reduction (MBSR), an 8-week group psychosocial intervention, may enhance spirituality and Posttraumatic Growth (PTG) in cancer patients. Enhanced spirituality and PTG may contribute to improvements in long term psychosocial adjustment. Mindfulness is posited as a key mechanism of action of MBSR however this hypothesis has not been adequately tested. This aim of this study is to assess the impact of MBSR on PTG, spirituality and mindfulness in cancer patients. **METHOD:** A longitudinal waitlist-controlled study was conducted to test the hypothesis that increased mindfulness would mediate the impact of MBSR on spirituality and PTG. One hundred and six patients (mostly female) with a diagnosis of cancer (mostly breast) were assessed pre-, mid-, and post-MBSR intervention ( $n = 62$ ) or 8-week waiting period ( $n = 44$ ). Five key aspects of mindfulness were measured using the Five Facet Mindfulness Questionnaire (FFMQ) subscales. **RESULTS:** Results indicated that MBSR participation compared to the waitlist condition was associated with increased spirituality ( $F = 10.67$ ,  $p < 0.001$ ) and mindfulness (FFMQ-Observe:  $F = 15.70$ ,  $p < 0.001$ ; FFMQ-Describe:  $F = 8.51$ ,  $p < 0.001$ ; FFMQ-Act:  $F = 4.78$ ,  $p < 0.05$ ; FFMQ-Nonjudge:  $F = 12.86$ ,  $p < 0.05$ ; FFMQ-Nonreact:  $F = 16.87$ ,  $p = 0.001$ ) but not PTG. Changes in four measures of mindfulness partially mediated changes in spirituality (FFMQ-Observe:  $t = 4.44$ ,  $p < 0.001$ ; FFMQ-Describe:  $t = 3.47$ ,  $p < 0.001$ ; FFMQ-Act:  $t = 2.08$ ,  $p < 0.05$ , FFMQ-Nonreact:  $t = 2.59$ ,  $p < 0.05$ ). **CONCLUSIONS:** This is the first controlled study to demonstrate an association between MBSR participation and enhanced spirituality in cancer patients. Findings suggest that spirituality may be enhanced through learning to

maintain awareness of moment-to-moment experience in an accepting manner.

#### P-604

##### **Supportive Care in Oncology: Effectiveness Evidence for the Schultz's Autogenic Training**

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**OBJECTIVES:** Reduction in anxious and depressive states, relaxation, body functions' regulation, pain control, self-determination facilitation are several effects of the Schultz's Autogenic Training (AT) described in literature that encourage its use in oncology as a supportive care. In the present work the published experimental literature about the application of AT in oncology is reviewed to collect data about its both diffusion and effectiveness in this domain. **METHOD:** Combinations of the words 'autogenic training', 'cancer', 'oncology', 'neoplasm', were used to select records in MedLine, PsycInfo, Scopus, and Cinahl databases. Files about children, school aged subjects and teens were dropped. **RESULTS:** Despite more frequent citations of TA in papers about supportive care in oncology and more numerous clinical reports (usually published in journals not accessible by the mentioned databases), three papers met the inclusion criteria and they were presented in their contents an limitations. Many reasons (e.g. poor knowledge about TA; methodological problems in clinical psychology research and intervention assessment; needs for technique adaptations) can help in understanding this datum. **CONCLUSIONS:** Although TA seems to be a useful supportive care in oncology from both a theoretic and clinical point of view, more empirical research is recommendable. In general TA suffers from the same problems in effectiveness assessment coming from other psychological interventions, including psychotherapy.

#### P-605

##### **Psychosocial Service Utilization By Cancer Patients**

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**OBJECTIVES:** There is plan to start a psycho-oncology service in our institution to meet the needs of cancer patients. The aim of this study is to survey the use of psychosocial interventions by looking at referrals to psychiatrists, medical social workers and psychologists. The results of this study will help to project resources required for the new

psycho-oncology service. Outcome of the new service can be compared with this baseline data to measure the impact of the new services. **METHOD:** This is a retrospective case notes study of the utilization of mental health services in cancer patients seen at our institution over a one year period in 2008. The cases are identified by new cases referral registers kept by the respective departments. The case notes will be traced and the relevant data extracted. The data will be analysed using SPSS. **RESULTS:** The results of 176 cases analyzed showed the referral rates to the various professionals are: medical social worker 146(83%), psychiatrist 20(11%) and psychologists 22(13%), with 12 patients having referrals to more than one professional. The reason for referrals are mainly for practical issues - financial difficulties 85(48%) and care arrangement/referral to external agencies 21(12%). There are 41(23%) referrals for emotional distress. There were 764 newly diagnosed cases, out of which 95(12%) cases were referred. **CONCLUSIONS:** The referral rate for psychosocial intervention is low. Most of the referrals are to the medical social workers for practical issues such as financial problems, care arrangement/referral to external agencies. There is hidden morbidity among this group of patients for which psychosocial interventions can be beneficial. The challenges for planning the new service include increasing the awareness of roles of psychosocial interventions in cancer care and balancing the increase in referrals with limited resources.

#### P-611

##### **Psychosocial and Psychological Needs of Rectal Cancer Patients Treated with Brachytherapy: A Prospective Observational Cohort Study**

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**OBJECTIVES:** A literature review demonstrated an absence of studies examining the psychosocial needs of rectal cancer patients while receiving high dose rate brachytherapy. Existing research has focused on the long-term treatment side effects and on quality of life as opposed to the experience of these patients during the brachytherapy. This poster will present the development of a prospective observational study to provide a descriptive profile of their emotional, cognitive and physical experience during the brachytherapy.

**METHOD:** 25 patients will complete self-report questionnaires and visual analogue scale of mood and anxiety before and after the brachytherapy, and verbal anxiety and pain rating scales will be administered at 4 time points during treatment. On treatment completion, patients will be assessed using a semi-structured interview. The interview data will first will read independently by two research team members and categorized according to emergent themes. The data will be analyzed using an interpretive description method. **RESULTS:** Basic descriptive descriptions will include cohort and bivariate analysis and test for internal consistency of self-report questionnaires. Quantitative analyses of socio-demographic data, self-report questionnaires and analog scales will be used to test for pre-post, and intra-procedure in pain and anxiety. Using descriptive and interpretive methods, qualitative data analysis will examine patients' subjective description of discomfort. **CONCLUSIONS:** The results from the mixed method of data analysis will be used as a basis to design interventions to reduce discomfort experienced by rectal cancer patients during brachytherapy. Adding to the quantitative observations, the qualitative data will provide a detailed, rich experiential profile of the brachytherapy procedure. This study will also be the first to investigate and report on the experience of rectal cancer patients during brachytherapy.

#### P-619

##### **Smoking Cessation is Associated with Transient Aggravation of Insomnia Comorbid with Cancer**

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**OBJECTIVES:** Nicotine withdrawal increases the risk for insomnia in the general population, but this question has never been investigated in cancer patients, who are strongly advised to quit smoking in order to decrease the risk of cancer recurrence. This presentation aims at investigating the effect of nicotine withdrawal on insomnia in cancer patients. **METHOD:** All patients scheduled to undergo surgery after a first diagnosis of non-metastatic cancer were solicited at their pre-operative visit. Among the 3196 patients approached, 1681 were found eligible and 962 (57%) accepted to participate. The participants completed the Insomnia Interview Schedule, a health behavior questionnaire and the Insomnia Severity Index (ISI) at baseline, 2, 6, 10, 14 and 18 months. The sleep quality of quitters and non-quitters was compared using split-plot mixed models. **RESULTS:** While ISI scores decreased in non-quitters ( $n = 120$ ; from 9.5 to 9.3 at post to 8.3 four months later), in quitters ( $n = 55$ ) they increased from 8.5 to 9.5

( $p = 0.20$ ,  $ES = 0.16$ ) and then returned to baseline levels (8.1). Among quitters, those who were good sleepers at baseline had a significantly greater increase of ISI scores (from 5.2 to 8.3;  $p < 0.02$ ,  $ES = 0.57$ ) as compared to those with insomnia (from 10.7 to 10.6; ns). **CONCLUSIONS:** Nicotine withdrawal appears to be associated with a transient aggravation of insomnia symptoms, in particular in patients having good sleep at baseline.

#### P-620

##### **A Proposed Coping Skills Intervention Program for Adolescents and Young Adults with Cancer (AYAC): Results of a Preliminary Survey**

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**OBJECTIVES:** Recent studies have consistently shown that AYAC face unique physical (i.e. unabated high levels of morbidity and mortality) and psychosocial challenges (e.g. fertility, sexuality). Moreover, over 50% of the psychosocial needs of AYAC remain unmet and interventions programs specialized in AYA oncology are lacking. We present preliminary results of a survey asking AYAC to evaluate a proposed coping skills intervention program aimed at enhancing their management of cancer-related challenges. **METHOD:** The proposed intervention program consists of 3 sessions. Session 1 focuses on navigation of the medical system and effective decision-making/problem-solving. Session 2 focuses on emotional management, and Session 3 focuses on fertility, sexuality and relationships issues after cancer. In addition, AYAC are paired with other age-matched AYAC for further support. The proposed intervention program was evaluated by AYAC seen at the McGill Adolescent and Young Adults Oncology clinic using an anonymous survey. **RESULTS:** Twenty-eight AYAC age (range 21–43; mean = 30.33) rated the content and potential impact of the proposed intervention program on a number of dimensions. The results showed mean expected improvement in domains of self-confidence, mood and relationships with family, friends and the spouse/partner. Moreover, the majority (68%) of AYAC desired to meet with an aged-matched AYAC. Location and time constraints were reported as the main obstacles to participation. **CONCLUSIONS:** Survey results provided valuable information about the potential benefits of a coping skills intervention program designed for AYAC. Overall, the proposed intervention was appealing to our target population for its potential to improve their quality of life. More importantly, identified obstacles to participation

present new opportunities to integrate current technologies used by AYA (e.g. texting, twittering, webcams, etc), and to evaluate their utility as modalities for the delivery of the intervention program.

### P-631

#### Recruitment Challenge in an Existential Psychotherapy Intervention

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**OBJECTIVES:** Background: recruitment rates in psychotherapy studies often compromise the achievement of significant results. However, only a few reports dealt directly with this problematic issue. Purpose: To describe recruitment methods used in a randomized cognitive-existential study for non-metastatic cancer patients. **METHOD:** We describe the strategies and difficulties encountered in the recruitment of 99 patients for a randomized 12-session cognitive-existential intervention. These strategies were (1) Local Advertising: posters/flyers, informing local organizations/associations. (2) Promoting the study to the public: Interviews in television/radio/newspapers, advertising in newspapers, mailing lists. (3) Promoting the study to medical staff. (4) Indirect methods: word of mouth, recruiting in waiting rooms. (5) Follow-up methods: Letters to related medical staff following enrollment, reminders E-mail. **RESULTS:** Among the 84 participants who reported how they heard about the study, more than half (55%,  $n = 47$ ) of the participants said they were recruited through the second method, especially publicity in newspapers. 18% ( $n = 16$ ) of the participants were recruited with local advertising (1) compared to 8% ( $n = 7$ ) through medical staff (3) and 16% ( $n = 14$ ) with the indirect method. **CONCLUSIONS:** Promoting the study to the public (2) is the most efficient mode of recruitment in our psychotherapy intervention so far (64%). Direct recruitment coming from cancer units and medical staff, while necessary, remain a scarce source of participants. These strategies should be considered seriously and revised periodically to avoid a poor recruitment rate which would jeopardize otherwise carefully designed and important studies.

### P-633

#### Innovations in Interdisciplinary Care Delivery: Integrating a Comprehensive Psychosocial Oncology Program in an Expanding Cancer Care Centre

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**OBJECTIVES:** There is an increasingly important need to establish clinical psychosocial oncology programs which integrate expert clinical knowledge and research in the provision of high quality, timely psychosocial care to oncology patients and their families. We describe innovations in care delivery by an interprofessional, interdisciplinary team of psychosocial oncology professionals designed to meet patient and family needs in an expanding urban university-affiliated cancer center serving local, regional and provincial needs. **METHOD:** We established an interdisciplinary program within the cancer centre's organizational structure to provide both psychosocial care and consultation to tumour site teams. An Interactive Electronic Health Record (IEHR) allows for real time communication, and the generation of a database from which quality of care information and best practice audits are obtained. The data facilitate efficiencies in consultation response time, and outcomes analysis, both in terms of understanding referral population demographics and quality assurance. **RESULTS:** Implementation of the IEHR led to innovations including a comprehensive referral form designed to enhance an innovative triage system. Additional developments include a distress screening program, monthly clinical/academic team meetings to achieve consensual, coordinated case management, and weekly administrative meetings. These innovations served to optimize patient and family access (in- and out-patient) to expertise of psychosocial oncology professionals capable of addressing their specific concerns and to provide timely crisis management when appropriate. **CONCLUSIONS:** This comprehensive model of interprofessional interdisciplinary communication brings together psychosocial oncology professionals (e.g. psychologists, social workers, nurses, psychiatrists, sexologists and chaplaincy, etc.) with significant expertise to foster mutual support, innovation, cross-fertilization, quality and continuity in clinical care and research. Ongoing work strives to develop team identity while supporting integration of psychosocial care to patients and families within tumour site teams, as a critical component of the cancer care centre's overall mission.

## P-637

**Delirium Subtypes In Hospitalized Cancer Patients: Prevalence And Evolution**

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**OBJECTIVES:** Delirium is a psychiatric complication frequently seen in hospitalized cancer patients. Delirious patients can be classified in three subtypes based on their psychomotor activity: hypoactive, hyperactive, and mixed. Based on the Nursing Delirium Screening Scale (Nu-DESC) validation study, we have developed an algorithm that accurately classified all delirious patients regarding their psychomotor subtype in comparison to the Memorial Delirium Assessment Scale. We have endeavored to establish delirium subtype prevalence and evolution based on this algorithm. **METHOD:** We have determined the prevalence of each subtype in 140 consecutive incident cases of delirium in a post-hoc analysis. We have also followed-up in survival analyses 113 hypoactive/mixed of these patients with repeated assessments using the Nu-DESC for incident hyperactive delirium since a first hypoactive/mixed event. The associations between baseline variables and the occurrence of hyperactive delirium were computed using Cox regression models. **RESULTS:** Of 140 incident delirium cases, 15 were hyperactive, 25 had mixed features, and 100 were hypoactive. Fifteen patients developed hyperactive delirium (13.3%). The 14-day cumulative probability of hyperactive delirium was 17.4%. Fifteen of the other 98 patients did not later present other delirium events, while most patients presented  $\geq 5$  hypoactive/mixed events. Hyperactive delirium was significantly associated with advanced age ( $p = 0.0214$ ) and marginally associated with a first event in the evening ( $p = 0.0517$ ) in multivariate analyses. **CONCLUSIONS:** Most delirious hospitalized cancer patients are hypoactive. After a first hypoactive/mixed delirium event, only a few patients progress to hyperactive delirium and these tend to be older and prone to present a first delirium event in the evening. Given the high recurrence rate of delirium during hospitalization, detection and monitoring should be performed continuously.

## P-638

**A Multidisciplinary Approach in the Haematology Service of a General Hospital on a Terminally Ill Woman with Young Children - A Proposed Model Based on a Clinical Case**

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**OBJECTIVES:** We propose a model for a multidisciplinary approach to reduce the psychological distress of terminally ill inpatients in a small haematology unit. The model also aims to reduce burnout and distress levels of staff members and lead to their progressive empowerment in difficult communication issues. It can be applied in situations of diminished human and logistic resources. **METHOD:** We assessed difficulties experienced by: (1) a terminally ill mother of four aged 5 to 17 in our small haematology unit in: openly expressing her feelings; shifting to palliative care; talking about death and dying; giving up her parental role; 'letting go'. (2) the haematology team, who were insufficiently confident to deal with either the emotions of the patient or their own, were unable to discuss difficult end-of-life issues, and resorted to maintaining active treatment. **RESULTS:** Instead of providing direct assistance exclusively to the patient, the liaison-psychiatrist held a weekly meeting with the haematologist and nurse in charge about the psychological challenges faced by patient and medical team. Strategies were worked out and applied throughout the week, facilitating communication, self expression, the shift to palliative care, the transfer of parental responsibilities, and the involvement of the children. 3 months after death, the grieving process was seen to be non-pathological. **CONCLUSIONS:** This weekly meeting, now extended to all patients, improves doctors' and nurses' confidence and communication skills, so reducing their distress and thereby increasing the quality of care they can offer, without the need for costly or lengthy formal training sessions or additional staff requirements. The psychiatrist can focus primarily on specialised interventions while contributing to the continuous development of the team. Consequently, we provide support conducive to a 'better death' and an uncomplicated grieving process.

## P-643

**A Definitive Meta-analysis to Ascertain the Optimal Screening Method for Depression in Cancer and Palliative Care. Part II - Algorithmic Test Combinations**

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**OBJECTIVES:** We aimed to examine the validity of screening tools for any defined depression following cancer, according to an ICD10 / DSMIV criterion. In this part, we look at the merits of each screening tool in combination with oncologists' judgement (data from Br J Ca 2001; 84, 1011–1015) or in an algorithmic combination. The latter is a two step approach applying the initial screen to all but the second step only in those who score positive. **METHOD:** After excluding those tools without at least two independent validity attempts, there were 8 tools for comparison plus clinical skills alone. Assuming a maximum of two applications per tool in order to make a clear diagnosis there were 81 possible combinations of tests of tools. We tested each method at a prevalence of 19%, using the fraction correct statistic which shows overall accuracy (TP+TN / all cases). **RESULTS:** After 81 combinations, the optimal test algorithm for diagnosing depression was repeat application of the two screening questions (for example PHQ2). This achieved a sensitivity of 91.4% and a specificity of 98.8% and an overall accuracy (fraction correct) of 0.974. The least accurate algorithmic strategy was oncologists' clinical judgement (unaided) applied twice. Other methods and combinations achieved intermediate accuracy. **CONCLUSIONS:** An algorithmic combination of two tests can have superior accuracy to one test applied alone. The optimal method so far studied appears to be a two question test, applied on two occasions. Clinician judgement alone, even after two consultations, is usually unsatisfactory.

#### P-646

##### **Describing Sexual Health in Women Treated for a Gynaecological Cancer: A Qualitative Exploration**

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**OBJECTIVES:** To gain a better understanding of the sexual health of gynaecological cancer (GC) patients. Current literature highlights numerous complications and unmet psychosocial needs. However, little is known about specific sexual health-related needs and the extent to which patients desire help with these needs. The goals of the present study were to explore patients' 1) difficulties experienced and their impact on sexuality, and 2) unmet needs, desire to receive help, and suggestions for intervention format and content. **METHOD:** Six women who had been treated for a GC were offered the opportunity to participate in a semi-structured interview on their cancer

experience, its impact on their sexuality, and suggestions about the development of services. As current literature suggests the difficulties experienced in GC patients are diverse, recruitment was stratified based on cancer type, treatment type, and menopausal status at diagnosis. Recruitment will continue until a sample size of sixteen participants is obtained. **RESULTS:** To date, preliminary findings suggest the participants experienced difficulty coping with the common physical and psychological challenges instigated by the cancer and its treatment. Common themes include significant informational needs, body image-related difficulties, decreases in sexual arousal and desire, grievance (i.e. of past life, loss of fertility), as well as benefit finding (i.e. new appreciation of life). Many patients felt that problems amongst GC patients differed based on age, relationship status, cancer site, and treatment. **CONCLUSIONS:** Participants reported a wide range of difficulties and needs and expressed a desire for services from their health care team before and after treatment. The variety of needs reported emphasizes the importance of undertaking a multidisciplinary approach in providing supportive, holistic care to GC patients. The results will support improved quality of care by informing the development of future informational and supportive services.

#### P-652

##### **The Supportive Care Needs Beyond the End of Treatment in Colorectal Cancer Outpatients**

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**OBJECTIVES:** To explore the levels of symptom distress and supportive care needs after the end of treatment and further identify predictors of supportive care needs in patients with colorectal cancer. **METHOD:** Outpatients with colorectal cancer were recruited from outpatient clinics in a teaching hospital in Northern Taiwan. Data was collected using a set of structured questionnaire to measure supportive care needs, symptom distress, anxiety and depression, and demographic and disease related information. Significant factors related to overall needs and each domain were identified by using generalized estimating equations. **RESULTS:** Of the 114 participants completed the survey, most of them (62.3%) were male. The time since completed treatment was 25.9 months. The major results showed that fatigue was the most reported symptom, following by numbness and insomnia. The highest level of needs was health system and information domain. Overall care needs were related to age, time since completed treatment, symptom distress, and depression. Symptom distress and time since

completed treatment were the major factors related to the most domains of care needs. **CONCLUSIONS:** The results suggest supportive care needs is dynamic and changing by the time since beyond the end of cancer treatment. Symptom distress was the major factors to affect the level of supportive care needs. Therefore, routinely assess cancer survivor's symptom distress and supportive care needs is suggested.

#### P-658

##### **Psychological Distress During Treatment for Primary Ovarian Cancer: Factors Associated With Consent for Mental Health Services**

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**OBJECTIVES:** Psychological distress in cancer is frequently reported, but inadequately treated. Although clinicians may refer cancer patients for mental health (MH) services, some distressed patients refuse treatment. Ovarian cancer patients are prone to distress due to aggressive regimens with uncertain outcomes. This study compares patient demographics, problems, and nursing interventions of two groups of distressed women after ovarian cancer surgery, those who received and those who refused MH services within the intervention arm of a clinical trial. **METHOD:** A secondary analysis of data from 24 distressed women was performed from study records of a completed clinical trial investigating QOL outcomes in gynecologic cancer. Eighteen records per patient for six months following surgery were coded by content analysis, using the Omaha System to categorize patient problems and nursing interventions. Group demographic and clinical characteristics, patient problems, and nursing interventions were compared using chi-square and t-tests. **RESULTS:** Of 24 subjects, 18 consented, 6 refused MH evaluations. Mean Distress Thermometer Scores: 6.94 for consenting, 5.67 for non-consenting subjects. Group demographic and clinical characteristics not significantly different. Mean numbers of contacts: 17.56 ( $\pm 2.20$ ) for consenting, 14.17 ( $\pm 3.87$ ) for non-consenting women. The Mental Health Problem most frequent and of longest duration for both groups. Nursing interventions most frequent for Physical Problems. Non-consenting subjects had higher proportion of interventions for Environmental Problems. MH evaluations identified 8 women with psychiatric diagnoses. **CONCLUSIONS:** Psychological issues represent important clinical problems for women with ovarian cancer. Women who refuse MH services for distress may suffer from unique challenges that are not well-addressed within our

current healthcare system. Nurses may play a critical role in helping to identify and promote treatment for MH problems for these patients.

#### P-659

##### **Efficacy of Reminiscence Therapy for Cancer Patients with Recurrence**

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**OBJECTIVES:** The purpose of this study was to assess the efficacy of reminiscence therapy on the psychosocial aspects of the cancer patients with recurrence. **METHOD:** After randomly assigning the patient to two groups, an intervention group and a control group, reminiscence therapy was conducted in a total of 8 sessions (about 1 hour per session) in the intervention group and only questionnaire was conducted in the control group. Psychosocial aspects were assessed using the Profile of Mood States (POMS), the Rosenberg Self-Esteem Scale and the Functional Assessment of Chronic Illness Therapy-Spiritual, at baseline and immediately after completion of the intervention. **RESULTS:** Among 52 cancer patients with recurrence, written consent was obtained from 45 (86%), and the final evaluation was conducted with 20 subjects in each group. About each score of the intervention group and the control group compared the mean of the quantity of change in intervention before and after. The t-test showed significant difference between the two groups for tension-anxiety ( $p = 0.02$ ), depression-dejection ( $p = 0.02$ ) and vigor ( $p = 0.04$ ) on the POMS. **CONCLUSIONS:** The results suggested that reminiscence therapy is feasible and may be effective in improving psychosocial aspects of the cancer patients with recurrence.

#### P-665

##### **Psychophysiological Assessment Of Psychological Defense Of Breast Cancer Patients**

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**OBJECTIVES:** The diagnosis of breast cancer (BC) is very strong traumatic stress for each person. Degree and the form of mental desadaptation, caused by this stress, depends on mechanisms of psychological defense. The purpose of present research is further development of psychophysiological assessment directed to definition of psychological consequences of stress experience among BC patients. **METHOD:** The method is the ERP recording in reply to presentation of photos concerning various spheres of life. Photos from

International Affective Picture Systems (IAPS, CSEA-NIMH, 1995) as well as photos related to psychological trauma situation ('breast examination') were used. EEG was recorded in frontal, temporal and parietal leads of both hemispheres. Besides, all patients were examined by a Mississippi scale (MS), SCL-90-R and LSI questionnaires. 48 women have taken part in research with BC. RESULTS: Activation of back area of the right hemisphere corresponds to emotional activity, activation of frontal area of the left hemisphere – anxiety. It is shown that decrease of left frontal activity with increase of time of an exposition of traumatic stimuli correlates with 'suppression' defense mechanism. This type of defense reaction, characteristic for BC patients, is formed at increase of the time period after diagnosis and operations. CONCLUSIONS: The results received by the described approach reflect psychological problem situations existing among BC patients. It was shown that patterns of local brain activity reflect features of subjective experience and individual adaptation to stress situation. These data can be helpful for psychological assistance and social rehabilitation of such patients.

#### P-666

##### **Distress, Depression, Anxiety and Coping Strategies in Breast Cancer Patients on Chemotherapy**

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OBJECTIVES: The objectives of the study were to determine distress, depression and anxiety among breast cancer patients on chemotherapy and to assess their coping strategies. METHOD: Breast cancer patients underwent out patient chemotherapy at the Oncology Unit, University Malaya Medical Centre were invited to participate in the study. They were assessed on their socio-demographic profiles, clinical history, distress level as measured using the 'Distress Thermometer', and problems checklist on practical, family, emotional and physical symptoms. The Hospital Anxiety Depression Scale (HADS) was used by patients to report anxiety and depression. Brief COPE Scale was used to assess coping strategies. RESULTS: A total of 141 patients with mean age of 50 years participated in the study. The prevalence of psychological distress was 36.9%. Prevalence of depression or anxiety was 29.0%. Distress and anxiety were significantly associated with practical, family, emotional problems whereas depression was associated with practical problems. In addition, distress, depression and anxiety were associated with some of the physical problems. Distressed patients used denial while depressed patients used self blame as their coping strategies.

CONCLUSIONS: Breast cancer patients on chemotherapy experienced high level of distress, depressive and anxiety symptoms. Denial and self-blame were used as their coping strategies against feeling distress and depression.

#### P-668

##### **Evaluation Of Quality Of Life And Coping Strategies Of Cancer Patients: A Longitudinal Study**

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OBJECTIVES: The main goal of this study is to evaluate the variation over time of Quality of Life in cancer patients, related to coping strategies and to the presence of specific resources. It is meaningful and remarkable the role of psychological implications in physical illness and so the importance to address them in cancer treatment, even in terms of patient's Quality of Life. METHOD: The sample is made up of 34 cancer patients. The patients gave information about the seat of the pathology, the therapies and the presence of psycho-social resources. The psycho-oncologic survey battery consisted of: SF-36; Mental Adjustment to Cancer (MAC); Psychological Distress Inventory (PDI); Hospital Anxiety and Depression Scale (HADS). The retest was made after a follow up (at least of 6 months). The results are analyzed by the multivariate analysis of variance using SPSS. RESULTS: We observed the presence of a main time effect on the improving of QoL in cancer patients,  $F(1,27) = 11.58, p < 0.05$ . There is a significant correlation between QoL and how to adapt 'Spirit-combatant' ( $r = 0.377, p < 0.05$ ). Statistically significant correlations are those among the coping strategies 'Anxious-preoccupied' and 'helpless-hopeless' ( $r = 0.466, p < 0.05$ ) and 'fatalistic' ( $r = 0.537, p < 0.001$ ), and between 'fatalistic' and 'fighting spirit' ( $r = 0.666, p < 0.001$ ). CONCLUSIONS: The purpose of this research was to evaluate the correlation between specific adaptive mechanisms used by cancer patients in comparison with the Quality of Life perceived. Resources available to the the patient, connected to the QoL, were also took under consideration Our results could be used by professionals to work in detail on those dimensions that could potentially reduce the negative impact of the disease on patient's life.

#### P-669

##### **Music Therapy In Supportive Care for Cancer Inpatients. An Italian Pilot Study**

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**OBJECTIVES:** In Complementary and Alternative Medicine (CAM), Music Therapy (MT) effectively can improve physical and emotional well-being in cancer inpatients, with benefits in managing symptoms along the cancer journey. Among other symptoms the anxiety is the primary one associated with cancer and its treatments. This pilot study was drawn to evaluate the effectiveness of the MT in controlling the anxiety due to the medical procedures and the influence of MT on mood during hospitalization. **METHOD:** The study was carried on breast cancer inpatients proposed for surgery, and on colorectal cancer inpatients to the first line of chemotherapy. They underwent MT session, lasted about 1.5 hour, the day before the procedures, with 5 patients per session who interacted through musical instruments and their voices. The controls were performed before and after MT by S.T.A.Y.-Y1 and a list of mood's frames (agitated, worried, sad, bored, pessimistic, calm, serene, satisfied, happy, hopeful). **RESULTS:** 79 inpatients, 59 women and 20 men, ranging in age from 20 to 75 years (MD = 51) were enrolled. Findings showed a significant decrease of anxiety ( $p = 0.000$ ) on the average of the responses measured by paired T test, with significant positive mood changes before and after MT: 92.5% of the 'agitated' answers decreased to 7.5%; 69.3% of the 'sad' answers decreased to 30.7%; 24% of the 'hopeful' answers increased to 76.3%. **CONCLUSIONS:** The results of this pilot study suggest that Music Therapy represents an helpfulness experience with effective, positive impact on cancer inpatients that confirms being a supportive intervention for controlling and reducing anxiety related to clinical procedures in cancer inpatients. The musical experience in interactive MT facilitates the non verbal communication of strong feelings and emotions beyond the words, so the MT might be integrated into a multidisciplinary approach in psycho-oncology.

#### P-670

##### **Predicting Post-traumatic Growth in Cancer Patients: A Longitudinal Study**

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**OBJECTIVES:** The aim of the present study is to investigate the role of social support and coping strategies in enhancing post-traumatic growth (PTG) in cancer patients. The study focused on both avoidance and approaching coping and on four distinct types of social support: a) perceived availability, b) actual received, c) satisfaction with received support and d) the competence of caregiver to satisfy the patient's basic psychological

needs of autonomy, competence and relatedness. **METHOD:** A longitudinal study was conducted with a group of 41 cancer patients currently in the treatment and management phase of their illness. Data were collected by means of a written questionnaire, at two time points (T1 and T2) that were six months apart. Social support was assessed using the Interpersonal Support Evaluation List and the Need Satisfaction in Relationship Scale. Coping strategies were assessed using the Brief COPE questionnaire. **RESULTS:** Regression analyses showed that autonomy-supportive caregivers ( $= 0.42^{***}$ ) and a problem-focused strategy of coping ( $= 0.55^{***}$ ) significantly predicted greater post-traumatic growth at T2 ( $R = 0.47$ ). **CONCLUSIONS:** The current study contributes to a deeper understanding of the type of social support that may specifically aid cancer patients in surpassing the level of functioning they experienced prior to diagnosis. Further, findings confirm the important role of problem-focused coping strategies in growing psychologically.

#### P-672

##### **To Think, To Feel, To Talk and To Realize: A Construction of a Psychoanalytical Work Developed with Health Professionals Dealing with Cancer Patients**

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**OBJECTIVES:** This study aims to reflect about the psychoanalytical setting developed to analyze difficulties of the health team dealing with cancer patients, and its role as a device to take care of the health professionals. It was also a goal to point out to the specialized health services managers the therapeutic possibilities for taking care of health professionals to prevent sickness in their work process. **METHOD:** It was organized an interdisciplinary work group in the oncology service, coordinated by a psychoanalyst and developed from 2006 to 2007 in the referral service for a region of 4 million inhabitants. The participants of the group were oncologists, public health specialists, nurses, psychologists, psychoncologists, nutritionists, physiotherapists, social workers and managers. The group content produced in biweekly meetings was analyzed under the psychoanalytical orientation. **RESULTS:** At the beginning was observed high levels of stress in the group, with intense psychological suffering; emotional oscillations when dealing with the duality life and death; worries with the non compliance treatment; difficulties in recognize and nominate their own demands and those from the patients; communication obstacles and inside team conflicts. The group worked in the oscillation omnipotence-impotence, changing what was causing suffering

to a thoughtful emotional experience, inside learning, and extending the thinking. **CONCLUSIONS:** The therapeutic group with psychoanalytical orientation showed efficacy in reducing the psychological suffering of health professionals and a tool of understanding about the nature of their work, helping in the search for more powerful actions. This listening process and the psychoanalytical intervention allowed the relief of an extraordinary load of pain and, consequently, the possibility of a major integration with patients, families and the other workers.

#### P-674

##### **Returning to Work After Cancer in Italian Survivors: Is That Possible?**

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**OBJECTIVES:** It is well known that cancer survivors are living longer after diagnosis, thanks to screening programs, increased early diagnosis and improvement in treatments. In Italy, the 5-year relative survival rate for all cancers has now reached 49.8% in men and 59.7% in women. This underlines the need of enhancing research on all returning to life issues, including work-related activities. **METHOD:** Cancer survivors (CS) were face to face interviewed after their follow up routine visit. Data were collected regarding: physical and psychological well being (SF-12), fatigue (Brief Fatigue Inventory-BFI), social support (Multidimensional Scale of Perceived Social Support-MSPSS), and patterns of work-related activities. **RESULTS:** 46% out of 166 CS interviewed had a working activity before cancer. Among them, 46% stopped working or retired after diagnosis, 29% had no changes in work-related activities, and 14% moved to a better situation; 43% felt they were penalized to what concerns their job. Factors associated with negative changes were age and education. Physical and psychological well-being (but not fatigue) accounted for negative work related patterns: those with worse status felt a stronger discrimination. **CONCLUSIONS:** While health care system in Italy allows people to get appropriate cancer care, little is still done to help people to return to their lives. Next steps in the agenda of employment for CS in Italy should be: to make large population studies to understand patients' and institutions' barriers on facilitating returning to work; to give patients appropriate information on their rights at work; to create surveillance agencies to help survivors when experiencing discriminations.

#### P-679

##### **Psychoeducational Group Intervention in Patients with Early Breast Cancer: Is there a Waiting Group Effect?**

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**OBJECTIVES:** In psycho-educational intervention studies with a waiting group design in cancer patients, the question about a possible effect of the waiting time on different psychosocial parameters as well as the efficiency of the later intervention is discussed. The purpose of this investigation in patients with early breast cancer was to compare psychosocial parameters of patients who entered immediately into an eight week psycho-educational intervention with patients who began the group intervention after a six months waiting period. **METHOD:** Fiftyone women were randomized to either receive an intervention upfront or after a waiting period. Patients in the intervention group (IG,  $n=29$ ) were tested at two different time points (before and after intervention). Twenty-two patients in the waiting group (WG) were evaluated at three different time points (baseline, before and after intervention). Semi-structured interviews with standardized questionnaires were conducted at each time point: EORTC QLQ-C30 (global health status, emotional functioning), IES (intrusion, avoidance). **RESULTS:** Repeated measures MANOVAs and t-tests were computed. For the IG significant improvements over time were found for intrusion ( $p=0.009$ ), emotional functioning ( $p=0.027$ ) and global health status  $p=0.010$  as well as a statistical trend for avoidance ( $p=0.058$ ). During the waiting period of the WG a trend towards worsening of global health status ( $p=0.079$ ) was observed whereas all other parameters did not change significantly. By the intervention after the waiting period, only intrusion improved significantly ( $p=0.019$ ). **CONCLUSIONS:** The anticipation of professional support during a waiting period had no beneficial waiting group effect on the outcome variables studied. Furthermore, the study showed that a waiting period prior to psycho-educational intervention did not demonstrate the significant improvements in selected quality of life parameters documented in the upfront intervention.

#### P-683

##### **Characteristics of Breast Cancer Survivors With and Without Children: Results of a Large Web-Based Survey**

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**OBJECTIVES:** Little is known about the effects of parenting in combination with a breast cancer diagnosis on coping and other psychosocial factors. A survey investigation of breast cancer survivors using sociodemographic and other psychosocial questionnaires related to stress, depression, and social support was conducted to determine the factors that moderate stress in surviving mothers versus non-mothers. The data presented here focus on the characteristics of breast cancer survivors and the differences between mothers and non-mothers. **METHOD:** Just under 3700 breast cancer survivors completed a comprehensive web-based survey, including sociodemographic variables related to age, education, income, number and age of children at diagnosis, time since diagnosis, cancer stage and treatment, and overall physical and psychological well-being. Of the participants, 73% were mothers. Descriptive and simple means analyses were used to distinguish any sociodemographic differences between the surviving mothers and non-mothers. **RESULTS:** The average age of participants was  $55 \pm 9.9$  with  $7 \pm 6.3$  years since diagnosis. The number of children at diagnosis ranged from 0 to 6 and most were adult. Most participants had no breast cancer recurrence, had not been diagnosed with another cancer, reported no serious mental illness and indicated no chronic illness. Non-mothers had significantly more years of education (16 versus 15). The mothers had a slightly higher stage of breast cancer (more at stage 2). **CONCLUSIONS:** To our knowledge, this is the largest survey of its kind to examine the profile of breast cancer survivors in the context of parenting with the overall finding that at least early stage breast cancer survivors remain relatively healthy years after diagnosis. More breast cancer survivors are using the internet for gathering information and seeking support, representing a valuable research resource. Furthermore, the literature indicates that survey participants express strong feelings of empowerment and satisfaction.

#### P-684

##### **A Symptom Level Exploration of the PHQ9 in a UK Cancer Setting: Which is the Optimal Single Question that Predicts DSMIV Major Depression?**

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**OBJECTIVES:** There is considerable interest in developing ultra-short methods of screening consisting of one or two items. The Patient Health Questionnaire (PHQ) is a relatively simple 9 item self-report tool focussing on the DSMIV symptoms of depression. It is often abbreviated into the PHQ2. However the validity of the PHQ2 com-

pared to other simple combinations of questions has not been previously studied in oncology. **METHOD:** We analysed data collected from Leicester Cancer Centre from 2008-2009 involving approximately 600 people approached by a research nurse and two therapeutic radiographers. The researcher asked patients to self-complete the PHQ9. We used DSMIV major depression (MDD) as the gold standard. We analysed the accuracy of single items and combinations of two items. **RESULTS:** A logistic regression suggested items 1, 2, 5, 6 and 7 were most influential as follows (sensitivity, specificity and AUC listed) Q1 - 81.5%; 91.2%; 0.884 [interest] Q2 - 81.2%; 96.2%; 0.887 [depression]; Q5 - 76.6%; 81.5%; 0.790 [appetite]; Q6 - 68.7%; 95.4%; 0.821 [self-esteem]; Q7 - 73.4%; 91.9%; 0.832 [concentration]. We then analysed conjoint questions with two items, the optimal ones were (sensitivity, specificity and AUC listed) Q1 or Q2 - 100%; 92.2%; 0.960 [interest or depression] Q2 or Q5 - 100%; 78.9%; 0.895 [depression or appetite] **CONCLUSIONS:** In fairly large UK sample the optimal simple questions to detection DSMIV MDD appear to be Q1 or Q2 > Q2 or Q5 > Q2 alone > Q1 alone. Notably the first two combinations may achieve near 100% sensitivity.

#### P-685

##### **Psychological Intervention With Serious Ill Patients: Perspectives And Limits**

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**OBJECTIVES:** The theme of hope is strictly connected to psychological intervention with serious ill patients: especially when clinical conditions are severe, the psychological intervention has to promote patient's desires and projects, threatened by severe physical limitations, but crucial to keep his compliance and promote his well being. The aim of this work is to achieve a better understanding of the clinical process involved in working with these patients, focusing on the implications on the psycho-oncologist's practice. **METHOD:** A review of clinical materials (quantitative and qualitative measures) from clinical practise with severe ill patients was made in order to identify the factors which can promote the psychological well being in these disease stages. All these materials were collected from hospital clinical work starting in 2000 with patients with oncological severe diagnosis. **RESULTS:** These clinical materials suggest that patient's hope and compliance to his treatment are promoted by his perception of maintaining cognitive, affective and emotional functions, despite of his physical impairment: this

perception is enhanced by the relationship with the clinician that gives the patients the opportunity to experiment all (thoughts, feelings, emotions) that promote the feeling of being still alive. **CONCLUSIONS:** Psycho-oncologist's interventions with serious ill patients should include clinical interviews, not only quantitative instruments, to let the patient perceive that his psychological function is still effective: clinical interviews help the patient to find that his desires, his projects and his wishes are still there, even if the disease and his body pain seem to have erased them.

#### P-686

##### **Clinical Utility Index - A New Method to Calculate the Clinical Value of Diagnostic & Screening Tests: Proof of Concept Study**

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**OBJECTIVES:** To develop a method to help inform clinicians as to the clinical value of a diagnostic or screening tests. Conventionally such tests are evaluated using sensitivity (SE) or specificity (SP). SE and SP are simple measures of occurrence. Positive predictive value (PPV) and negative predictive value (NPV) are measures of discrimination. To be clinically useful a test should score high on occurrence and high discrimination. **METHOD:** A method was developed called the clinical utility index (UI) which provides rule-in accuracy (also known as case-finding) using the UI+ as well as rule-out accuracy (also known as screening) using the UI-. UI combines discriminatory ability and occurrence such that the positive utility index  $(UI+) = \text{sensitivity} \times \text{PPV}$  and the negative utility index  $(UI-) = \text{specificity} \times \text{NPV}$ . As proof multiple alternative measures of accuracy in a simulation model were calculated. **RESULTS:** If a hypothetical screening test [A] yielded a true positive in 9/10 positive tests (90% PPV) and yet was positive in 1/5 of cases (20% sensitivity) then the UI+ would be 0.18. The clinical value of [A] would be much inferior to [B] with 90% PPV and 90% SE ( $UI+ = 0.81$ ). A qualitative interpretation of UI is 0.81 excellent >0.64 good >0.49 adequate >0.36 poor and <0.36 very poor. **CONCLUSIONS:** The interpretation of diagnostic and screening tests can be improved by combining occurrence with discrimination. The clinical utility index offers this with a simple qualitative and quantitative interpretation. When comparing diagnostic tests using the UI, it is advised to adjust for differences in prevalence. Utility index can be combined with acceptability and cost to further enhance the interpretation of test accuracy.

#### P-688

##### **Evaluation of The First Year of a Pilot Study of a New Graduate Diploma/MSc in Psycho-Oncology Through The School of Nursing & NICB, Dublin City University, Ireland**

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**OBJECTIVES:** In Ireland, psychosocial care for the person with cancer is recognised in the National Cancer Strategy (2006). However, psychosocial oncology service provision is currently ad hoc and healthcare professionals working in the oncology setting have often received minimal education in psychosocial aspects of cancer care. The Graduate Diploma/MSc in Psycho-oncology aims to provide an international standard third level accredited programme of education in psycho-oncology to help to drive the development of psycho-oncology services in Ireland. **METHOD:** The pilot with seven students began in October 2009, one day per week. The first year focused on the development of students' knowledge and skills relevant to assessment of distress and pain in patients with cancer, along with appropriate interview and referral skills. Other subjects covered were the science of cancer, communication skills for empathic listening, explaining cancer treatments in lay terms and recruiting patients to clinical trials, as well as research skills for psycho-oncology. **RESULTS:** Each lecture/ workshop was evaluated by students on a weekly basis using the LecTrain evaluation form, comprising a Likert scale and a pre post self evaluation of learning outcomes and qualitative comments. At the end of each semester a more detailed School of Nursing module evaluation form was completed by each student. Students were continuously assessed with both written and practical assignment (video and self assessment of communication and assessment skills; classroom presentation) components. **CONCLUSIONS:** So far the psycho-oncology programme has been evaluated positively by students, particularly the provision of online Moodle and general support, assessment and CBT workshops, as well as video and classroom practicals. Students' learning outcomes are reflected in the high standard of their assignments. The motivation and enthusiasm of students to transfer psycho-oncology knowledge to the clinical setting will assist their preparation for the research dissertation for the Masters degree in Psycho-oncology next academic year.

#### P-691

##### **Anxiety, Depression and PTSD in Colorectal Cancer after Differentiated Treatments: A study with Portuguese Patients and Partners**

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**OBJECTIVES:** Colorectal cancer is the second leading cause of cancer mortality in Western countries. In Portugal, the incidence of colon cancer is 15.15% for females and 22.09% for males (Gouveia, Anthony & Veloso, 1993). The purpose of this study was to describe the influence of treatment type (i.e. surgery; surgery and chemotherapy; surgery and radiotherapy) on both patients with colorectal cancer and their spouses particularly, on quality of life, depression, anxiety and post traumatic stress. **METHOD:** 141 patients (62% males and 38% females) and 67 spouses (39% males and 61% females) participated in the study. All patients were diagnosed with colorectal cancer. Instruments used were: a) patients: 'Hospital Anxiety & Depression Scale', (Zigmond & Snaith, 1983); b) spouses: Beck Depression Inventory (Beck, Mendelsohn & Mock 1961) and State-Trait Anxiety Inventory (Spielberger, Gorush, Lushene, Vagg & Jacobs 1983); c) patients and spouses: Impact of Events Scale Revised (Weiss & Marmer, 1977). **RESULTS:** Significant differences were found on anxiety, depression and post-traumatic stress among treatment groups. Spouses of patients who underwent surgery presented lower levels of state anxiety and post-traumatic stress when compared with spouses of the other two groups. The only significant variable between patients and spouses, from all variables studied, was depression. Patients who were diagnosed more than a year had more PTSD than the other two groups (less than 6 months; between 6 months-12 months). **CONCLUSIONS:** This study highlights the importance of providing support for cancer patients and their spouses since they show post traumatic stress, depression and anxiety regardless of treatment. Patients who undergo surgery followed by chemotherapy are the ones more at risk and those with the disease diagnosed more than one year.

#### P-696

##### **Feasibility and Acceptability of a Canadian Program of Counselor-Led Online Support Groups for People Affected By Cancer: A National Cohort Study**

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**OBJECTIVES:** Internet technology can enable access to professional psychosocial support to those who are socially, physically, or geographically isolated. This prospective cohort study explored 1) the feasibility of providing counselor-led synchronous online support groups (OSG's) for PAC across 5 Canadian provinces and 2) perceived acceptability of the OSG's among diverse populations of cancer patients (e.g. young and rural survivors, patients with head and neck cancers, prostate, and metastatic disease) and family caregivers. **METHOD:** Experienced psycho-oncology counsellors were trained for ten weeks to facilitate synchronous online support groups in chat rooms. A national program was established to recruit and enroll patients and family caregivers. Participant cancer burden, support resources, expectations, and preferences were assessed. A subset of participants took part in a semi-structured post-intervention telephone interview. A qualitative content analysis was used to analyze participant perceptions of the technology, the professional facilitator, and group dynamics. **RESULTS:** 180 participants enrolled in 24 OSG's (6-8 participants each). The primary reason for withdrawal was scheduling or work conflicts (26%). More than 2/3 of females ( $N = 157$ ), median age of 47, were patients or survivors (80%) with breast cancer (90%). Male participants ( $N = 23$ ) were mainly older (median = 61 years) caregiver spouses. Analysis of 52 interviews found the large majority of participants appreciated the OSG's, reported positive impressions with technology, the professional facilitator and group dynamics. **CONCLUSIONS:** OSG's are feasible and acceptable. People affected by cancer, including those with high cancer burden, unmet psycho-social needs and from very isolated communities can receive professional psycho-oncology support through the internet. Furthermore, they describe benefits comparable to those associated with face-to-face professional-led support groups. Ongoing research will identify who receives most benefit, and if measures of distress, social support and illness intrusiveness are affected by participation in the online group.

#### P-698

##### **Psychosocial Support in Pediatric Palliative Care: A Model of Care**

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**OBJECTIVES:** To develop a model of interdisciplinary psychosocial care for a pediatric palliative care consultation service in a large urban children's hospital. Staff who provide psychosocial support often have difficulty with clearly differentiating

their roles in order to work in a collaborative and complementary manner. The purpose of this presentation is to delineate a model of care that integrates the roles of psychologist, social worker, and chaplain in pediatric palliative care. **METHOD:** Palliative care team members considered options for differentiating roles. Through clinical experience and ongoing discussion in weekly team meetings as well as adjunctive administrative meetings, they determined the most effective composition of psychosocial team members on the service. Attention was given to how to integrate the roles of these psychosocial providers within the palliative care service in order to maximize benefits for the families from each discipline. **RESULTS:** The psychosocial disciplines included in the palliative care service are psychology, social work, and spiritual care. Psychology primarily addresses the mental health and support needs of the child/adolescent patients, including assessing and treating psychopathology; social work focuses on family support, assisting with concrete needs, and bereavement follow-up; and spiritual care addresses spiritual needs of patients and families. These psychosocial team members collaborate regularly in order to better inform each person's service delivery. **CONCLUSIONS:** Although roles of psychosocial team members often overlap, it is important to make distinctions in order to ensure that patients and families receive optimal benefits from the range of disciplines. In conjunction with the development of an inpatient pediatric palliative care service, a model of care was developed to achieve this goal. Thus, team members have the opportunity to collaborate without confusion of roles that can be disruptive to service delivery.

**P-699****Integrating a Palliative Care Consult Service into a Childrens Cancer Center: Lessons Learned**

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**OBJECTIVES:** To facilitate acceptance and utilization of an external palliative care team within a comprehensive pediatric cancer center and to educate oncology physicians, nurses, and staff regarding the value of specialized palliative care consultation. Challenges included building relationships, trust, and correcting misconceptions about palliative care. **METHOD:** An inpatient palliative care consult team was hired and the service was piloted in the division of pediatric oncology in a large, urban children's hospital. To facilitate a link between palliative care and oncology, a psychologist was hired from within oncology to serve as consultant to the palliative care service. Palliative care team members built

relationships with oncology clinicians and solicited informal feedback on performance. Palliative team practices were revised based on this feedback. **RESULTS:** Many issues were addressed including misconceptions that palliative care is relegated to end-of-life, how the palliative team should interact with patients, their role as consultants with regard to patient care, and best practices for communication and collaboration with the medical team. After a year of providing consultation to oncology, as well as formal and informal education, referrals to palliative care have increased and palliative team input has become sought after on a more regular basis. **CONCLUSIONS:** Although the launch of a new palliative care service meets many obstacles, it is essential that this task be approached with flexibility, communication, and openness to feedback so that needed adjustments can be made to fit the culture of the existing oncology program.

**P-701****Symptom Concerns and Quality of Life in Breast and Prostate Cancer Survivors Receiving Hormonal Therapy**

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**OBJECTIVES:** Describe symptom concerns and quality of life of breast and prostate cancer survivors receiving hormonal agents. **METHOD:** Patients were followed at baseline prior to treatment and at 1 and 4 months post-accural. **RESULTS:** Overall QOL is moderate both groups. Symptoms such as hot flashes, fatigue and anxiety were reported. **CONCLUSIONS:** Survivors suffer from multiple symptoms related to HT that places them at higher risk for diminished QOL.

**P-702****Strategies Used by Women to Deal with the Financial Costs Associated with Non-metastatic Breast Cancer**

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**OBJECTIVES:** Women experience out-of-pocket costs from getting treated for breast cancer, and working women may also have wage losses resulting from work absences. Indicators of financial burden resulting from these costs include

reducing expenditures and using financial savings. We evaluated whether these strategies were used for dealing with cancer costs during the first year after diagnosis of non-metastatic disease, and characteristics associated with these strategies, among women reporting that cancer was costly to some degree. **METHOD:** Participants came from a prospective study based on consecutive series of women with newly diagnosed, non-metastatic breast cancer from eight Quebec hospitals in 2003. Data here came from the final telephone interview conducted 12 months after treatment start. This interview included questions on perceived costliness of cancer, and strategies used to face costs such as reducing expenditures and using savings. Multivariate log-binomial regression was used to identify determinants of use of these strategies. **RESULTS:** Among 800 women (83% of eligibles), 660 (83%) said cancer was costly to some extent. The strategies most commonly used were reducing usual expenses (36%), delaying major purchases (27%) and using savings (25%); 50% used at least one such strategy. Women with pre-diagnosis family income <\$50,000/year (compared to ≥\$50,000) and those who experienced wage losses because of cancer (compared to no wage loss) were more likely to use ≥1 strategies ( $p < 0.0001$  for both). **CONCLUSIONS:** Use of these strategies provides evidence that breast cancer costs necessitate some readjustment in the management of financial resources for some women and their families. Our results indicate that this is particularly so for two groups of women: those who come to breast cancer with more restricted financial resources, and those subsequently challenged by wage losses because of breast cancer.

#### P-706

##### **Being a Psychologist in Paediatric Oncology with the Experience of Cancer in One's Own Child**

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**OBJECTIVES:** Reflect about the human experience of cancer in a child, being a health professional in the field of Paediatric Oncology and having that same experience in a personal level. Observe some implications to professional practice that might emerge from this professional-personal interface. **METHOD:** Supported by the constructivist vision of human experience, which emphasizes the active participation of individuals, permanently in development and in relationship, in the organization of their own life, through creation of meaning (Mahoney, 2003), some emotional implications for the clinical practice are identified from the personal experience of having a

child with cancer. It is revised the necessity of considering the experience of the disease as a human global experience, valuing meaning and existential variables. **RESULTS:** The experience of having a child with cancer, being a psychologist in the field of Paediatric Oncology, is a very challenging path. It's possible to identify emotional tasks similar to any other parent in these circumstances and at the same time, to identify specific tasks, namely in the exercise of professional functions after the death of one's own child. Some of these demands are recognized, as the importance of personal meanings in the cancer experience. **CONCLUSIONS:** The cancer experience is a complex human experience, therefore it can not be reduced or separated in its physical, psychological, social, spiritual dimensions. The health professional that works in the field of Paediatric Oncology can be confronted, as any other human being, with a personal experience with child cancer. From the demanding challenges which can be imposed by the situation, it is possible to become enriched as a person and evolve considerably as health professional.

#### P-710

##### **The Quality of Friendships Reported by Pediatric Brain Tumor Survivors and Comparison Classmates**

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**OBJECTIVES:** Studies suggest that survivors of pediatric brain tumors experience deficits in social functioning, including lower peer acceptance and number of friendships than comparison peers, however surprisingly little is known about the quality of friendships they do establish. Research supports that the attributes of high quality friendships have a positive impact on quality of life. The aim of this study is to examine the quality of friendship experienced by brain tumor survivors and comparison peers. **METHOD:** Brain tumor survivors ( $n = 42$ ), ages 9–18 and 1–6 years post treatment, were recruited from two pediatric oncology centers. Classmates ( $n = 37$ ) matched for gender, race, and age were recruited for a comparison group. Data included self-report on the Friendship Quality Questionnaire-Revised (Parker & Asher, 1989). This measure assesses the extent of Companionship and recreation, Help and

guidance, Validation and caring, Conflict and betrayal, Conflict resolution, and Intimate disclosure characterizing the relationship with a best friend. **RESULTS:** There were no differences in the number, gender, age, length of acquaintance, or frequency of contact with identified best friends. Survivors were more likely to meet their best friend at school (76%), while comparison peers were equally likely to meet their best friend at school (54%) or outside of school (46%). No significant group differences were found on subscales measuring friendship quality. **CONCLUSIONS:** Although survivors experience deficits in social functioning, it appears that when compared to other children they perceive having similar quality relationships with their best friend. Although we were unable to capture the best friend's perspective of the friendship, results suggest that survivors may benefit from the qualities within a friendship in the same way as other children. This may be protective for survivors and enhance their overall quality of life, but further research is warranted.

#### P-711

##### **Differences In Personality Traits And Emotional Functioning Of Children With Cancer Due To The Strategy Of Treatment**

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**OBJECTIVES:** Initial phase of ALL treatment requires patients to remain in the hospital from approximately four weeks, and therapy continues for two to three years. It is in contrary to HD where an initial hospitalisation is few days and treatment lasting 6-8 months requires only short chemotherapy cycles. The treatment regimens in ALL are associated with an increased risk of toxic effects. The aim of the study was to assess emotional functioning of children in relation to the treatment strategy. **METHOD:** 169 children with cancer diagnosis entered the study. The median age for the whole group was 12.6 years. All patients were divided into two groups due to the strategy of treatment: 40 children with Hodgkin's disease (HD Group) and 129 children with leukemia (ALL Group). Evaluation of patients' emotional functioning was conducted in the first month of treatment (the median time was 29.2 days). Both groups received equal programme of biopsychosocial support during initial treatment phase. **RESULTS:** The patients with HD presented features of better emotional adaptation than children with ALL. The results had shown that HD patients have more ongoing tendency ( $p < 0.001$ ), can better use their talents ( $p < 0.004$ ), have larger emotional stability ( $p < 0.001$ ), revealed tendency to dominance ( $p < 0.016$ ), are more cheerful ( $p < 0.003$ ) and more adventurous ( $p < 0.005$ ),

have higher secondary extraversion and independence ( $p < 0.001$ ), and lower level of secondary anxiety ( $p < 0.05$ ). Tendency to withholding difficulties in ALL vs HD group is significantly higher ( $p < 0.011$ ). **CONCLUSIONS:** 1. Children with HD during initial period of treatment disclosed less features of the emotional burden than children with ALL. 2. Children diagnosed with leukemia should received more intensive and personalized biopsychosocial support. 3. Overall time of hospitalisation of children with cancer diagnosis should be strictly observed.

#### P-716

##### **Knowledge of High-Risk Human Papillomavirus Status and Risk Behaviors in Women With a History of Cervical Intraepithelial Neoplasia**

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**OBJECTIVES:** The High-risk Human Papillomavirus (HPV) are the major risk factor for cervical cancer; 99.7% of cervical cancers contain HPV-DNA (Walboomers *et al.*, 1999). However, there are also exogenous factors that influence the risk of progression from an HPV (high risk) infection to cervical cancer (Castellsague & Munoz, 2003). These factors are: smoking, high parity, the use of oral contraceptive pills, and the presence of other sexually transmitted infections (Castellsague, Bosch & Munoz, 2003). **METHOD:** Many studies have shown that three factors protect against persistent HPV and therefore prevent cervical cancer: Safer sex practices, cessation of existing tobacco use, and compliance with cervical cytology screening (Castellsague & Munoz, 2003). Before designing treatment interventions to reduce the risk of progression from persistent HPV to cervical cancer for women with a positive high risk HPV status it is essential to understand any risk relevant behaviors these patients may be participating in. **RESULTS:** A prospective longitudinal study has been proposed to determine if any changes occur in risk-relevant behaviors after receiving a positive high-risk HPV result in women with a history of cervical intraepithelial neoplasia. The development of interventions to decrease the incidence of persistent high-risk HPV infections requires an understanding of the characteristics and risk-relevant behaviors of HPV positive women that has not currently been examined. **CONCLUSIONS:** This study proposes to provide valuable insights into the relevant behaviors of HPV (high-risk) positive women following diagnosis. This presentation will present the literature review and methods of this proposed work in progress, including a review of the exogenous factors and of the proposed variables that may influence a change in behavior following a diagnosis of high-risk HPV.

## P-717

**Colorectal Cancer Survivors: Hard to Reach?**

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**OBJECTIVES:** Exercise adoption has been found to increase fitness, improve mood, and reduce fatigue primarily among breast cancer survivors. Less is known about the feasibility of exercise adoption and its effects among colorectal cancer survivors (CRCs). Recruitment of cancer survivors into randomized clinical trials (RCTs) is challenging, particularly in states where legislation precludes use of state tumor registries for study recruitment. We examined the responses among CRCs to various recruitment approaches for an exercise RCT. **METHOD:** We utilized informational mailings from physicians, referrals, in-person clinic recruitment, electronic, print and radio media to reach sedentary CRCs within 10 years post-treatment. In response to recruitment efforts, 315 responses were received: 113 were not eligible prior to phone screens, 102 (eligibility unknown) were not interested, and 100 individuals completed phone screens. **RESULTS:** The most common reasons for ineligibility were: no CRC diagnosis, >10 years post-diagnosis, etc. (33%), too physically active (21%) and other medical contraindications (12%) ( $n = 147$ ). Among those who completed phone screens, 66% ( $n = 66$ ) were eligible and 70% ( $n = 46$ ) of eligible CRCs were randomized. Mailings from physicians ( $n = 27$ , 41%), electronic, print and radio media ( $n = 18$ , 27%), and physician referrals ( $n = 9$ , 14%) were most effective in identifying eligible participants. In-person recruitment yielded 9% ( $n = 6$ ) of eligible participants. **CONCLUSIONS:** These data help identify barriers to study enrollment among CRCs such as eligibility criteria and lack of interest. We identified effective avenues for enrolling participants diagnosed with the third most common cancer into RCTs aimed at improving their functioning and recovery. It appears that these avenues may differ across subgroups of cancer survivors: surprisingly, in-person recruitment was relatively ineffective, compared to prior experience in recruiting breast cancer survivors for exercise RCTs.

## P-718

**Social Support and Distress: The Mediating Role of Meaning in Life for Cancer Survivors with Major Depressive Disorder**

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**OBJECTIVES:** Meaning in life and social support are associated with reduced distress in cancer survivors. Meaning has been shown to mediate the relationship between social functioning and distress (Jim & Andersen, 2007). Up to 50% of cancer patients experience depressive symptoms, therefore examining mediators of social support is critical to reducing distress. This cross sectional study examines whether meaning mediates the relationship of social support and distress in survivors with Major Depressive Disorder (MDD). **METHOD:** Thirty-six cancer survivors (92% female, 91% Caucasian, mean age 49) of various sites (42% breast; 21% ovarian, 2.6% prostate) and stages of disease were eligible. An MDD diagnosis was determined with the SCID. Participants completed assessments of distress (Profile of Mood States-short form), social support from family and friends (Perceived Social Support-Family & -Friends) and meaning in life (Meaning in Life Scale-subcales: harmony/peace; life perspective; faith/spirituality; confusion/lessened meaning). **RESULTS:** Correlation and mediation analyses, using the bootstrapping approach, were conducted. Support from friends did not predict distress and was removed from further analyses. Mediation analyses of direct and indirect effects showed that the relationship between family support and distress was partially mediated by: harmony/peace ( $= -0.397$ ,  $p = 0.01$ ); life perspective ( $= -0.231$ ,  $p = 0.039$ ); and confusion/lessened meaning ( $= 0.460$ ,  $p = 0.009$ ). Faith was not significant ( $= -0.103$ ,  $p = 0.250$ ). **CONCLUSIONS:** Family support, rather than support from friends, was associated with reports of greater sense of meaning in depressed cancer survivors. Depressed individuals who perceive less support may experience greater distress due to a decreased sense of meaning in their lives. Treatments for depression focusing on increasing one's sense of meaning through gaining a sense of peace and reducing confusion concerning the cancer experience may be particularly helpful.

## P-720

**Self-actualization, Social Support, Anxiety and Depression in Parents of Children with Cancer**

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**OBJECTIVES:** Characterize the parents of children with cancer of a Paediatric Oncology Service, by the assessment of anxiety, depression, social support and self-actualization. Proceed to the reframing of these data in Guerra model (1994,

1998), which integrates the dimensions of sense of life, creative life, internal orientation and existential dimension, associating them to the social support variable. Relate the clinical variables with the meaning variables. **METHOD:** Retrospective study achieved by the administration of the following questionnaires: Sheet of demographic data and clinical data of children, Hospital Anxiety and Depression Scale (Zigmond & Snaith, 1983, translation and adaptation of Baltar & Ribeiro, 1999), Social Support Scale (Guerra, 1995) and Self-actualization Scale (Guerra, 1992). The informed consent was obtained from all the participants. The statistical analysis was done with the support of SPSS, through descriptive and inferential methods. **RESULTS:** The sample was constituted by 80 parents, 89% females, 92% married, with a mean of ages of 38, 11 years; 62, 5% of the participants' children were female, 62, 3% had the diagnosis of Leukemia or Lymphoma, 51% were in an acute phase of the disease and their mean of ages were 7, 98 years. The mean of Self-actualization obtained by these parents was 116, 6. The mean of Social Support, 80, 4. The remaining statistical treatment is still on course. **CONCLUSIONS:** The study of meaning variables is bringing light to its importance in the adaptation of human beings to situations of normal development, crisis and illness. The inclusion of these kind of variables in the study of the experience of parents of children with cancer might promote their quality of life, as well as the development of hope and meaning in the process of adaptation to their child's disease.

### P-723

#### Temperament And Social Behavior In Pediatric Brain Tumor Survivors And Comparison Peers

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**OBJECTIVES:** It is well documented that pediatric brain tumor survivors experience social difficulties. Intracranial treatment has been consistently linked to poorer psychosocial outcomes, but the specific mechanisms involved are largely unknown. Treatment for brain tumors may detrimentally affect core neurobiological processes that underlie temperament. Thus, we will explore differences in social behavior among survivors and comparison peers and examine whether differences in attention and temperament (i.e. surgency, negative affect,

effortful control) contribute to social outcomes. **METHOD:** Children ( $n = 76$ ) ages 8–16 ( $M = 12.2$ ) were recruited from two pediatric oncology centers post-treatment for intracranial tumors to participate in a classroom and home based study. Classmates ( $n = 67$ ) matched for gender, race, and age were recruited for a comparison group. Peer report of social behavior was collected in classrooms. Data collected in participants' homes included parent and self-report of temperament as well as a performance-based measure of attention. **RESULTS:** Data is currently being analyzed. We expect to replicate previous findings from our research group indicating survivors are perceived by classmates as exhibiting greater social sensitivity-isolation and victimization as well as less aggression-disruption and leadership-popularity than comparison peers. Independent *t*-tests will examine group differences in social behavior, attention, and temperament. Using hierarchical regression, we will test several moderated-mediation models to examine the contribution of temperament and attention to the prediction of social behavior. **CONCLUSIONS:** It is expected that survivors will differ from comparison peers on dimensions of attention and temperament and that, in combination, these variables will explain differences in social behavior. The final presentation will examine these analyses and provide recommendations for future research and clinical care to improve the quality of life for survivors.

### P-724

#### Gynecologic Oncology Patients: Pre- and Post-Operative Relationships Between Social Support and Body Image

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**OBJECTIVES:** While there have been numerous investigations of the psychological impact of surgery for benign gynecological conditions, fewer studies have examined gynecological cancer patients (Anderson & Carpenter, 2003). Given the nature of gynecological cancer surgery, sequelae specific to body image disturbance and its relation to adjustment are of particular interest. The present pilot study investigates the relationship between social support as a potential stress-buffering factor for body image disturbance in a sample of gynecological surgery patients. **METHOD:** Participants included 15 women (mean age 58.9 years) undergoing gynecologic surgery for endometrial cancer. Participants completed the ENRICHD Social Support Instrument (ESSI; Vaglio, J, *et al.*, 2004), a validated seven item self-report measure of social support, and the Body

Image Scale (BIS; Hopwood, P *et al.*) a validated questionnaire assessing body image changes in patients with cancer. Patients completed these measures at three time points, before surgery, and 2 weeks and 6 weeks post-operatively. **RESULTS:** Correlational analyses examined relationships between social support and body image disturbance within each time point. Analyses found a non-significant relationship between social support and body image concerns pre-operatively ( $r = 0.27$ ;  $p = ns$ ). Strikingly, however, social support and body image were significantly negatively correlated during the post-operative time period, both at the two week assessment ( $r = -0.74$ ,  $p = 0.003$ ) and at the six week assessment ( $r = -0.61$ ,  $p = 0.048$ ). **CONCLUSIONS:** Results of our ongoing pilot study showed a significant association between social support and body image during the post surgical period for women undergoing treatment for gynecological cancer. Greater levels of body image disturbance were associated with lower levels of social support at both the two week and six week evaluations. These findings highlight the need for assessment of existing social support resources and provision of supportive interventions targeting body image concerns for at-risk patients.

#### P-725

##### **Coping Scales in Cancer Patients: A Systematic Review of Instruments**

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**OBJECTIVES:** Assessment of coping strategies is becoming more common in cancer care and treatment during last decade. The aim of this review is to identify instruments used to assess coping in cancer patients, emphasizing cancer specific coping instruments. **METHOD:** A systematic review of MEDLINE and EMBASE database from 1968 to 2010 was performed by a sensitive search strategy using set of keywords (such as coping, cancer, tumor, carcinoma, neoplasm). 540 articles were selected and 10% of them met inclusion criteria in this review. Evaluation criteria of these articles were validity, reliability, and utility. **RESULTS:** Reviewing included articles we can divide coping questionnaires to two categories: 1) generic questionnaires. 2) Cancer specific questionnaires. Most of articles used generic coping questionnaires. Among these articles 3 instruments were especially developed for cancer patients: Ways of Coping-Cancer Version (WOC-CA), 21-item Cancer Coping Questionnaire (CCQ), and Coping with Cancer Instrument. All of

them have 5 dimensions and acceptable reliability and validity, but only the interpersonal scale of CCQ doesn't have adequate validity. **CONCLUSIONS:** With comprehensive search strategies, we found that most of the articles had used generic coping instruments. However these instruments are not enough qualified to assess coping in chronic diseases such as cancer. We suggest that some cancer specific coping questionnaires should be developed or validated for better assessment of coping in these patients. Comparing the mentioned three instruments, it seems because WOC-CA develops from valid questionnaire its dimensions better describe cancer patients' coping styles.

#### P-726

##### **The Impact Of Caregiver Age On Distress, Quality Of Life And Preparedness For The Caregiving Role: A Longitudinal Study Of Leukemia Patients' Caregivers**

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**OBJECTIVES:** While distress in response to illness is common among caregivers, adjustment among caregivers of leukemia patients may be especially difficult due to the sudden onset of the disease and significant ongoing caregiver burden. This burden may be particularly difficult for older caregivers facing these challenges with somewhat diminished resources. This study examined the impact of caregiver age on preparedness, distress and quality of life over time in a sample of leukemia patient caregivers. **METHOD:** To date, 21 caregivers have been enrolled (age range 33 to 60 years). Complete follow-up data is presently available for 12 caregivers. Caregivers completed the Brief Symptom Inventory (BSI-18), Caregiver Quality of Life-Cancer (CQOL-C), and Caregiver Preparedness measure within 72 hours of a patient's diagnosis or admission for treatment (T1). All measures were repeated at 2 weeks after diagnosis (T2), with 6 week (T3) and 12 week (T4) follow-ups for the BSI-18 and CQOL-C. **RESULTS:** While there was no significant relationship between age and preparedness at T1, a significant negative correlation was observed at T2 ( $r = -0.708$ ,  $p = 0.001$ ), with older caregivers reporting less preparedness. A trend toward younger age being associated with lower quality of life ( $r = 0.384$ ,  $p = 0.085$ ) and higher distress ( $r = -0.340$ ,  $p = 0.131$ ) was observed at T1. Preliminary results suggest that this pattern reverses over time for quality of life ( $r = -0.458$ ,  $p = 0.134$ ) and distress ( $r = 0.419$ ,  $p = 0.175$ ) by T4. **CONCLUSIONS:** The current study suggests that older and younger caregivers have different

support needs at different time periods. These results indicate that younger caregivers may have more difficulty around the time of diagnosis, older caregivers may be more vulnerable to caregiver burden over time and as caregiving responsibilities increase. Given these findings, interventions should be tailored to address the specific needs manifested by younger and older caregivers.

#### P-727

##### **The Effects of Age and Children on Psychosocial Outcomes in Women with Breast Cancer**

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**OBJECTIVES:** Research has shown that having breast cancer can lead to psychological distress and reduced quality of life in many women both in the short- and long-term, particularly for women diagnosed at a younger age. This study explores differences in psychosocial outcomes between women who were diagnosed with breast cancer at a younger (<45 years old) versus older age (>45 years old), with particular attention paid to the effects of having children on such outcomes. **METHOD:** A sample of 2,377 women diagnosed with stage 0–3 breast cancer (mean time since diagnosis: 5.8 years) completed a web-based survey consisting of self-report instruments assessing quality of life, illness intrusiveness, fear of cancer recurrence, social support, depression, stress, and anxiety. A principal axis factor analysis was used to explore the different patterns of psychosocial outcomes in multiple groups, including younger women with and without children and older women with and without children. **RESULTS:** Four factors emerged in each group: mental health, fear of cancer recurrence, physical health, and illness intrusiveness. Differences in factor structures and correlations between factors were observed among the groups. Physical health and mental health were more correlated in younger compared to older women. Illness intrusiveness and mental health were more correlated in younger women with children and in older women without children compared to younger women without children and older women with children. **CONCLUSIONS:** Consistent with prior studies, these results confirm that women diagnosed at a younger age have a poorer psychosocial profile compared to those diagnosed at an older age. Furthermore, the results suggest that having children may be a protective factor in older women, but a vulnerability factor in younger women. These findings indicate that having children has a separate but interactive effect with age of diagnosis on the psychosocial outcomes of breast cancer.

#### P-732

##### **Hope and Support in Cancer Related Articles of Two Iranian Nationwide Newspapers**

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**OBJECTIVES:** Public newspapers are popular sources of cancer information and have a remarkable effect on opinions and feelings of patients and their families. Hope and support are important issues for cancer patients that could affect quality of life of patients and even the outcomes of disease and treatments. The objective of this research is to describe what has been reported about hope and support of cancer patients in two most famous Iranian newspapers during 2002–2009. **METHOD:** Searchable version of the mentioned newspapers archive was used to identify cancer related issues by using ‘cancer’ and some synonym words as keyword. 750 Related articles which met our inclusion criteria were included. Reviewing these articles, data were coded for cancer type, hope & support and publication date among other variables. **RESULTS:** Content analysis of 750 included articles showed that only 2.25 percent of the cancer related articles considered hope as the important point of the article. 72.7 percent of hope related articles published in 2008–2009. From included articles, 12.65 percent described support and most of these articles published in 2008–2009. Information support, emotional support and financial support respectively had most articles. There is no article related to social, physical and spiritual support in cancer. **CONCLUSIONS:** An increasing trend in frequency of hope and support related articles has been observed during recent two years. It seems although we can see more related articles in this era, but the total number of these articles especially about hope in cancer patients, is very low and such messages should be considered more in new policies of these famous newspapers. Insufficient and Inaccurate media coverage may be contributing to public misunderstanding and disappointment about cancer.

#### P-735

##### **Development Of A Symptom Distress Reduction Model For Stem Cell Transplant Patients**

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**OBJECTIVES:** The purpose of this poster presentation is to describe one’s unit experience in the

conceptualization of a model to guide interventions aimed at reducing symptom severity and distress (i.e. oral mucositis) in stem cell transplant patients undergoing high-dose chemotherapy. Oral mucositis, characterized by an inflammation and ulceration of the oral and oropharyngeal mucosa, remains a significant problem that impacts physical and psychological wellbeing and quality of life of patients with cancer and their families. **METHOD:** A master-prepared staff nurse, with assistance from the Chair of the Oncology Nursing Research, took a leadership role in this effort. Staff nurses identified oral mucositis as a priority clinical problem that warranted change in their practice. Critical inputs from clinical educators, physicians, nutritionists, pharmacists, and nurse manager were viewed as crucial to the implementation and success of the project. Internal evidence, professional practice knowledge, and relevant theories and models were synthesized. **RESULTS:** The resultant model has three components with supporting concepts: (A) Problem-persons with cancer/families, identified stressors, and stressor reactions; (B) Process-prevention as intervention, goal of care, intervention characteristics (e.g. self-efficacy) and oral health; and (C) Outcomes-patient, healthcare system, and quality of life. This model has afforded us a proactive approach to mucositis prevention with an evidence-based oral care guide and achieved a significant reduction of mucositis severity/distress through a pilot randomized trial. **CONCLUSIONS:** The development of this model is an important step towards prevention for oral mucositis severity and distress. It provides an effective framework to understand the nature of oral mucositis and identify intervention characteristics that may predict the adherence of an oral self-care protocol in order to achieve optimal outcomes. It may also contribute to the advancement of clinical practice in mucositis prevention and management and to add evidence-based knowledge of effective interventions.

#### P-736

##### **A Comparison Of Written Versus Video Informational Presentations Designed To Enhance Human Papillomavirus Vaccine Acceptability In Young Adults: A Randomized Controlled Intervention Study**

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**OBJECTIVES:** The Human Papillomavirus (HPV) is sexually transmitted and the principal cause of cervical cancer. HPV vaccines are known to reduce

the likelihood of infection in the young adult population, which is especially at high risk. The aims of the present study were: 1) to explore acceptability of the HPV vaccine among young adults; 2) to investigate predictors of vaccine acceptability; and 3) to evaluate the comparative efficacy of two informational intervention modalities on vaccine acceptability. **METHOD:** Undergraduate university students ( $N = 97$ ; mean age = 20.3 years,  $SD = 2.3$ ) were randomly assigned to one of two experimental conditions (video or written information about HPV), or to a control condition (written information about general cancer prevention strategies). Students also completed a questionnaire assessing predictors of vaccine acceptability pre- and post-intervention (e.g. HPV and HPV vaccine knowledge; perceived HPV susceptibility and severity; and perceived benefits and barriers to receiving the vaccine). **RESULTS:** At baseline, 34.3% of participants indicated intentions to receive the HPV vaccine, with 54.5% intending post intervention. Perceived severity of HPV and perceived benefits and barriers to receive the vaccine were correlated with vaccine acceptability. The two experimental interventions resulted in increased HPV and HPV vaccine knowledge, perceptions of HPV susceptibility and severity and perceptions of benefits to receiving the vaccine as compared to the control. None of the conditions were related to increased acceptability. **CONCLUSIONS:** Educational interventions appear to increase knowledge about HPV and the HPV vaccine in university students, but this increase is not related to acceptability. It appears that perceived HPV severity and perceived benefits to receiving the vaccine may be more important in influencing acceptability. Future interventions should perhaps focus on the potential severity of HPV and on the beneficial aspects of the HPV vaccine, such as the reduction of cervical cancer risk.

#### P-738

##### **The Psycho-oncologist's Place In The Diagnosis Disclosure Procedure In France**

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**OBJECTIVES:** Establishment in France of specialized consultations in cancer diagnosis called diagnosis disclosure procedure was a key measure of the French Cancer Plan 1 (Measure 40). It became increasingly widespread in France since 2007. It is intended to formalize and harmonize medical practices in the announcement of a diagnosis of cancer, not considered appropriate and being traumatic for patients, in order to humanize and professionalize process' announcement.

**METHOD:** Under this procedure, the patient may be referred to a psycho-oncologist, member of the supportive care team, through a form generally filled by the consulting nurse which will screen psychosocial needs. The psycho-oncologist will be able to help the patient to perform an elaboration work focused on thoughts and affects paralyzed by this traumatic disclosure. A cognitive restructuring and an additional pharmacological support regarding psychiatric issues related to the disease announcement might be done. **RESULTS:** During the meeting with the psycho-oncologist, different elements will be discussed and evaluated such as the experience of the announcement, the identification of the defense mechanisms and the coping strategies. Moreover, a screening for psychological difficulties and / or psychopathological disorders encountered by the patient will be implemented. Finally, psychosocial resources available by the patient and its surroundings will be assessed. **CONCLUSIONS:** This moment shared between the psycho-oncologist and the patient is part of the prevention and the earliest care of the psychological distress so frequent during consultations announcement. It might also have a preventive role against anxiety and depressive disorders occurrence during the cancer trajectory.

#### P-740

##### **The Effect of Spirituality And Religiosity on Mental Health And Quality of Life In Cancer Patients**

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**OBJECTIVES:** It has been shown that cancer patients sometimes use their spiritual and religious beliefs to cope with cancer and their problems. The aim of this study is to investigate the role of spirituality and religion in patient's mental health and their quality of life. **METHOD:** 101 consecutive cancer patients were included in this study, mean age: 44 and female/male ratio was 3:1. Patients completed 3 validated questionnaires to assess quality of life, spirituality, mental health. **RESULTS:** Most of patients (98%) considered religion to be somewhat important. 78.2 percent of patients reported that their spiritual activities were increased after their diagnosis. 97 percent of all, believed that if God want, they will survive and about 75 percent thought that their disease is a kind of God exam for them to be closer to God. With statistical analysis, spirituality was significantly associated with patient's quality of life ( $p$ -value = 0.02), and mental health ( $p$ -value = 0.04). **CONCLUSIONS:** Many cancer patients use

spirituality for coping with their disease. Our results emphasize and confirm on the role of spirituality and religious belief on enhancing quality of life and mental health improvement.

#### P-741

##### **Impact of Spirituality on QOL of Lower Income Predominantly Minority Cancer Survivors**

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**OBJECTIVES:** The spiritual side of an individual is increasingly acknowledged as having an impact on that individual's health and well-being. We investigated spirituality and its impact over time on the well being of a lower income predominantly minority sample of cancer survivors. **METHOD:** Cancer patients in treatment or follow-up were surveyed by telephone at baseline, approximately 2-months later, and again at 8-months. The FACT-G [Emotional Well Being (EWB), Social Well Being (SWB) and Functional Well Being (FWB) subscales] as well as FACIT-Spirituality (Meaning and Faith subscales) were administered at all time points. Regression analyses, controlling for potential confounders (e.g. time since diagnosis), were used to test the hypotheses that Meaning and Faith predicted well-being. **RESULTS:** At baseline, survivors ( $N = 140$ ) were predominately African American (80%), not married (73%), unemployed (89%), and low income (average <\$15, 000). Twenty-two percent had < HS education. Mean baseline Spirituality subscales (Meaning = 25.3 (max = 32); Faith = 14.6 (max = 16)) were stable over time. Meaning in life, measured at baseline, predicted each of 2-month and 8-month EWB, SWB and FWB ( $p < 0.02$ ). The models for 2-month and 8-month EWB accounted for the greatest variability with adjusted  $r^2 = 0.29$  and  $r^2 = 0.35$  respectively. **CONCLUSIONS:** Spirituality factors appear stable over time. In a sample of cancer survivors for whom Faith was important, patients high in Meaning (e.g. feelings of peace, sense of purpose in life, belief that life had been productive), reported better cancer-related quality of life at 2 and 8 months post-baseline. Interventions that will help patients find meaning in their life experiences may further improve QOL for cancer survivors.

#### P-747

##### **Social Difficulties Screeners: How to Systematically Detect Patients Social Difficulties?**

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**OBJECTIVES:** Cancer patients meet various difficulties in daily life. The disease increases previous problems like existing financial, housing or employment problems, loss of autonomy or access to help services. Besides, hospital stay in our institution are often shorter. Finally, the temporality is not the same from the point of view of the patient, of the family, of the hospital or of the society. In this context, anticipating social difficulties is required to maintain efficient social services. **METHOD:** A procedure of systematic anticipation of social difficulties was set up within the framework of the Long Diagnosis Disclosure Consultations. Doctors have to answer to 5 following questions (Y/N): Living alone? Responsible for children or handicapped? Handicapped? Having risk to lose autonomy? Having financial problems? A positive answer to 2 items automatically activates a social alert, with diverse modalities of answer: mailing, appointment, participation in a medical consultation. **RESULTS:** During a trial phase realized on 335 CLA, 140 gave place to an effective intervention of the Social services department. 46% of the CLA ENT and 64% of the CLA brain tumours generated social alerts. These interventions consisted of the implementation: preservation at home for 100% of brain tumours; grants for 49% of the patients ENT and helps for home maintenance for 90% of them. **CONCLUSIONS:** The social alert procedure is at present effective on all the long cancer diagnosis disclosure consultations and was opened more recently to the palliative care consultations. Our global objective allows for the anticipation of potential social difficulties in patients and contributes to a reduction of hospital stay duration while taking into account patients' everyday life with the objective of an optimal preservation of their quality of life.

#### P-750

##### **Barriers And Facilitators In Adherence to Treatment In Cancer Patients**

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**OBJECTIVES:** Adherence to treatment is the main issue in treatment outcome and recovery of cancer patients. The aim of this study is to investigate some barriers and facilitators of adherence to treatment in cancer patients. **METHOD:** 97 cancer patients were included in our study. Data was collected with investigator-designed questionnaires for adherence, barriers' and facilitators' factors. Chi square and correlation analyses were used to investigate the relations between variables. **RESULTS:** Some facilitators considered to have

effect on patients' adherence were: doctor and family recommendations, hope to recovery, cue to action (successful recovery in other patients), and fear from metastasis. Some barriers were anhedonia, hopeless to treatment, costs of treatment, complications of treatment, family inconvenience and some other negative thoughts. The most mentioned facilitator was hope to recovery (75 percent) and the most mentioned barrier was cost of treatment. **CONCLUSIONS:** The result suggests although physicians' recommendations, favorable outcomes, and familiar supports positively related to adherence, hopelessness, costs, treatment equipments, and treatment side effects negatively related to adherence. It seems high adherence to treatment could be as a result of hope increasing trend in Iranian cancer patients because of treatment advances in Iran and also successful coping strategies in patients.

#### P-753

##### **Distress In Couples Affected By Cancer: Prevalence, Gender-specific Patterns And Longitudinal Predictors**

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**OBJECTIVES:** Findings on distress in couples affected by cancer are heterogeneous, but tend to indicate that women have a greater chance to be more distressed than men regardless of being the patient or the partner. We want (1) to assess the amount of distress couples experience after cancer diagnosis, (2) to explore by which individual and dyadic factors distress is influenced and (3) want to get a better understanding of the factors 'gender' and 'role'. **METHOD:** A representative sample of 137 heterosexual couples with one partner affected by cancer was recruited in a regional hospital in Switzerland at diagnosis, 6 month, 12 month and 3 years later. Distress (HADS, IES, GSI), QoL (SF-12) and coping styles (EMOREG, BriefCOPE) were assessed. Mixed models were used to evaluate time and group effects. Cross-lagged effects were estimated with structural equation modelling, using a multilevel-multigroup path model within the framework of the Actor-Partner Interdependence Model (APIM). **RESULTS:** Female partners prevalence rates and scores for anxiety are mostly higher compared with patients (m/f) and male partners. Similar patterns were found for depression rates, posttraumatic symptoms and distress. Distress and QoL was related to preceding adaptive coping in patients and partners ( $r = |0.31$  to  $0.49|$ ). Adaptive coping in female patients

predicts better QoL/less distress in spouse ( $r = 0.43/-0.40$ ). Adaptive Coping and less distress in female partners predicts better QoL and less distress in male patients ( $r = 0.28/-0.24$ ). **CONCLUSIONS:** Our cross-lagged findings showed, that on the one hand female partners experience the highest distress in contrast with male or female patients and male spouses, and on the other hand women, regardless of their role, are the persons who active modulate the psychological well-being of their partners. This double role bears important encumbrances and should be considered as an important starting point in planning and conceptualizing of psycho-oncological interventions.

### P-756

#### **The Long Term Follow Up of Survivors of Childhood Cancer at the McGill University Health Centre**

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**OBJECTIVES:** Improvements in treatment for childhood cancers over the past 3 decades have led to a major improvement in prognosis for most of these patients. Approximately 75% of newly diagnosed cases can now expect to be long-term survivors (defined as over 5 years). The diagnosis and treatment received, which may include surgery, chemotherapy and radiation therapy, may lead to long-term health issues. **METHOD:** While most of these individuals lead full lives with good quality, several recent publications indicate that up to 75% of them will suffer at least one chronic health condition. Thus, long term follow up by a team of professionals with knowledge of their diagnoses, treatments received and potential health issues is essential. This is also important for those providing care to newly diagnosed children, as some modifications of current treatment regimens may decrease these late effects. **RESULTS:** The expectations of the professional team, the survivor and those of his/her parents in participating in long-term follow up clinics may differ. Many models of long term follow up of survivors of childhood cancer now exist. One of the obstacles to providing care in the province of Québec is the shortage of primary care physicians. **CONCLUSIONS:** At the McGill University Health Center (MUHC), we have a dedicated clinic for long term follow up within the Montréal Children's Hospital until the age of 18, with a transition to the Montréal General Hospital, an adult institution within the MUHC, after that time. There are many strengths, but also weaknesses, of our current program, which we hope to address in the near future.

### P-758

#### **Differences in Developmental Personality, Locus of Control and Work Behavior Self-Efficacy: Implications for Young Adult Cancer Survivors' Employment**

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**OBJECTIVES:** The continuing advancement of medical technology has dramatically increased the number of cancer survivors able to return to work. Cancer survivors often regard returning to work as indicative of complete recovery. However, relatively few studies have specially assessed the vocational needs of this population. The purpose of this study is to examine differences in three work-related constructs between young adult CNS cancer survivors and other categories of disability. **METHOD:** A total of 107 participants with physical disabilities, psychiatric disabilities, learning disabilities or young adult CNS cancer completed the measures representing developmental work personality, work locus of control, and self-efficacy work behaviors. **RESULTS:** Results indicate significant difference in various types of disability across measures of developmental work personality, work locus of control, and self-efficacy work behaviors in which gender was found to be a significant covariate. Follow-up analyses further indicated that males with different types of disability demonstrated differences on developmental work personality and self-efficacy work behaviours whereas females with different types of disability demonstrated differences on developmental work personality and work locus of control. **CONCLUSIONS:** This study further verified previous findings which people experiencing different types of disability would have different vocational and career needs (O'Sullivan, Strauser, & Wong, submitted). More research is needed to address the impact of factors regarding developmental work personality, work locus of control, and self-efficacy at work, which seem to play an important role in cancer survivors' employment. Research does highlight the need for vocational and career interventions to be incorporated into psycho-social rehabilitation programs.

### P-763

#### **Patient Reports: Evaluating Satisfaction with Medical and Supportive Care Services**

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**OBJECTIVES:** In line with patient and family centred care initiatives, we aim to assess whether young adult cancer patients feel satisfied with their medical and supportive care services. The psychosocial needs of young adults are now known to be unique, rendering it necessary to evaluate whether their needs in particular are being met. Our goal is to briefly address these questions and to formulate policy recommendations based on the responses. **METHOD:** Young adult cancer patients (18–44 years) seen since September 2004 were invited to participate in a questionnaire mailing. A subset of questions assessed satisfaction with medical treatment, and the ability to have questions answered by doctors (each rated on a 5-point Likert scale). Awareness of, and use of, supportive care services was also assessed (yes or no questions). For those who did access services, satisfaction with supportive care was also questioned (5-point Likert scale). **RESULTS:** Questionnaire mailing took place January 6th, 2009, therefore results are pending. At present, 40 completed questionnaires have been returned. Data entry and analysis will be completed by March 15th, 2010. Results relating to medical and supportive care satisfaction will be analyzed in reference to basic demographics (gender, age, education, income, marital status) and type of cancer. **CONCLUSIONS:** As professionals, it is our responsibility to ensure that the needs of young cancer patients are being met to the best of our ability, and that concerns are being heard and addressed. Although brief, this subset of questions allows for a general overview of satisfaction (or dissatisfaction). Results will be discussed in relation to patient and family centred care initiatives, policy recommendations, and research directives.

#### P-764

##### **Leveling the Playing Field: Increasing Participation of non-MD Clinicians in Multidisciplinary Supportive Care Medicine Rounds**

Jennifer Gotto

*City of Hope Cancer Center, Duarte, CA, United States*

**OBJECTIVES:** This abstract demonstrates changes we made in our Supportive Care Medicine patient rounds in order to increase participation of non-MD clinicians, improve interdisciplinary communication, and to better integrate Supportive Care clinical services. **METHOD:** Clinician satisfaction with rounds is associated with participation; our feedback demonstrated physicians talked more often than non-MD clinicians during usual rounds. Physician-led rounds emphasized medical over psychosocial, and neglected to establish a clear treatment plan for biopsychosocial problems. To increase non-MD participation, changes were made to room layout, patient list, method and

focus of case presentations, expectation for leading discussion, responsibility for developing biopsychosocial treatment plan, and level of accountability for carrying out treatments. **RESULTS:** Clinicians like the new rounding format and find it more useful. More non-MD clinicians present cases and pose challenging questions. All disciplines participate in problem solving and treatment planning discussion. We expect increases in confidence, satisfaction and team cohesiveness; increases in use of clinical language and recognition of psychiatric symptomatology by non-MD practitioners. We hope for a shift in rounds style from traditional medical hierarchy to open, 'equal opportunity to lead discussion' format. **CONCLUSIONS:** Psychiatric need exceeds psychiatrists available for cancer patients. A variety of professional degrees populates our department, and interdisciplinary communication needs to be clear. Practitioners need equal opportunity to present difficult patient problems to the entire team. This variety is the essence of multidisciplinary medicine, whose uneven edge is both the challenge and the payoff in developing a truly integrated clinical program.

#### P-769

##### **The Value of Patient Education in Laryngeal Cancer Rehabilitation and its Influence on Quality of Life (QoL)**

Marie-Ève Caty, Philip C. Doyle

*The University of Western Ontario, London, Ontario, Canada*

**OBJECTIVES:** The literature suggests that patient education directly influences one's ability to cope with a diagnosis of cancer and its subsequent impact on perceived well-being and associated Quality of Life (QoL). The purpose of this presentation is to outline recent advancements in 1) laryngeal cancer treatment and 2) health professional education and consider their potential influences on patient education practices provided to those with head and neck cancer. Implications for future research will also be discussed. **METHOD:** Contemporary methods of treatment for laryngeal cancer have diversified with the advancement of organ preservation therapy (radiotherapy and/or chemotherapy). In addition, health professional education and practice have changed over the last decade with more emphasis given to evidence based-practice, client-centered practice, interprofessional education, and reflective practice. In light of the current literature, new perspectives on the impact of these changes and considerations will be discussed relative to patient education and their QoL. **RESULTS:** Previous research exploring educational preferences of individuals with laryngeal cancer suggest that information provided

should interdisciplinary, coming from a variety of health professionals, and should be provided on multiple occasions throughout the rehabilitation process. Findings also indicate that continued efforts are needed to improve the quality of service and information provided to individuals treated with laryngeal cancer since these individuals may not be receiving the level of information and service they need. **CONCLUSIONS:** Individuals with laryngeal cancers may experience voice loss or compromise which limits their ability to self-advocate for their health care needs. Thus, concerns relative to individuals diagnosed and treated for laryngeal cancer persist regarding patient education and its effect QoL. Health professional education is suggested as one avenue to better prepare health care professionals to work with individuals diagnosed with laryngeal cancer as well as other malignancies of the head and neck.

#### P-770

##### **Interest of Individuals with Severe Mental Illness in Improving Health Behaviors and Reducing Cancer Risk**

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**OBJECTIVES:** Individuals with severe mental illness (SMI) have higher rates of premature mortality from cancer compared to the general population, and are likely to have lifestyles that increase the risk for cancer. Little has been reported regarding the interest of individuals with SMI in interventions that promote healthy behaviors and reduce cancer risk. The present study examines the interest of individuals with SMI in obtaining information and instruction to improve health behaviors and reduce cancer risk. **METHOD:** This study includes individuals with SMI attending a psychosocial program within a community mental health center. Participants are assessed regarding their interest in learning about healthy lifestyle and cancer risk reduction. Interest in enhancing a variety of health and cancer prevention behaviors is assessed. **RESULTS:** Sample demographics and psychiatric diagnostic information will be reported. The level of interest in learning about and improving behaviors associated with cancer risk and cancer control, including tobacco use, nutrition, exercise, cancer screening, and communication with physicians, will be reported. **CONCLUSIONS:** Implications for the tailored design of a cancer prevention and health promotion program for individuals with SMI will be discussed. Recommendations for the integration of such programs in the comprehensive treatment of individuals with SMI within a community mental health center will be provided.

#### P-772

##### **Perceived Cognitive Function after Cancer Treatment: Considerations for Future Research**

Samantha Mayo

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**OBJECTIVES:** Neuropsychological testing provides valuable data regarding cognitive performance after cancer treatment. However, it provides limited information regarding individuals' experiences of their day-to-day functioning. As part of a larger project to examine cognitive outcomes among recipients of allogeneic stem cell transplantation, a literature review was conducted to: 1) develop an understanding of perceived cognitive function after cancer treatment; and, 2) identify important considerations for future research in this area. **METHOD:** A literature search was conducted for primary studies and systematic reviews in 5 electronic databases: Medline, CINAHL, Embase, PsycINFO and Cochrane Library. Studies were included if they investigated perceived cognitive function (including subjective or self-reported cognitive function, cognitive complaints, etc.) among adult cancer patients following the completion of treatment. Studies of patients with cancers involving the central nervous system were excluded. **RESULTS:** Reviewed studies suggest that cancer patients' perceptions of cognitive functioning after treatment do not correlate with performance on neuropsychological testing, but more strongly reflect psychological factors and fatigue. However, issues regarding operational definitions of perceived cognitive function, choice of neuropsychological measures and methodological rigor were evident as important areas for consideration in planning future studies. **CONCLUSIONS:** Perceived cognitive function has recently gained attention as an important factor in the dialogue surrounding the cognitive outcomes of cancer treatment. Future research that employs a theoretically-driven and rigorous approach to the study of perceived cognitive function among cancer survivors will further our understanding of their experiences and supportive care needs in this phase of the cancer continuum.

#### P-773

##### **A New Tool for Assessing the Needs of Children with Siblings Requiring Palliative Care: The Content Validity Study**

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**OBJECTIVES:** All family members are involved in many ways in the care of a child facing a life-threatening illness, such as cancer. Siblings experience a variety of feelings and therefore have varied needs. A new tool, which specifically assesses siblings' needs within the palliative care context is currently being systematically developed and validated. The first step of this research program is going to be presented. More specifically, item selection and content validity procedures will be described. **METHOD:** A sibling-needs typology has been developed from a qualitative study among focus groups whereby siblings and their parents were assessed separately. A pool of 135 items has been generated from this 43 needs typology, which was then subdivided in 10 domains. Four categories of experts (psychometricians, researchers, clinicians and siblings), recruited through snowball procedure, were involved in validity procedure based on the criteria of relevance and clarity. Missing needs were also identified. **RESULTS:** Content-validity study recruited 21 experts. Quantification of content validity was performed with Content-Validity Index (CVI). 38 items from the initial pool reached criterion of 0.80 CVI (28%). CVI gives a proportion of agreement between experts on item relevance and on item clarity. Eight items were deleted because they bring discomfort or redundancy. Experts identified 12 missing siblings needs. This content validity study has allowed selection of 48 items, which were included in the first version. **CONCLUSIONS:** Item selection and expert opinion are relevant aspects of tool development. A panel of experts provides constructive feedback about the quality of the newly developed measure and represents an objective criterion with which to evaluate each item. Qualitative approach underlying the need-typology and content experts will improve the instrument by a mixed-method. Indeed, siblings are actively implicated in this instrument development study. They are judged expert at the same level as clinicians or researchers.

#### P-775

##### **Screening for Psychological Distress among Sesotho-speaking South African Patients Diagnosed with Breast or Cervical Cancer**

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University of the Free State, Bloemfontein, South Africa<sup>2</sup>*

**OBJECTIVES:** Although international research indicates that cancer patients suffer psychological distress, research in southern Africa is still in its infancy stage. The objective of this study was to screen for psychological distress of Sesotho-speaking South African women with breast or cervical

cancer. The study further aimed to explore the feasibility of the use of the Distress Thermometer (DT) and the Hospital Anxiety and Depression Scale (HADS) as distress screening tools within South African oncology settings. **METHOD:** The sample consisted of 126 Sesotho-speaking patients with histologically confirmed breast- or cervical cancer. Data was collected at the out-patient clinic of the Universitas Academic Hospital in Bloemfontein, South Africa. The study was approved by the Ethics Committee of the Faculty of Health Sciences at the University of the Free State. The DT and the HADS were used, and both tools were translated into Sesotho. **RESULTS:** The mean age was 52.21 (12.56) and the time since diagnosis in months was 12.60 (12.65). The HADS identified 33% of the subjects as distressed, whereas 34% and 33% were identified as experiencing anxiety and depression respectively. ROC analysis suggests a cut-off score of 3 as ideal on the DT. At this cut-off score, 44% of the patients were identified as distressed. The DT correlates positively and significantly with the HADS. **CONCLUSIONS:** The results of the study suggest that a substantial number of Sesotho-speaking cancer patients experience significant psychological distress, and support international research. Given their ease of administration, both the DT and the HADS could be useful screening tools for psychological distress in busy and under-staffed South African oncology settings. The study highlights the potential need for routine screening for psychological distress, the management thereof, and the improvement of quality of care of cancer patients.

#### P-777

##### **Various Methods Of Tobacco Use in India, Leading To Cancer**

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*Revive, Kolkata, West Bengal, India<sup>1</sup>, Chittaranjan National Cancer Institute, Kolkata, West Bengal, India<sup>2</sup>*

**OBJECTIVES:** Tobacco use (Cigarette smoking and other methods) is the single largest cause of Cancer. 35% of Cancer mortality can be prevented by stopping various types of Tobacco use. Use of Tobacco is mainly smoking and non-smoking types. Both types of tobacco use varies extensively worldwide. It is important to know the various methods of tobacco consumption, in order to plan and programme its prevention. **METHOD:** The major types/means of tobacco use, both smoking and nonsmoking in India were probed into. The various parts of the country associated with various methods of tobacco use was also studied upon. The parts of the country were divided basically into 5 zones namely North, South, East, West and Central. Both Urban and Rural areas

were considered for the study. **RESULTS:** 38 different types of tobacco use (15 types of smoking tobacco and 23 types of non-smoking tobacco) were found in various parts of India. The non-smoking tobacco use involved inhalation, chewing and oral application. It was found that the various forms of tobacco use varied from one part /state to another part/state of the country. Identification of the type of use in different parts of India had been made **CONCLUSIONS:** As the site and type of Cancer varies with the variation of tobacco use, the knowledge of various forms of tobacco use in various parts of India is essential to formulate and plan proper health education and awareness programmes about the hazards of tobacco consumption in relation to Cancer. Proper awareness will only help in preventing the single largest cause of premature death, due to Cancer.

#### P-778

##### **Hope, Support and Healing for Siblings Who are Bereaved**

Deborah Bond Berk

*Dana Farber-Children's Hospital Cancer Care, Boston, MA, United States*

**OBJECTIVES:** The presentation will provide professionals with a better understanding of how this sibling program supports the brothers and sisters of the children and adolescent patients we care for through end of life and into bereavement. This, in turn, facilitates better family-centered care. Psychosocial professionals will be provided with evidence-based recommendations tailored specifically to the sibling grief and healing experience. **METHOD:** During individual and group psychosocial interactions, approximately 20 school-aged and adolescent siblings were invited to participate in expressive and creative activities focusing on end of life and bereavement issues. This yielded written, verbal and creative information that qualitatively illustrates key issues encountered by this population. **RESULTS:** Siblings benefitted from the opportunity to discuss end of life and bereavement issues with psychosocial clinicians, parents and extended family. Siblings reported the amelioration of immediate psychosocial distress. Reduction in emotional and behavioral difficulties was also observed. Providing emotional support throughout this significant loss, while understanding cultural and religious beliefs, enabled siblings to begin to cope more adaptively with their grief. **CONCLUSIONS:** Evidence indicates a traumatic and persistent developmental impact of losing a brother or sister to cancer. Targeted and prescriptive psychosocial support is highly beneficial as siblings face end of life with their brother or sister. This can help

soften the impact of the loss. Findings will aid in further developing effective grief comfort services provided by practitioners serving families facing pediatric cancer.

#### P-779

##### **Canadian Cancer Society's Cancer Information Service Follow-Up Program: Helping Clients Navigate the Journey to Hope and Meaning**

Tara Bilash

*Canadian Cancer Society - Cancer Information Service, Regina, SK, Canada*

**OBJECTIVES:** Results of a Canadian Cancer Society needs assessment survey of clients (cancer patients and caregivers) affirmed that information and communication needs ranked high among the majority of clients, with between only 40–50% of clients reporting having these needs met. Continuously striving to meet clients' needs, the Canadian Cancer Society's Information Service developed a pilot Follow-Up Program in October 2008. The pilot program identified and reinforced the information and communication needs of Canadians. **METHOD:** The Follow-Up Program was piloted from October through December 2008. Clients were offered a callback from Information Specialists 7–10 days after the client's initial call. Feedback from both clients and Information Specialists revealed the untapped range of impact of the Follow-Up Program. After overwhelming positive response to the 2008 pilot, the Canadian Cancer Society officially launched the Cancer Information Service Follow-Up Program in English in July 2009 and in French in December 2009. **RESULTS:** Impact upon follow-up contact with a client is categorized across several categories. Since its launch, the Cancer Information Service Follow-Up Program has empowered approximately 1,000 clients by increasing their awareness of resources; helping them understand cancer and cope better; decreasing their stress and anxiety; and helping them communicate better with family, friends, and their oncology teams. Completion of a formal third party evaluation of the Follow-Up Program is planned for December 2010. **CONCLUSIONS:** Cancer patients or friends/family enrolled in the Follow-Up Program receive enhanced support from the Cancer Information Service in the form of a follow-up call(s) to help ensure information and support needs are met throughout the cancer journey. The Cancer Information Service's Follow-Up Program cultivates client-centred relationships that help clients navigate their journey through cancer to hope and meaning. The Follow-Up Program propels the Canadian Cancer Society closer to creating a world where no Canadian fears cancer.

**P-781****Responses of Patients with Malignant Brain Tumours and their Families' to Expanded Psychosocial Services**

Douglas Ozier, Maureen Parkinson  
*BC Cancer Agency, Vancouver, BC, Canada*

**OBJECTIVES:** People living with malignant brain tumours and their families are a very high needs group that has historically been underserved. To help meet these needs more effectively, a multi-disciplinary team is currently implementing a new model with the goal offering more comprehensive care. The purpose of this ongoing research study is to measure the value of the services offered through this new program and to gain insight into ways that it can be improved. **METHOD:** All new malignant brain tumour patients in our centre and their families will be offered an increased range of services including earlier assessment, more intensive practical supports, and increased counselling accessibility. Service usage will be tracked as a behavioural indicator of perceived value. Rating scales will be administered and interviews conducted to measure subjectively perceived value, to monitor quality of life, and lessened barriers to treatment, and to solicit any recommendations for improved care. **RESULTS:** The research study will generate a combination of qualitative and quantitative results that together will provide deepened insight into the lived experience and psycho-social needs of patients living with malignant brain tumours and their loved ones. In turn, this increased awareness should improve service delivery and inform best practice in this domain. **CONCLUSIONS:** The expanded Psychosocial services have been already been offered in our clinic to over 40 people living with malignant brain tumours. This poster will report preliminary data on patient and family responses served to date. This data will offer an initial window into how these clients have responded to a range of expanded Psychosocial services.

**P-783****Psychoneuroimmunology and Biopsychosocial Model - Implications for Oncology**

Kizior Aleksandra  
*Medical University of Warsaw, Warsaw, Poland*

**OBJECTIVES:** Key words: psychoneuroimmunology, personality, stress, cancer  
 This paper focuses on psychoneuroimmunology studies published since 1939, particularly those that

were clustered according to key themes including personality, stress and responsiveness of the immune system to behavioral interventions. **METHOD:** In recent years it underlines the immune system plays role in the onset and progression of the neoplastic disease. This review describes psychoneuroimmunological pathways involved in cancer disease is a major determinant of pathophysiological mechanism accounting for the association between psychological risk factors, immune systems parameters and acute cancer disease. **RESULTS:** Although psychological modulation of immune function is now a well established-phenomenon, much of the relevant literature has been published within the last decade. **CONCLUSIONS:** In this article we speculated on future directions for psychoneuroimmunology research after, after reviewing the history of the field.

**P-790****Communication Adjustment and Experiences of Patients with a Laryngectomy in Turkey**

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*Towson University, Towson, MD, United States<sup>1</sup>,  
 Uludag University, Bursa, Turkey<sup>2</sup>*

**OBJECTIVES:** The purpose of this poster presentation will be to delineate the communication experiences and degree of adjustment for people in Turkey that have had a total laryngectomy and now use an alternate voice source. Comparisons will be made to patients with a laryngectomy in the United States. **METHOD:** Twenty-five persons with a laryngectomy ( $n = 20$  with TE prosthesis,  $5 =$  oesophageal) completed the Self-Evaluation of Communication Experiences after Laryngectomy (SECEL; Blood, 1993) in Turkey. The SECEL is a valid and reliable measure that reports patient factors related to three subscales: general, environment, and attitude and has been shown to be able to distinguish those patients that are adjusting well to their new voice with those that may need additional support. **RESULTS:** Data on 20 patients has been collected and is currently being translated to English for data analysis. Data on ten more patients is anticipated. **CONCLUSIONS:** Results will be discussed in terms of comparisons to patients in the United States and the continued use of the SECEL in a clinical setting to identify those patients that may need additional support. For any significant differences observed, additional insight will be offered from a cultural perspective on why those differences may exist.

## WORKSHOPS

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### W-8

#### **Finding Hope and Meaning after Prostate Cancer: The Science and the Art of Healing**

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University of Manitoba, Winnipeg, MB,  
Canada<sup>2</sup>*

**OBJECTIVES:** The treatment of prostate cancer involves several modalities, all of which impact on erectile functioning. No matter the stage of the cancer—early localized to advanced hormone refractory disease—the treatments universally affect erectile functioning, orgasmic capacity and sexual satisfaction. As important however is the effect on male self concept, perceived masculinity, and sexual self-confidence. The partner too is affected. **METHOD:** This workshop will trace the sexual changes and challenges beginning with the diagnosis of prostate cancer, the decisions around treatment, and some challenges for men with advanced disease treated with hormone ablation and their partner. Using case studies, the presenter will highlight the unique challenges facing these couples as well as make suggestions for counseling. The latest advances in treatment and the side effects of these will also be discussed. **RESULTS:** Studies show that partners experience more distress than the man with prostate cancer. Problems in the sexual relationship result in communication challenges which in turn influence the couple's ability to cope with the changes brought on by the diagnosis and treatment. **CONCLUSIONS:** Recent advances in treating erectile dysfunction provide hope and healing to these men however some will have to learn to adapt to an altered reality for many years following treatment. Psychosocial clinicians, nurses and other members of the health care team must be aware of these issues which profoundly affect the man, his relationship and quality of life.

### W-22

#### **'Chasing Rainbows - Young Adults Living With Cancer': French-Language Premiere of Documentary Film, and Discussion with Film Director, Young Adult Cancer Survivor and Psycho-Social Oncologist, Addressing the Need for Multi-Lingual Resources**

Pat Taylor

*Chasingrainbowsproduction.com, Vancouver, BC,  
Canada*

**OBJECTIVES:** 1. To offer emotional and practical support, hope and meaning to francophone young adult cancer patients, their families, caregivers and medical support teams through the French-language version of 'Chasing Rainbows: Young Adults Living With Cancer' 2. To foster dialogue and promote action surrounding the need for multi-lingual resources, to improve quality and accessibility of cancer care 3. To support the voice of young adults in the global cancer community. **METHOD:** Chasing Rainbows: Young Adults Living with Cancer is an upbeat 43-minute documentary built around a living-room conversation between six young adults: four women and two men. With passion and humour, they discuss hope, fear, faith, sexuality, infertility, family relationships, finances, the future and more. Their stories are an invaluable source of information, inspiration and hope - both for other young adults facing life-threatening illness, and for their families, friends, caregivers and medical support teams. **RESULTS:** Producer Pat Taylor has screened Chasing Rainbows across Canada, in the US and in Mumbai (India), and has had requests for screenings in the UK, Italy, the Netherlands and Australia. In the course of the film's travels it has become abundantly clear that there is a great need for resources in languages other than English. **CONCLUSIONS:** Having now completed the French-language versioning of Chasing Rainbows, Pat is in the process of translating the film into Spanish, Chinese, Arabic, Malay, Hindi, Portuguese and Italian.

## W-33

**Mini-Symposium Benefits of National Cancer Control Programs for Establishing Full Integration of Psychosocial Care in Oncology-Europe**

Margot Remie, Hanneke de Haes, Mecheline van der Linden

*Dutch Psychosocial Society, Amsterdam, Netherlands*

**OBJECTIVES:** In this round table meeting the results and possibilities for promotion and integration of psychosocial care through NCCP are illuminated. Examples from different countries will be presented. Results regarding structural implementation of distress screening, integration of psychosocial issues in medical treatment guidelines and after care programs, bench marking and incorporation of psychosocial oncology in National Oncology Care Standards will be presented. Pitfalls and strategies for further cooperation and implementation will be discussed. **METHOD:** Representatives from European countries (invited are: Belgium, Portugal, Sweden, Scotland and the Netherlands) will present their National Standards. Other countries will be invited in a interactive discussion. **RESULTS:** Clinical Implications: Through a successful implementation of the NCCP patients will increasingly benefit from adequate support as a result of systematic screening, development of treatment guidelines and the organisation of psychosocial care programmes nationwide. Research Implications: The implementation of a NCCP can promote cooperation of research teams, development of a common research agenda and facilitate funding. Sharing with trailblazers: Learning through exchanging programs, sharing experience (pitfalls and success policy), gaining (further) inspiration for NCCP implementation. **CONCLUSIONS:** Full integration of psychosocial aspects in oncology care can be highly facilitated by being incorporated in National Cancer Control Programs. Through optimal cooperation of all parties involved it stimulates the true integration of psychosocial care in oncology.

## W-36

**Facilitating the Implementation of the Palliative Care Needs Assessment Guidelines and the Needs Assessment Tool: Progressive Disease - Cancer in Clinical Practice**

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*Centre for Health Research & Psycho-oncology (CHeRP), Cancer Council NSW, University of Newcastle & Hunter Medical Research Institute, Newcastle, NSW, Australia<sup>1</sup>, Flinders University, Adelaide, South Australia, Australia<sup>2</sup>*

**OBJECTIVES:** The workshop will introduce the Palliative Care Needs Assessment Guidelines and

Needs Assessment Tool: Progressive Disease - Cancer (NAT:PD-C) to multidisciplinary international attendees to facilitate their systematic use in clinical practice. **METHOD:** Evidence supporting the acceptability and impact of use of the Guidelines and NAT:PD-C will be presented. Workshop participants will then watch segments of a DVD developed by the research team which demonstrate how a health professional discusses issues covered in the NAT:PD-C with a simulated patient and a caregiver. Group discussion will focus on how best to utilise the NAT:PD-C and the optimal timing of its use in the respective clinical settings of workshop participants. **RESULTS:** The Guidelines and NAT:PD-C were developed with funding from the Australian Government Department of Health & Ageing. The evaluation completed in 2008 suggests that the tool is helpful for assisting busy health professionals to identify issues of concern, particularly in areas not routinely well addressed in consultations; is a highly acceptable and efficient needs assessment tool, with a high rate of completion by health care providers and no impact on the length of consultations. **CONCLUSIONS:** No other national or international guidelines or screening tools currently exist to concurrently assess patient, caregiver and professional carer's needs to prompt needs based referrals to palliative care services. By incorporating these resources as part of the care at an early stage of their advancing disease, health professionals can identify those with greater needs who may require targeted early interventions, thus reducing burden and improving quality of life.

## W-60

**Management of Difficult Personality Traits and Disorders in Cancer Patients**

John David Wynn<sup>1,2</sup>  
*Swedish Cancer Institute, Seattle, WA, United States<sup>1</sup>, University of Washington School of Medicine, Seattle, WA, United States<sup>2</sup>*

**OBJECTIVES:** This workshop will introduce a new structure and method for collaborative consultation with oncology clinicians in the identification and management of cancer patients with difficult personality traits and disorders. **METHOD:** The workshop will open with an overview of the existential challenges that evoke dysfunctional interactions in oncology settings. This is followed with a review of the DSM classification of personality disorders, including the clinical shortcomings of this system. Fundamental features of clusters A, B and C are used to structure general clinical understanding and intervention. A clinically-based typology is then introduced with examples of specific interactions that can be performed and taught by psycho-oncology

consultants. **RESULTS:** Patient-clinician interactions are divided into Diagnosis, Dominant features, Typical Caregiver Interactions, Helpful Interventions and Diagnostic Confounds. Interventions emphasize empathic relevance, clinical utility, and ease of communication with collaborating clinicians in a multidisciplinary setting. Recognizing patient-clinician interactions is emphasized over nosological classification, recognizing that most difficult patients do not have DSM Axis II diagnoses. **CONCLUSIONS:** Beyond DSM-IV we need an approach to difficult patients that respects their diverse presentations and needs. Understanding the perceptions and misunderstandings common to complex medical care settings will enhance clinical interactions between psycho-oncology consultants, cancer patients and the diverse clinicians who care for them.

#### W-116

##### **What Children Need to Know When a Parent or Sibling Has Cancer**

Andrea Warnick

*Mount Sinai Hospital, Toronto, Ontario, Canada*

**OBJECTIVES:** This workshop will identify: Common experiences and concerns among children and adolescents' when a loved one has cancer; Overview of the research on children's experience of a family member's cancer; Strategies for health care professionals to support parents' communication with their children about the illness and prognosis; Creative interventions to directly support children when a family member has cancer; Strategies to support families if the diagnosis becomes palliative; Literary and web resources available to support children and adolescents through a family member's cancer experience. **METHOD:** The objectives for this workshop will be achieved through a combination of interactive exercises and lecture format. **RESULTS:** It is the intent of the presenter to provide the participants with communication strategies and creative interventions that can be used to support a child or adolescent when a family member has cancer. **CONCLUSIONS:** While the current body of research on children experiencing the cancer diagnosis of a parent advises a policy of honesty and inclusion, many health care professionals are unaware of this knowledge, thus are left unsure of the role that they can play to support these families. This workshop will include a review of the current body of research as well as strategies that can be used to support children when a family member has cancer.

#### W-145

##### **Systemic Family Therapy in Psycho-oncology. The Genogram Technique**

Marta Irena Porebiak, Anna Blogosz

*Cancer Centre Institute, Warsaw, Poland<sup>1</sup>*

**OBJECTIVES:** This is planned as a comprehensive workshop for psychotherapists who want to learn how to apply systemic approach and genogram technique in therapy of cancer patients. Systemic therapy is based on Bertalanffy's works to increase attachment bonds, healthy communication and relationships between relatives. Family as a system is a set of interacting elements (family members), characterized by relationships between them, forming integrated whole, which is more than just a sum of its parts. **METHOD:** We present wide range of systemic constructs-family bonds (according to Minuchin's structural approach), family life circle (according to Haley's concept), loyalties (Boszormenyi-Nagy's approach). We focus on the technique of genogram, which best helps to assess not only present family functioning, but also family's past experience-patterns of support giving, care providing and grief management. Case studies of families of patients suffering from cancer are presented to show those phenomena. **RESULTS:** It is very important for clinicians to learn how to work on family resources and to teach the family to collaborate to support good psychological well-being and high quality of life. We expect that after this presentation/workshop clinicians will have enough knowledge to use systemic approach and they will be able to apply genogram method in their work with cancer patients and their family members. **CONCLUSIONS:** As a workshop-this presentation is based on exercises in assessment of family functioning, potential resources and threats within family system and interventions planning. It is a practical experience and short training program for psychologists, psychotherapists and clinicians interested in genogram technique in cancer patients' therapy.

#### W-152

##### **The Impact of a Positive Self-Talk Intervention on Breast Cancer Survivors Coping Skills and Psychological Well-Being - Workshop Demonstration and Discussion of Results**

Ryan Hamilton, Baukje Miedema, Julie Easley, Leslie MacIntyre

*Dalhousie University - Family Medicine Teaching Unit, Fredericton, NB, Canada*

**OBJECTIVES:** Cancer survivorship is a distinct phase of the cancer continuum and can have a myriad of associated stresses and challenges. The purpose of this study was to evaluate the effectiveness of a positive self-talk (PST) intervention in enhancing the coping skills and psychological well-being of breast cancer survivors. In this workshop, the elements of the intervention will be presented in detail to illustrate exactly what was done and solicit suggestions for improvement. **METHOD:** Participants ( $N = 38$ ) were recruited from five support

groups in a small Eastern Canadian province. Support groups were randomly assigned to either a control ( $N=18$ ) or intervention ( $N=20$ ) condition. Intervention participants were pre-tested, received a two hour PST intervention, a 15 minute booster session by telephone and completed a post test questionnaires one month later. Measures included the POMS, HADS, RSOPAC, and a workshop evaluation questionnaire. **RESULTS:** Intervention participants reviewed the workshop favorably. Nearly all participants used the intervention in their everyday lives, were able to accurately describe how PST works and found that it had a considerable impact on their ability to cope with cancer and related sequelae. However, the descriptive findings from the workshop evaluation did not translate into significant differences between intervention and control groups on the psychometric measures employed. **CONCLUSIONS:** The PST intervention, delivered in a community group model, was positively received and effective in teaching participants about PST and its applicability. The intervention, however, did not promote significantly greater levels of change in anxiety, depression, mood disturbance or coping ability for intervention participants. The unique challenges of community level psychological intervention will be discussed, as will future steps to building on the initial successes of this project.

#### W-220

##### **Money Matters—A Canadian Model Of Service Compilation And Service Delivery To Address The Financial Impact Faced By Cancer Patients**

Pamela Bowes, Holly Bradley

*Wellspring Cancer Support Foundation, Toronto, Ontario, Canada*

**OBJECTIVES:** Cancer can have a significant financial impact that adds a serious burden to patients' disease management. This workshop will identify common evidence-based sources (e.g. lost income, drug expenses), and the systemic taboo and other reasons that prevent patients from getting the help they need. A program model that is a targeted and comprehensive intervention on the financial impact of cancer will be described. Case studies, evaluation data and leaders' feedback will be presented. **METHOD:** To respond to the identified financial needs of patients, a comprehensive program was developed. The unique aspects of the program include the participation of experts, wide array of services, and comprehensive one-stop assistance. Extensive program development work focused on building partnerships and relationships with government programs, community services and legal resources. Professional case managers

assist patients to navigate through and access needed resources to meet financial needs, and advocate on their behalf when challenges arise. **RESULTS:** Evaluation data from patients indicates significant help with the majority citing the program as the only resource available. The demographics of program users, and the multiple sources of financial concerns show diversity of need. Most new patients are referred by oncology professionals. The program continues to gain recognition in the oncology community and beyond. Today the program includes legal clinics, income tax clinic, government program staff on site conducting intakes and comprehensive case management. **CONCLUSIONS:** This program is a model for supportive services to meet the financial concerns of cancer patients. When the stigma of money worries is reduced, and comprehensive services are offered, money worries can be managed. As one patient said 'dealing with cancer was easy compared to dealing with money concerns'. The presentation will offer participants the opportunity to explore how money worries can be managed for their patients, and learn about a proven, comprehensive intervention model.

#### W-224

##### **Cancer Patients and Workplace Programs: Community Based Psycho-Educational Programs for Patients**

Holly Bradley, Pamela Bowes

*Wellspring Cancer Support Foundation, Toronto, Ontario, Canada*

**OBJECTIVES:** Cancer patients face many fears and anxieties associated with returning to work or being back at work. There are many broad anxieties e.g. coping abilities, physical/emotional/cognitive deficits, stamina, workplace accommodation, communication, health management strategies. Instrumental interventions were developed based on workplace literature and patients' experiences. The programs have had positive and significant results. Program highlights, challenges, outcomes and lessons learned will be explored in this presentation. **METHOD:** Two eight-week programs were developed—for cancer patients thinking about returning to work and patients now back at work. Participants attended to learn new coping strategies, reduce isolation and reduce fears. The programs followed specific content to teach new skills and gave participants ample opportunities to share. Expert speakers addressed key topics including employment law, government programs and workplace accommodation. Extensive evaluation was completed at the end of the program and six months later. **RESULTS:** Overall high attendance and low drop-out rate. Expert

speakers, especially legal experts, were well received with needed information. We expected participants to be more engaged in the homework assignments and contemplating various workplace/career options. Participants noted high satisfaction from connecting with other patients. Managing the return to work or managing workplace issues is a complex process requiring time and well thought-out process. Outcome affirmed need for stringent leaders' credentials and additional applied training. **CONCLUSIONS:** These two programs are models for helping cancer patients manage workplace issues. Anxiety and fear is high for patients thinking of returning or those back at work. Learning new skills and sharing with others helps to reduce anxiety and create action plans. Experts provided valuable information. Participant satisfaction was high. Leaders required more training to better understand the emotional, practical and vocational needs of participants.

#### W-244

##### **Using Somatic Psychology To Decrease Distress and Find Meaning After A Cancer Diagnosis**

Marita Poll

*BC Cancer Agency, Victoria, BC, Canada*

**OBJECTIVES:** Cancer diagnoses and treatment are often associated with psychological distress for patients. Cancer, by definition, is at the very least a threat to one's physical integrity, and at the most, a threat to one's life. People react instinctively to a threat to one's body or life with the flight/fight response, a physiological defensive response that allows a person to defend or mobilize against a threat. This physiological response is often overwhelming and confusing for patients. **METHOD:** In this workshop, cancer will be viewed through a trauma lens, and patients' reactions to cancer are considered as normal responses to danger and threat. Somatic Psychology, informed by the fields of neuroscience and Interpersonal Neurobiology, is a trauma theory and treatment approach. A general overview of Somatic Psychology principles will be presented. Then Somatic Interventions, including somatic inquiry, optimal arousal zone, movement, and meaning-making questions, will be reviewed. **RESULTS:** These tools allow Psychosocial Clinicians to help cancer patients resolve and make meaning of thwarted defensive responses (e.g. a flight or fight response that did not lead to avoidance of danger or life threat). Through a review of a real life case study, participants will be presented with an example of a thwarted defensive response, along with ways of working with these instinctive responses. **CONCLUSIONS:** There will also be an opportunity to practice these skills with fellow participants.

#### W-251

##### **A Workshop To Identify Strategies To Support Hope**

John Kearsley<sup>1</sup>, Judith Lacey<sup>2</sup>, Frank Brennan<sup>2</sup>, Simone Connell<sup>2</sup>, Elizabeth Lobb<sup>2</sup>, Christine Sanderson<sup>2</sup>, David Thomas<sup>1</sup>

*St. George Hospital - Cancer Care Centre, New South Wales, Australia<sup>1</sup>, Calvary Health Care Sydney - Palliative Care Services, New South Wales, Australia<sup>2</sup>*

**OBJECTIVES:** This workshop will examine hope from the perspective of the clinician and the patient and will identify strategies for health professionals to create an environment where hope can be supported. Hope and hopelessness are important concepts for patients and families in palliative care. Conversations with patients that are truthful yet capable of engendering hope have the potential to improve patients' quality of life, lessen their will to die and increase satisfaction with care. **METHOD:** In this workshop a brief film where a patient discusses hope is shown. A film of a panel discussion on hope from the perspective of the oncologist, the surgeon, the palliative care physician and a patient will then be presented. Workshop participants will be invited to respond to the films and the views they present. Individual strategies used by the disciplines represented at the workshop to support hope will be identified and discussed. **RESULTS:** This workshop is focused on health professionals involved in the care of patients with life threatening illness. It will provide participants with the opportunity to: a) reflect on their own definitions of hope; b) share experiences from their own clinical practice; c) discuss the role of hope in whole person care; and d) identify additional strategies to extend the psychological, spiritual and clinical care of patients. **CONCLUSIONS:** Hope is a multidimensional concept. It is defined as a positive future orientation and is an important coping strategy in critical stages of life. Hope is a way of thinking, feeling and acting that may help cancer patients and their families cope with a difficult situation. Hope can help patients move forward despite bad news and disappointment. This workshop will identify strategies that may support patient hope and bring about positive psychological outcomes.

#### W-328

##### **Finding Hope and Meaning in Uncertain Times: Lessons Learned from End of Life Journeys**

Cheryl Nikolaichuk, Sheila Killoran, Bette Emery, Zinia Pritchard

*Grey Nuns Hospital, Edmonton, Alberta, Canada*

**OBJECTIVES:** A terminal illness propels patients and families onto a pathway of uncertainty, marked by debilitating symptoms, multiple losses and marginalized roles. Despite progressive disease, people who are terminally ill and their families search for hope and meaning within health care provider relationships. The purpose of this workshop is to describe experiences and provide practical strategies for dealing with uncertainty, based on lessons learned from journeying with patients and families at end of life. **METHOD:** The lessons that will be presented are based on the experiences of four members of an interdisciplinary psychosocial-spiritual team - a social worker, music therapist, psychologist and chaplain - who provide care to patients and families on a tertiary palliative care unit. A variety of multi-media and creative arts methods will be used to share these experiences, including dialogue, case scenarios, photography, music and poetry. **RESULTS:** Participants will have an opportunity to explore the following questions: How do patients and families experience uncertainty at end of life? What are some of the changes that may occur in terms of their spiritual practices? What type of strategies can patients, families and health care providers use to find hope and meaning amidst the uncertainty? **CONCLUSIONS:** Terminally ill patients and their families may have difficulty expressing and dealing with their experiences of fear, anxiety and sadness, which often accompany profound physical changes and decline. The creation of a safe environment, supported by an integrated interdisciplinary team, can help patients and families search for and find hope and meaning in the uncertainty. Many of the lessons learned at end of life can be transferred to other transitions and uncertain times in life.

#### W-346

##### **Psychosocial Assessment and Intervention Strategies for Adolescents and Young Adults with Cancer**

Sylvie Aubin<sup>1</sup>, Norma D'Agostino<sup>2</sup>, Kim Edelstein<sup>2</sup>

*Jewish General Hospital, Montreal Quebec, Canada<sup>1</sup>, Princess Margaret Hospital, Toronto Ontario, Canada<sup>2</sup>*

**OBJECTIVES:** Adolescent and young adults with cancer (AYAC) face unique medical and psychosocial challenges, including emotional/psychological distress, financial hardship, social isolation, and the impact of cancer treatments on fertility, sexuality and self/body image. The objective of this clinical workshop is to provide assessment and intervention strategies addressing AYAC psychosocial issues. Based on the comprehensive cancer care model, the workshop is relevant to medical and mental health providers involved in the care of

AYAC. **METHOD:** This workshop will be divided in two parts structured around the presentation of core assessment and intervention strategies for AYAC. Part I will focus on the assessment of biopsychosocial factors, including medical/physical, mental/emotional, neurocognitive, social, career/education, financial issues as well as fertility, sexuality and body/self-image. Part II will focus on intervention strategies such as communication/assertiveness, problem-solving/decision making, dating, sexuality and couple intervention strategies. **RESULTS:** Assessment and intervention modalities will be discussed in light of their benefits and drawbacks, and suggestions will be made for potential adaptations for use with AYAC. These include interview guidelines, self-report questionnaires and the differing roles of individual, family and group therapy for AYAC. Moreover, following the comprehensive cancer care model, an emphasis will be placed on illustrating how psychosocial interventions are integrated with adjunctive oncology services provided by other providers of the care team. **CONCLUSIONS:** The workshop will benefit both the clinician and the AYAC. Participants will thus have the opportunity to not only learn about the key psychosocial issues and reality of AYAC but also about the intervention strategies and guidelines most indicated to address issues. Moreover, the provision of resources and materials specific to AYA oncology may serve as documents of reference for participants and as a result, lead to improved care.

#### W-350

##### **'Getting the Best Bang for the Buck' - or, Realizing the Value of our Work. Making a Business Case**

John Christopherson

*B.C. Cancer Agency, Vancouver, B.C., Canada*

**OBJECTIVES:** An examination of methodology and challenges of examining psycho oncology through an economic lens. The workshop objectives include increasing the capacity of the participants about the application of economics to our field, a discussion of current issues in psychosocial economics, and where we need to go from here. **METHOD:** Economics are about choice. There is an opportunity cost to choosing one intervention over another. In these days of increasingly scarce resources we have to ensure that we can provide evidence that allocating resources to psychosocial oncology is the optimum choice. This workshop will examine methodologies of measuring the value of our work. We will discuss approaches taken in other fields of oncology, and in other clinical fields. **RESULTS:** The challenge can be described as trying to compare apples and oranges. Comparing a psychotherapeutic intervention to a medical one

presents difficulties - what units should one use, what are the units worth, and are they a fair representation of the value of that intervention? CONCLUSIONS: There are two approaches to measuring the value of psychosocial interventions - medical cost offsets and patient utility measures. The former is fairly well understood and documented. Patient utility instruments are typically focussed on disease adaptation and treatment side effects, and fall short of being adequate measures of quality of life. Today the competition for resources is becoming increasingly intense, we need to have the appropriate tools to justify the value of our contributions.

#### W-487

##### **An Experiential Workshop For Psycho-Oncology Professionals: Enhancing Meaning In Our Work Through Mindfulness Based Stress Reduction(MBSR) Interventions:**

Sarah Sample, Michael Specia  
*BC Cancer Agency, Vancouver, BC, Canada<sup>1</sup>, Tom Baker Cancer Centre, Calgary, AB, Canada<sup>2</sup>*

OBJECTIVES: This experiential workshop will provide psycho-oncology professionals with direct experience of MBSR so that they may incorporate it into their lives and professional practise. METHOD: Mindfulness refers to the practice of directing awareness, in the form of non-judgmental attention, to that which arises, moment by moment, in lived experience. Over 25 years of studies have demonstrated that MBSR is helpful in relieving stress in day to day life and its use as an oncology intervention is growing. This particular way of paying attention to process can foster compassion, evoke a greater sense of grace and ease in life. RESULTS: Through mindfulness practice we may come to understand the process and context of shifting thoughts and feelings. It can deepen our connection with ourselves and others. One can cultivate new skills in facing difficult challenges such as illness, pain and loss more effectively thus strengthening innate capacities for healing. MBSR can bring us a refined ability to discern and discard unhelpful patterns of relation to ourselves and to others with mindfulness as our companion. CONCLUSIONS: This workshop will provide an opportunity to experience the gifts of mindfulness directly as you are gently guided by experienced instructors through a range of mindfulness practices designed to refresh and renew a sense of peace, joy and gratitude. There will be time devoted to questions and open discussion of the experiences provided. Time will also be given towards the end of the workshop for addressing specific considerations of teaching mindfulness with cancer patients.

#### W-496

##### **Building a Case for Canadian Virtual Hospice in Psychosocial Care**

Harvey Max Chochinov<sup>2</sup>, Shelly Cory<sup>3</sup>, Fred Nelson<sup>4</sup>, Glen Horst<sup>1</sup>, Brenda Hearson<sup>4</sup>  
*Canadian Virtual Hospice, Winnipeg, Manitoba, Canada<sup>1</sup>, University of Manitoba, Winnipeg, Manitoba, Canada<sup>2</sup>, CancerCare Manitoba, Winnipeg, Manitoba, Canada<sup>3</sup>, Winnipeg Regional Health Authority, Winnipeg, Manitoba, Canada<sup>4</sup>*

OBJECTIVES: Increasingly people access the Internet for health information and to connect with others. Likewise, health care professionals access on-line information to support practice. Based on key informant interviews, visitor surveys and web analytics, the Canadian Virtual Hospice (CVH) website has expanded its ability to meet the needs of patients, families, health care professionals, regardless of geography. Combining technological advances and palliative care expertise, the site provides evidence-based information and support on palliative care and bereavement. METHOD: The CVH clinical team (physicians, clinical nurse specialists, social worker and spiritual care advisor) uses an interdisciplinary approach to develop evidence-based content and respond to 'Ask a Professional' (AAP) questions. CVH leverages the latest advances in information technology to enhance access to palliative care information, inter-professional collaboration and health literacy. Website visitors can browse information, ask questions and receive confidential, individualized responses from the clinical team, and connect in a community of support. RESULTS: CVH's AAP service is unique in the world. The site averages 25,000 visits per month from Canada and 154 countries. The largest user groups are health professionals and families. The clinical team has responded to over 1000 AAP questions from health professionals (40%) and patients/families(60%). Satisfaction results indicate that 87% are highly satisfied with their visitor experience. Other countries have approached CVH about replicating its model. CONCLUSIONS: In this interactive presentation you will participate in building case examples that facilitate exploration of the features of the site from patient, family and health care perspectives. We will also examine the unique online interdisciplinary collaborative process involved in providing information and support in a web-based environment, as well as benefits, challenges, nuances and lessons learned related to virtual communication.

#### W-507

##### **Managing Cancer and Living Meaningfully (CALM): A Brief Individual Psychotherapy for the Treatment of Patients with Advanced Cancer**

Gary Rodin, Christopher Lo, Virginia Boquiren, Emily Freeman, Sarah Hales  
*Princess Margaret Hospital, Toronto, Ontario, Canada*

**OBJECTIVES:** Psychological well-being is challenged in patients with advanced cancer because of the multiple and progressive stresses, burdens and losses associated with it. These include physical suffering and disability, the requirement of dependency, the challenge to the sense of meaning and purpose, and the threat of mortality. We have developed a 3–6 session individual psychotherapy to alleviate distress and to promote psychological well-being and growth in this population. **METHOD:** CALM is a manualized, individual psychotherapeutic intervention based on longitudinal research and the principles of supportive-expressive, existential and relational/attachment theory. It consists of 3–6 individual sessions delivered over 3 months by trained mental health staff, with optional booster sessions. Treatment modules address: 1) symptom management and communication with health care providers; 2) changes in self and relations with close others; 3) spiritual well-being; and 4) preparing for the future, sustaining hope and facing mortality. **RESULTS:** In this interactive workshop, we will describe and illustrate the treatment framework and the training and supervisory process. Video excerpts of therapy sessions will demonstrate CALM in action and discussion will focus on clinical challenges and opportunities. Quantitative and qualitative outcome data obtained from therapists and patients will be presented, based on the research pilot phase with 25 CALM therapy participants. **CONCLUSIONS:** The educational goals of this workshop are to describe the rationale, training and treatment process of a newly developed individual psychotherapeutic intervention for patients with advanced and terminal disease. Such an intervention has the potential to transform the experience of advanced disease for patients and therapists and to promote psychological growth in individuals who are facing what is most often the greatest challenge of their lives.

#### W-532

##### **Finding Hope and Meaning through Cancer Rehabilitation**

Pasqualina Di Dio, Virginia Lee  
*McGill University Health Centre, Montreal, Quebec, Canada*

**OBJECTIVES:** Cancer affects multiple aspects of an individual's functioning. Cancer rehabilitation can instill hope to help patients and their family return to the task of living and find meaning in their disrupted lives. The aim of this workshop is to discuss the strategies used by the interdisciplinary team of the Cancer Rehabilitation Program to promote hope and meaning in cancer patients suffering from multiple symptoms, loss of function,

and psychological distress. **METHOD:** The 8-week Cancer Rehabilitation Program consists of a team of physicians, nurses, physiotherapists, a nutritionist, a psychologist, and a social worker. Interventions for managing distress, promoting autonomy and self-management, instilling hope, and finding meaning will be discussed within the context of diet, exercise, work and leisure activities, and symptom management for cancer. **RESULTS:** Clinical examples will be used to illustrate interventions and some of the challenges encountered. An interactive discussion will follow with opportunity to practice and reflect on real life and hypothetical case studies. **CONCLUSIONS:** A comprehensive yet focused approach to cancer rehabilitation can facilitate, revive, and sustain a sense of hope and meaning for cancer patients along the cancer care continuum.

#### W-533

##### **An Experiential Workshop Demonstrating the Use of Drama Therapy Techniques to Cultivate Hope**

Gwynneth Gorman  
*Cedars Cansupport, Montreal, Quebec, Canada*

**OBJECTIVES:** Qualitative feedback and Likert scale quality control survey data have revealed the value and power of using drama therapy with oncology patients as a way to build resilience, enhance self-expression, and find meaning to difficult personal material. This in turn has reinforced the priority to develop psychosocial support groups which emphasize the use of this modality. **METHOD:** Drama therapy methodologies incorporate techniques from psychodrama, Gestalt therapy, art therapy and other supportive expressive therapies. It is recognized as active problem solving due to its ability to bypass the blocks in verbal therapy and move straight to core issues. The use of projective techniques, metaphor, improvisation, creative play, storytelling and art assist in this process. **RESULTS:** These methods have been successfully practiced specifically with post-treatment and young adult oncology populations. This presentation will outline key principles and basic concepts of how to use this modality, along with a description of limitations and challenges. Practical intervention techniques will be described in relation to the core themes addressed these groups. **CONCLUSIONS:** Through active engagement participants will have the opportunity to experience the dynamics of drama therapy interventions. This workshop is designed for those who are curious about how to weave elements of drama therapy into their own support group practice. Please wear comfortable clothing.

## W-547

**Quality Decision Making in Health Care Settings: The Contribution of Contemporary Social Conflict Theory**Michael Van Slyck<sup>1</sup>, Marilyn Stern<sup>1</sup>*Virginia Commonwealth University, Richmond, VA, United States<sup>1</sup>, Virginia Commonwealth University, Richmond, VA, United States<sup>2</sup>*

**OBJECTIVES:** It is suggested that the science and practice of Contemporary Social Conflict Theory (CSCT), with its focus on conflict management through problem solving can add a set of skills to health care providers when working with patients and their families. The primary goal of the workshop is to provide the participant with a comprehensive overview of conflict as it is viewed and understood by CSCT contrasting it with conventional views of conflict as fighting. **METHOD:** Provided with this information participants will know that they have a variety of strategies with which to respond to conflictual decision making situations as a basis for making optimal decisions - especially with regard to treatment. The primary experiential goal of the workshop is to provide the participants with a basic set of skills necessary to implement positive conflict management styles proposed by CSCT as a basis for optimal decision making. **RESULTS:** The session begins with administration of a conflict management inventory. Participants are then paired in dyads and engage in a structured conflict task. At the end of the task they will debrief with the other member of the dyad. A question and answer period will be used to explain the nature of the task and introduce the participants to the concepts of CSCT. Participants will nominate difficult decision making events from their experience. **CONCLUSIONS:** Groups of three will be established, two participants role playing a patient and a health care provider. The third participant will be an observer and take notes. After 15 minutes the participants will stop and process their experience. The entire group will then reconvene and participants will be asked to nominate and discuss aspects of their interactions which worked or did not in their effort to make a decision in the face of disagreement.

## W-653

**Developing Brief Training Programs in Psycho-Oncology. How Can a One or Two Day Workshop be used to Increase Access to Psycho-Oncology Support?**

Catherine Adams

*Calvary Mater Newcastle, Newcastle, NSW, Australia*

**OBJECTIVES:** This workshop will describe two educational programmes, one for psychologists,

the other for general practitioners, that provide basic training in psycho-oncology for people not working in the oncology field. The aim of these projects was to increase access to psychosocial support for patients living away from treatment centres. Opportunities will be provided for participants to develop ideas for similar training programs in their own countries. **METHOD:** The workshops described were for psychologists in rural areas of NSW, Australia, and for general practitioners in a regional area in NSW, Australia. The psychologists workshops considered basic oncology as well as common psychological reactions in cancer patients and their families. Training in effective interventions was also given. The GP workshop was breast cancer specific and concentrated and recognising psychosocial distress in these patients and providing adequate support, either from the GP or via referral. **RESULTS:** Results from the psychologists workshops were very positive and highlighted some of the fears professionals have about working with cancer patients. These results were presented previously<sup>1</sup>. The GP workshops are yet to be completed, but results will be available during the workshop. Methods of evaluating such training will be discussed. Adams, C.A., Gianacas, L., Levick, W. (2009) Expanding Psycho-Oncology support to rural areas in NSW, Australia. *Psycho-Oncology*, 18, S55. **CONCLUSIONS:** In order to increase appropriate and timely access to psychosocial care it is necessary to think outside the square in terms of service provision. This workshop demonstrates that it is relatively easy to increase service access through brief, targeted training sessions for medical and allied health professionals who may not be working in the oncology system but nonetheless are able to provide psychosocial care. Participants will be encouraged to develop training ideas for their area.

## W-677

**Imagery As Currently Used In The Simonton Program In Addressing Both Emotional And Physical Distress**Mariusz Wirga<sup>1,2</sup>*Todd Cancer Institute, Long Beach Memorial Medical Center, Long Beach, CA, United States<sup>1</sup>, Simonton Cancer Center, Malibu, CA, United States<sup>2</sup>*

**OBJECTIVES:** The purpose of this workshop is to familiarize participants with the evolution of the use of mental imagery in the Simonton Program and how it relates to the recent discoveries in cognitive neuroscience. Emphasis will be placed on the practical applications of imagery to reduce both emotional and physical distress. **METHOD:** The participants will be introduced to the conceptual and practical applications of mental

imagery in the Simonton Program and how it relates to the recent discoveries in cognitive neuroscience. The participants will be able to incorporate these techniques into any modern psycho-oncology practice, including support groups and particularly cognitive-behavior therapy. **RESULTS:** At the end of the workshop the participants will be able to teach mental imagery to their patients to recognize distressing cognitions as well using this form of mental practice to decrease anxiety, physical pain, nausea, fatigue and other negative symptoms of illness or side effects of treatment. **CONCLUSIONS:** Late Dr O. Carl Simonton (1942–2009), radiation oncologist, introduced imagery in the treatment of his patients in 1971. It quickly emerged as one of the most popular alternative treatments utilized by cancer patients. However, most patients and practitioners do not know the modern applications of this versatile, refined yet easy to apply set of techniques. This workshop will fill this gap.

#### W-678

##### **Communication Skills Training in Oncology : How can it be Helpful in Your Professional Life ? Let's Try ...**

Patrice Guex<sup>1</sup>, Anne Bredart<sup>2</sup>, Sylvie Dolbeault<sup>3</sup>  
*Centre Hospitalier Universitaire Vaudois, Lausanne, Switzerland<sup>1</sup>, Institut Curie; Laboratoire de Psychopathologie et Neuropsychologie clinique, Univ Paris V, Paris, France<sup>2</sup>, Institut Curie; Inserm U669; Univ Paris-Sud et Univ Paris Descartes, Paris, France<sup>3</sup>*

**OBJECTIVES:** The communication skills training (CST) workshop consists of a 90 minutes session, where participants are trained by means of case discussions, role play and video analyses of «simulated» patient interviews. Trainers have extensive experience in psycho-oncology; their professional background is psychiatry, psychology, internal medicine and all of them have been trained in psychoanalytic, systemic or cognitive-behavioural psychotherapy or in psychosomatic medicine and supervision. **METHOD:** Participants should conduct a short video-taped interview with a simulated patient role-played by attendee. Short written instructions are given to the clinician and the «actor» (simulated patient) prior to the interview, specifying the patient age, cancer type (different scenarios possible), treatment type (curative or palliative) and the objectives of the interview. **RESULTS:** Different communication situations will be explored, adapted to each attendee. For physicians, it will be for example : communicating the diagnosis of a curable cancer, lymphoma or testicular cancer, or explaining transition from curative to palliative treatment for stomach cancer. For nurses, it will be : preparing the patient for

curative or palliative chemotherapy for the same cancers mentioned before. These exercises will give the opportunity to introduce simple and helpful communication tools. **CONCLUSIONS:** This CST provides only a very limited amount of theory; it is mainly based on interactivity and practical exercises by means of different clinical settings presentations. Participants are given the opportunity to experience of their way of interacting with patients, to analyse how some communication tools can facilitate the patient - health professional interaction, and to feel more comfortable in difficult communications issues such as delivering bad news.

#### W-692

##### **Psychological Interventions Regarding Preschoolers: Clinical Illustrations**

Mélanie St-Onge

*CHU Sainte-Justine Mother and child University Hospital Center, Montreal, Quebec, Canada*

**OBJECTIVES:** Due to the rising number of children surviving cancer, pediatric oncology teams are increasingly confronted to the short-, medium- and long-term psychological after-effects of cancer. For preschoolers, psychological assistance is particularly relevant due to their vulnerability, their dependence and to the fact that their psychoemotional development is in progress. In the context of a serious illness, the psychological intervention aims to first and foremost help the child make sense of their own reality and reactions as well as those of their family. Therefore, psychologists work toward establishing or maintaining a close and secure attachment between the child and the parents; as well as supporting parents so that they are prepared to deal with their child's reactions; and, finally, mobilizing and respecting any defense mechanism helping child to better cope with the disease, treatments, hospitalization and prognosis. **RESULTS:** Play therapy serves to create a non-threatening space where the children can communicate their experience and where they can attach feelings to their reality. Psychotherapy at the intrapsychic level will dominate, but the psychologist will never lose sight of the reality of the vital care; and will assist, whenever needed, the child, parents and medical team to develop the framework that will foster collaboration. **CONCLUSIONS:** Clinical illustrations take into account: 1) the psychologist's role in pediatric oncology, specifically regarding children under five, 2) the needs and reactions of preschoolers, 3) psychotherapy, and 4) interventions with parents. The objective is to equip psychologists in pediatric and adult oncology as well as other psychosocial care providers who deal with the psychological distress of children and parents living with cancer for a psychological recovery hope.

**W-704****The Mindfulness Based Stress Reduction In Cancer**

Tatiana Melnyk

*Princess Margaret Hospital, Toronto, Canada*

**OBJECTIVES:** This workshop will provide the basis for understanding the philosophy and research behind the Mindfulness Based Stress Reduction Program, and will expose participants to its application in cancer. Participants will be able to identify patients suitable for this approach, and will learn some of the techniques used with cancer patients. **METHOD:** This workshop will be based on the presenter's experience with the Mindfulness Based Stress Reduction Program as well as on a review of the current literature which suggests the usefulness of the program in cancer care. **RESULTS:** The Mindfulness Based Stress Reduction program has been used to help cancer patients address sadness, fear, anger, disfigurement or physical disability related to cancer, as well as to help them cope better with pain. In addition, this program has helped cancer patients address the existential concerns that arise with this illness, including making sense of their experience, making sense of death, and of suffering. There is research evidence supporting the use of MBSR for alleviating cancer distress. **CONCLUSIONS:** The MBSR program is a viable and effective program for cancer patients wishing to address emotional distress, physical change and existential concerns as a result of cancer.

**W-715****Managing Distress in Cancer Patients with Personality Disorders**Lana M. Pratt, Marc Hamel, Pasqualina Di Dio  
*McGill University Health Center, Montreal, Quebec, Canada*

**OBJECTIVES:** The psychological distress that accompanies a cancer diagnosis is often influenced by pre-existing conditions, such as personality disorders. Co-morbid personality disorders increase the complexity of treating distress in cancer patients. The aims of this workshop are to provide health care professionals with a) the basics necessary to identify common personality disorders, b) evidence based strategies to manage problematic behaviours using a time-limited approach and c) the impact of some personality traits on medical care. **METHOD:** Based on clinical observations from the MUHC Psychosocial Oncology program, case examples will be presented on how personality traits can impact the psychological functioning of cancer patients. It will also be demonstrated that a poor understanding of these influences can impact the care of the patients and/

or the relationship with the treating team members. **RESULTS:** Common personality disorders with their typical key features will be presented. Specific case examples will be provided to help illustrate strategies and specific interventions that teams can adapt in order to help them manage these cases. **CONCLUSIONS:** Effective management of patient distress involves recognizing and managing, although not necessarily treating, pre-existing personality disorders. Personality disorders make the management of oncology patients more challenging, and can influence adherence to treatment recommendations, frequency of hospital visits or phone calls, time spent per visit, as well as the alliance between the patient and health care professional(s).

**W-729****Development of an Experiential Elective in Spirituality For a Palliative Care Fellow: A Pilot Project**

June Mawhinney, Sharon Konyen

*Canadian Association of Pastoral Practice and Education, Toronto, Ontario, Canada*

**OBJECTIVES:** For people with terminal illnesses, hope contributes to an improved quality of life, identified as the primary objective of palliative care. Health care professionals through their relationships, if experienced as meaningful, have a profound opportunity to facilitate hope. The Spiritual Care Department created an elective in spirituality with the objective to promote reflection and self-awareness as a means for a physician to enhance the meaningfulness of his relationships with palliative patients. **METHOD:** The educational process designed for spiritual care professionals was modified for a palliative care fellow interested in developing spiritual care competencies. Curriculum design was based on the experiential learning cycle model and reflective learning (action-reflection-action). The 50 hour elective integrated role-play, reflection, shadowing spiritual care professionals, participation in rituals and groups, didactics and review and presentation of recommended readings. **RESULTS:** Comments from the palliative care fellow who completed the spiritual care elective- '...it's about helping patients identify that which is hopeful in their lives, and renew that hope, belief, or faith, in a time when their beliefs are being challenged in a way that they may never have been challenged before.' A curriculum has been developed and delivered which can be adapted as an inter-professional education tool for other health sciences students. **CONCLUSIONS:** There is value in an experiential and reflective model of learning. We need a wider sample to formally evaluate the capacity of the model to enhance hope through meaningful relationships. We plan to offer this elective to

family medicine residents and pre-clerkship medical students.

#### W-742

##### **Take It and Go! Turn-key Training for Palliative Care Volunteers**

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**OBJECTIVES:** Volunteers are the cornerstone of hospice palliative programs yet their training is often underfunded and not all programs have access to training materials. A 'Take It and Go!' package of videos and training guides, highlighting real situations volunteers may face in their daily practice is an easy resource for both basic and advanced volunteer training. Key themes include confidentiality, privacy, trust, boundaries, risk management and cultural issues. **METHOD:** This is a fun interactive workshop using videos as well as stories, exercises and shared discussion to examine and challenge conventional wisdom about the role of the volunteer on the team, both in hospital and homecare settings and to facilitate interdisciplinary discussion about the role of the volunteer in patient-centred care and program delivery. **RESULTS:** We will discuss whether volunteers can be trained more efficiently, and with a higher level of comprehension than previously achieved through traditional teaching methods, thereby improving both their effectiveness and confidence in their work with the terminally ill and bereaved. Many of the issues in the videos are equally relevant to health care staff. **CONCLUSIONS:** Volunteer Training is important and there is a need for easy-to-use, accessible resources to help skill development in the volunteer and to stimulate dialogue around their role within the health care team. A comprehensive teaching package will be available to all attendees. It includes 2 DVDs -- one with instructions for running a workshop and one with four bilingual training videos showing the issues and challenges faced by volunteers in hospital and home-care settings.

#### W-767

##### **Helping Families Find Hope and Meaning in the Face of Loss: Redefining the Family Unit**

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**OBJECTIVES:** Hope and meaning are two important concepts that have become an integral part of supportive therapy for families who are coping with a loved one who is dying. A cancer diagnosis affects the entire family unit and families may differ greatly in how they navigate the dying process. The goal of this workshop will be to present how a

psychosocial oncology program can play a vital role in assessments and interventions related to these concepts. **METHOD:** This workshop will focus on the assessment of families facing the death of a loved one and will highlight interventions used both prior and after their loss. We will provide clinical examples of families and encourage participants to perform the assessments and suggest interventions. Interventions specific to hope and meaning will be highlighted. **RESULTS:** It has been documented that hope fluctuates over time for both the patient and the family in the palliative care phase. Hopelessness is often linked to the loss of meaning in families. Additionally, the literature suggests that a family's attempt to search for meaning at the end of life is a normal but distressing psychological process. Therefore both hope and meaning have become important areas for family therapy. **CONCLUSIONS:** The Psychosocial Oncology Program works with patients and families in supporting them through their anticipatory grief, and helping them in their search for hope and meaning. Bereavement support is also a critical part of the program.

#### W-780

##### **Healthy Hope versus False Hopelessness: Addressing the Meaning of Illness and Issues of Spirituality in the Simonton Program**

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**OBJECTIVES:** The purpose of this workshop is to help participants gain an understanding of the concept of healthy hope, and ways of supporting patients' hopefulness at all stages of life and treatment. Practical ways of addressing trust and faith as well as purpose and meaning of life will be presented. Particular focus will be placed on learning nondenominational and nonjudgmental ways of addressing spiritual and deeply philosophical beliefs. **METHOD:** The participants will be introduced into the role of doubt, hopelessness, loss of purpose and meaning in patients' overall suffering as taught in the Simonton Program. Practical exercises are going to be conducted in applying cognitive-behavioral techniques to help patients and their family members to assess the health value of their own spiritual and existential beliefs and fostering those that are healthy. **RESULTS:** At the end of the workshop the participants will be able to teach CBT techniques effectively and non-intrusively addressing spiritual and deeply philosophical beliefs of patients and their family members. Participants will learn how to protect patients' hopefulness while promoting realistic treatment expectations. **CONCLUSIONS:** Dr O. Carl Simonton, an

early pioneer of psycho-oncology, devoted his whole professional career of 38 years to addressing the most difficult issues facing cancer patients and their families. He taught effective ways of helping patients resolve spiritual suffering across cultures and religions. In this workshop participants can partake in Dr Simonton's pragmatic approach to the area of hope, meaning and spirituality.

#### W-788

##### **Psychosocial Research Ethics In The Online World: Virtual Or Real?**

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**OBJECTIVES:** The focus of this workshop is on the ethical considerations and implications of conducting psychosocial oncology research over the internet. A brief review of the evolution of ethics in psychosocial research and core concepts of sound research practices for the protection of research participants will be provided. This workshop will employ a slide presentation, actual case examples, and active discussion as teaching modalities. Attendees will receive a comprehensive bibliography and resource list. **METHOD:** The historical development of ethical standards for research on human subjects was studied and a thorough review of the literature concerning online psychosocial research was conducted. Ethical violations by psychosocial researchers in a large, well-established online community of cancer survivors and caregivers were reviewed to identify the primary ethical issues, concerns, and dilemmas. **RESULTS:** Oncology researchers and other health professionals are increasingly turning to online methods of surveying cancer survivors and their families. Several professional associations have developed general guidelines for the online delivery of therapeutic services and research, but standards are still emerging as experience is gained. In the interim, ethics violations are surprisingly frequent in the large online community of cancer survivors and caregivers for which the authors are responsible. **CONCLUSIONS:** There is a strong need to educate users, providers, and researchers of online cancer support services about ethics standards, concerns, and dilemmas in conducting and participating in web-based psychosocial research. As knowledge and experience is gained, clear standards should continue to be developed, disseminated, and applied.

#### W-904

##### **The Truth of It: Talking About Cancer**

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**OBJECTIVES:** This special workshop is an opportunity to preview a unique patient video series of unscripted, open-ended interviews with Canadians who have experienced a cancer diagnosis ranging in age from 20–73. Directed by film maker Wendy Rowland, the interviews asked individuals, 'What would you tell your best friend if he or she had to go through the experience you have had with cancer?' Workshop participants will inform the outreach plans for the series including how such a resource could be used by psychosocial oncology professionals, as well as potential future directions. **METHOD:** Funded by the Canadian Partnership Against Cancer to develop a Canadian knowledge base of cancer patient experiences, the video series was developed in partnership with the Li Ka Shing Knowledge Institute at St. Michael's Hospital. The series will be showcased on Cancer View Canada ([www.cancerview.ca](http://www.cancerview.ca)) a web-based portal that links Canadians to resources, information and tools to improve cancer control. Individuals who had been diagnosed with cancer at any age, background and experience were invited to be interviewed on camera so that their story could be shared with a broad public audience in order to inform and support other patients and caregivers, and clinical, psychosocial and patient education professionals. **RESULTS:** The personal stories of almost 40 cancer patients, including young adults, members of First Nations communities, men and women, individuals from both rural and urban regions of Canada and over ten different types of cancer are included in the series. The themes that emerged from these experiences included how patients coped with getting the news, telling friends and family, talking to their kids, returning to work, being their own advocate, the worst aspects of treatment, fear of recurrence, and body image among many other themes. **CONCLUSIONS:** This patient-centred series is a virtual supportive care resource that contributes to new knowledge in psychosocial oncology.

## Listed by Author and Abstract Number

The following pages display the authors of the abstracts selected for the IPOS Abstract book together with their abstract numbers

Aaronson N	A-37	Andrade MGG	A-676, P-498, P-672	Baer L	A-451, A-470
Abbink F	P-576	Andrews YJ	A-614, A-618	Baezconde-Garbanati L	S1837-2
Abbott JM	A-133	Andrews S	P-741	Baider L	S1916-2, S1928-2
Abbott M	S1832-2	Andritsch E	A-695, P-679	Baillon C	P-146, P-319
Abdallah – Mabjish A	A-61	Anita M	A-689	Baker-Glenn E	A-275, A-276, P-454
Abgrall-Barbry G	A-190	Anne B	A-129	Baldassarre F	A-358
Abish S	P-756	Ann�lie A	A-504	Balneaves LG	A-110, A-111, A-639, A-703
Aboualmagd S	A-737	Annunziata MA	P-255, P-256, P-604	Banga A	P-570
Absolom K	A-552	Antoine P	A-128	Barbera L	A-340
Ach EL	P-283	Arab M	S1919-3	Barberio D	P-520
Achille M	A-488	Aranda S	A-366, A-370, A-375, A-381, A-383, P-39, S2000-4	Barbosa A	P-419
Acker J	P-710	Araujo I	P-463	Barbosa F	P-419
Adams C	A-642, A-651, W-653	Araujo TCCF	P-228	Barello S	P-457
Adams E	A-278, A-396	Arcand M	P-49	Bargetzi M	P-753
Adams J	A-26	Arcusa A	P-64	Barnett J	S1919-1
Adams S	A-622	Arden-Close E	A-552	Barni S	P-19, P-20, P-670
Adenis C	A-410	Arechiga A	S1816-3	Barnum DD	P-770
Agar T	P-468	Arefnazari M	A-787	Barrault M	A-430
Agnieszka S-C	A-129	Arenas G	P-64	Barrera ME	A-192, P-132, P-198, P-283, P-322, S1841-1, S1841-2, S1841-3
Aguerre C	P-226	Ares I	A-648, P-453, P-683, P-727	Barretina P	A-411
Ait-Kaci F	P-738	Ari�le	A P-484	Barrington V	A-65
Aitken J	A-42	Armay Z	S1829-1	Bartolacelli E	P-15
Akabayashi A	P-206	Aronson M	A-623, A-625	Bastida P	P-429
Akazawa T	P-57	Asai M	P-384	Basumallik I	P-273
Akechi T	P-57, P-90, P-208	Ashing-Giwa K	A-159, A-495, P-492	Bathe OF	A-299
Akin-Odanye EO	P-268, P-527	Ashley S	P-106	Batt G	P-232
Akizuki N	P-384	Ashraf� E	A-787	Batterby E	S1832-2
Alam R	S1841-1	Aslett A	A-476	Battler H	A-280, A-361
Alder J	A-107	Asuzu CC	A-446, P-59, P-155, P-268, P-527, P-558	Bauernhofer T	P-679
Aldridge L	S1810-3	Au A	A-745	Bauwens S	P-146, P-318, P-319, P-417
Alejandra P	P-200	Aubin M	A-540, P-183	Bayraktar S	A-398
Aleksandra K	P-783	Aubin S	W-346	Beattie S	A-239, A-648, A-765
Alexanderson K	P-444	Augustin T	P-679	Beatty L	A-26
Alexandra M	A-313	Auluck A	A-122	Beaulieu M	P-49
Alfaro J	P-64	Aviv C	A-745	Beaune L	A-192
Alhabib S	P-82	Awad M	S1837-4	Beck A	A-501
Alibhai S	P-62	Awad NMN	A-24	Beheshti M	P-740
Alidina K	A-12	Awusah IB	A-446, P-59, P-155, P-558	Behrendt C	A-154
Allan P	P-633	Azaiza	F S1837-3, S1837-4	Beigy FF	P-740
Allanson J	A-623	Baba HB	P-537	Beith J	S1832-2
Allart P	P-226	Babayi B	P-725, P-732, P-750	B�langer B	A-539
Allison P	P-223	Babcock R	A-451, A-470	Belcher A	A-172
Allison PJ	A-708	Bacalhau MR	A-266, A-499, A-608	Belcher J	A-278
Allison V	A-439	Bacchi MT	P-413	Belkic K	S1837-1, S1837-2
Almarza CC	A-757	Bacqu� M-F	S1846-1, S1846-2, S1846-4	Bell J	P-373
Almeida S	P-720			Bella TT	A-446
Almeida SN	P-706			Bell� M	P-284
Altman K	A-627			Beltran M	A-411
�lvarez E	A-411			Bendahl P-O	A-212
Amir R	P-611			Bendiane M-K	A-446, A-465, A-497
Amy Z	A-201			Benea A	P-79
Andersen B	P-241				
Andersen RE	A-491				
Andershed B	A-92				
Anderson C	A-235				
Anderson D	A-85, P-86				

- Bennett C A-682  
 Benoit-Bousquet L P-631  
 Bensing JM P-254  
 Benzein E A-92  
 Berenger C A-465  
 Berg G A-300  
 Bergerot PG P-225  
 Bergin R A-370  
 Bergman H A-722  
 Berk DB P-778  
 Berman AH S1837-1  
 Bernshaw D A-370  
 Bernstein LJ A-167  
 Berretta M P-256  
 Berthet P A-410  
 Bertz H A-154, A-210,  
 Besancenet C P-142, P-550  
 Bialer P A-510  
 Bianchet K P-256  
 Bidonde J A-591  
 Bielajew C A-648, P-453,  
 P-683, P-727  
 Biggs K S1847-2  
 Bilash T P-779  
 Bilodeau D P-285  
 Bittante M A-744  
 Blaakaer J P-252  
 Blacker S A-682  
 Blais C A-714  
 Blais M-C P-631, S1919-4  
 Blanco R P-64  
 Blasco T P-64, P-429, P-478  
 Bleijenberg G A-418  
 Blinka M A-153  
 Bliss-Isberg C A-349  
 Blogosz A P-428, W-145  
 Blom ES A-400  
 Bloom D A-135  
 Bloom J A-555, A-603,  
 A-721, P-317  
 Boeru AM P-445  
 Bøge P A-253  
 Bokey L A-385  
 Bonamis O A-475  
 Bonetti L P-19, P-20  
 Bonetti ML P-670  
 Bonfiglio NS P-548  
 Bonner C A-235  
 Bonneterre J P-477  
 Boonzaier A A-29, A-394,  
 A-422  
 Boquiren V W-507  
 Bordeleau L A-623, A-795  
 Borelli V P-548  
 Borgonovo K P-19, P-20  
 Borgstadt N A-461  
 Bornais C A-714  
 Bornbaum C A-303  
 Bottorff JL A-110, A-111,  
 A-122, A-571,  
 A-623, S1842-3  
 Bouchard K A-51  
 Bouffet E A-192, P-109  
 Bouhnik A-D A-465  
 Bouisson J A-271  
 Boujout E P-550  
 Boulton M A-278, A-396  
 Bousada H P-113  
 Bowes P W-220, W-224  
 Bowler A A-304  
 Boyes A A-248, P-315,  
 S1810-2  
 Boyington AR A-188  
 Boyle F A-236  
 Boyle M S1847-1, S1847-3,  
 S1847-4  
 Bradbury A A-525, A-595  
 Bradley H A-462, W-220,  
 W-224  
 Braehler E P-426  
 Bragard I A-272, A-578,  
 P-403, P-404,  
 P-441, P-442  
 Brähler E A-481, P-203  
 Bramajo MP P-200  
 Branagan G A-687  
 Branco M A-634  
 Brandwein J A-614, A-618  
 Branin J P-489  
 Brashers D A-509  
 Brasselet V A-181, P-176,  
 P-182, P-185  
 Braun M S1924-2, S1924-3  
 Brazel F S1832-2  
 Breau GM P-447  
 Breau LM P-447  
 Brédart A A-662, A-667,  
 W-678  
 Bredius R P-576  
 Breitbart W A-502, S1808-1,  
 S1928-3  
 Brennan F W-251  
 Breyer J S1824-3  
 BrintzenhofeSzoc K A-153  
 Broadfield L S1847-2  
 Broek A P-437  
 Brons P P-576  
 Brosseau DC A-518  
 Brothers BM P-718  
 Brown E A-192  
 Brown J A-167  
 Brown P A-358, P-285  
 Brown R A-509, A-510,  
 A-630  
 Brown RL A-301  
 Brown S A-439  
 Brunet J A-480, A-491  
 Bruno M P-520  
 Büchi S A-324  
 Buchmann L A-316  
 Buchot E P-747  
 Buda F P-9  
 Buhr AM P-156  
 Buick C P-716  
 Bullen T A-385  
 Bultz B A-647, S1918-1,  
 S1918-2, S1918-3  
 Burfoot A P-537  
 Burkhalter R A-534, A-538  
 Burkoski V A-628  
 Burles M A-194, A-196  
 Burmeister B A-664  
 Burnett J P-285  
 Burney S A-368, P-364  
 Burns CM A-664  
 Busa F A-744  
 Buso MM A-229, P-218,  
 P-225, P-228  
 Buss MK A-301  
 Bussières E A-430  
 Bustam AZ P-168, P-666  
 Butler K A-625  
 Butow P A-236, A-246,  
 A-357, P-39,  
 P-232, P-233,  
 P-234, S1810-3,  
 S1832-2  
 Butros L A-655  
 Buzaglo J S1910-2  
 Buzzo A A-744  
 Bylund C A-509, A-510  
 Cabiddu M P-19, P-20  
 Cadell S A-500  
 Caicedo L A-153  
 Campbell HS A-534  
 Campbell M S1861-1  
 Campbell S A-193, A-538  
 Campbell T P-597  
 Campos C A-153  
 Cankurtaran ES A-409, P-277  
 Cann B A-754  
 Canny A A-431  
 Capdevila L P-429  
 Caplette-Gingras A A-621, P-549  
 Cappelli M A-623, P-529  
 Capretti N P-413  
 Caps E P-441  
 Carey J A-571  
 Carey M A-375  
 Carlander I A-400  
 Carlson L A-501, A-647,  
 P-597, S1918-1,  
 S1918-2, S1918-3  
 Carlsson C A-212, A-663  
 Carmack CL A-301  
 Carmen GL P-633  
 Carnevale FA A-722  
 Carroll J P-529  
 Carter G A-641, P-643  
 Carter GL A-641, A-642, P-643  
 Carter J A-235  
 Carter R P-43  
 Carter W S1921-2, S1921-4  
 Carvalho GM P-498  
 Carver C A-690, S1816-1  
 Casais C P-638  
 Casault L A-521  
 Cason E P-284  
 Cassidy E A-304, A-312  
 Castellan P A-744  
 Castellano C P-429, P-478  
 Castellanos E S1837-1, S1837-2  
 Castellanos M S1837-1, S1837-2  
 Castle D A-29, A-394,  
 A-422  
 Catherine B A-129  
 Cattan S A-128  
 Catton P A-77, A-321,  
 A-682  
 Caty M-È P-769

- Cavanagh M S1832-2  
Cécile F A-129, A-577, P-550
- Chadwick D A-18  
Chakrabarti B P-391  
Chamberland P A-714  
Chambers S A-38, A-42, A-44, A-45, A-101, P-43
- Chami P P-16  
Chan A A-288, A-614, A-618  
Chan CL A-421  
Chan F A-760, P-758  
Chang C-N A-739, P-718  
Charbonneau C A-539  
Charlebois J A-245  
Charron A P-242  
Chaturvedi SK P-71  
Chauhan D A-385  
Chen C-H P-207  
Chen EX A-167  
Chen H-W A-362, P-207, P-286  
Chen Mc P-588  
Chen S-H P-123, P-134, P-136, P-514
- Cheng C-D P-514  
Cheng C-T P-123, P-134, P-136  
Cheng N A-390  
Cheng T A-321  
Cheung B A-390  
Cheung W A-407, A-414  
Chih M-Y A-379  
Chipperfield K A-368  
Chittem M A-416  
Chivers M A-340  
Chochinov HM A-754, S1808-2, W-496
- Choi CMZ P-395  
Choi H P-741  
Choo CH P-605  
Chou A A-603, A-721  
Christine L-G A-129  
Christophe V A-128, A-410, P-477
- Christopher J P-230  
Christopherson J W-350  
Chung J P-593, S1847-2  
Chung KM P-399, P-402, P-516  
Chung P A-579  
Citrin D A-135  
Claffey K P-570  
Clark K A-567, A-568, A-596  
Clarke S A-385, A-660, A-795, S1861-1, S1861-3  
Classen C A-340  
Clayton M P-472  
Cleary JF A-301, A-379  
Clover K A-642  
Clutton S A-44, A-45  
Coates A A-236
- Cohen M A-61, S1816-2, S1837-1, S1837-2, S1837-3, S1837-4  
Cohen R A-166, P-367  
Coimbra F A-608  
Coleman R A-552  
Collacutt V S1847-1, S1847-3, S1847-4  
Collie K A-344, P-696, S1910-1  
Collier S A-528  
Collins KA P-727  
Colmant M P-291  
Colucci G A-671, P-669, P-674  
Compas BE P-198, P-322  
Conijn B P-433  
Conlee J A-316  
Conlon M S1919-2  
Connell S W-251, S1810-3  
Connor M P-62  
Conradt S A-578  
Consoli SM A-181, A-190, A-260, A-262, P-176, P-182, P-185
- Cook S S1822-2, S1822-3, S1822-4, S1919-3  
Corbisiero A P-198, P-322, S1841-3  
Cordova M A-349  
Cormio C A-671, P-669, P-674  
Corrado V P-279, P-282  
Correia M A-474  
Corry J A-29, A-394, A-422  
Corsicato N P-520  
Corsini-Munt S P-367  
Cortaredona S A-446  
Cory S W-496  
Costello AJ A-52, A-133  
Cote G A-448  
Couban S S1921-1, S1921-3  
Coucke P A-475  
Couper J A-29, A-394, A-422  
Cousson-Gélie F A-271, A-430, A-455, P-226, P-339, F P-342
- Couture-Lalande M-È P-453  
Creaner M A-440  
Crocker PRE A-480  
Crofts S A-108  
Csaba DL A-3  
Cunha MJ A-493, P-463  
Curran J S1861-2  
Currie KL A-579  
Currie S S1847-1, S1847-2, S1847-3, S1847-4  
Currow D W-36  
Curtin A A-440  
Cwikel J P-519  
Czajkowska Z P-426, P-511
- Dagher A A-213  
D'Agostino N A-50, A-192, P-281, S1841-1, W-346  
Dahman B A-630  
Dalfen R A-622  
D'Alton P A-330, A-431, A-432, A-440  
Daly M A-525, A-595  
Dalzell M-A A-622  
D'Amico C P-669  
Damore-Petingola S S1919-2  
Daneault S A-540  
Daniel J A-108  
Daniels M P-281  
Daoud F S1837-4  
Daryaafzoun M P-725, P-732, P-740  
Das-Munshi J A-481  
Dauchy S S1824-1  
Daugherty C A-595  
Daughterty C A-525  
Davidman K A-310  
Davies B P-198, P-322, S1841-2, S1841-3  
D'Avignon MO P-773  
Davison J P-199  
Davolls S P-106  
Day AMB P-526  
de Albuquerque MS P-93  
de Falco F P-520  
de Figueiredo M A-259  
de Gee A P-433  
de Haes H W-33  
de Heredia CD P-429  
de Jesus Moura M A-474  
de Serres M S1822-2, S1822-3, S1822-4, S1919-4  
De Susbielle D A-181, P-176, P-182, P-185  
Decat CSA A-229, P-218, P-225, P-228  
Deegan J A-184  
DeLaat S P-529  
Delisle V P-736  
Dellson P A-663  
Delvaux N A-272, A-475, A-479, A-578, P-403, P-404, P-441, P-442  
Demirci U P-790  
Dent S P-121  
Deodhar J A-75  
Desai G P-71  
Desauw A A-128  
Desbiens J-F P-53  
Deshields T A-351  
D'Este C S1810-2  
Destrooper P P-417  
Detmar S A-455, P-576  
Devins GM S1832-4, S1842-2, S1843-1, S1843-2, S1843-3  
Dhillon HM A-165, A-660  
Di Dio P W-532, W-715  
Di Mattei V P-668  
Dibaei S A-787  
Dickler M A-510

- Dietmaier G A-695  
Dige J A-253  
Digout C S1847-1, S1847-3, S1847-4  
Dillehunt J A-568  
Dinauer S A-379  
Dintinjana M P-297  
Dintinjana RD P-297  
Distelmans W P-146, P-318, P-319, P-417  
Dodd A A-660  
Dolbeault S A-667, W-678  
Dolcetti R P-255  
Doll R A-712, P-696, S1822-2, S1822-3, S1822-4  
Dolling L A-366, A-383  
Domanska K A-212  
Domingue P A-610  
Dominique L A-504  
Donovan H A-556  
Donovan KA A-188, A-592  
Dorval M A-51, A-623  
Dotor E P-64  
Doumit MAA A-4  
Doyle PC A-303, P-526, P-769  
Drabe N A-324  
Dubé L A-189, A-494  
DuBenske LL A-301, A-379  
Dudgeon P A-383  
Duggal-Beri P S1810-3  
Duggleby W A-88  
Duijts S A-37  
Dumas M A-166  
Dumont S A-85, A-540, P-86, P-183, P-773, S1861-2  
Duncan L A-115  
Duncan V A-88  
Dunn J A-44, A-45, P-43  
DuPont N P-724  
Duprez C A-410  
Dupuis G A-435, A-578  
Durieux J-F A-479  
Durkin L A-358  
Dutta A A-760, P-758  
Earle C A-414  
Easley J A-186, W-152  
Easty T P-367  
Edelstein K P-109, P-281, W-346  
Édery L S1846-1  
Edgar L A-310, A-708  
Edgerson S A-509  
Edlynn E P-698, P-699  
Edward W A-107  
Eelen S P-318, P-319  
Egleston B A-525, A-595  
Ehrler A A-731  
Eisenbruch M S1810-3  
Eiser C A-552  
El Saghir N A-4  
Eliason R P-156  
Eliott J S1836-1  
Ellington L P-472  
Ellis J A-336  
Ellwood A-L P-25  
Elmar B A-313  
Elsaid AA A-24  
Elsass P A-48  
El-Shafei H A-24  
ElShami M A-737  
Emery B W-328  
Endo C P-57, P-90  
Engebretson A A-719  
Engelen V A-455, P-576  
Engler-Stringer R A-591  
Enjedany E P-725, P-732, P-740  
Ercolano E P-658  
Erkek BM P-277  
Ernst J P-203, P-426  
Ersin P-277  
Espilen MJ A-212, A-309, A-623, A-625, A-795, S1847-2, S1861-1, S1861-3  
Etchegary H P-529  
Etienne A-M A-272, A-435, A-475, A-578, P-403, P-404, P-441, P-442  
Evans M P-741, W-904  
Evitts P P-790  
Ewing C A-745  
Ezat M A-737  
Faber A A-494  
Fabre B A-300  
Fairclough D P-322, P-723, S1841-2, S1841-3  
Fairclough DL P-198, P-283  
Fais M A-647  
Fall M A-667  
Fang C-K A-362, P-207, P-286  
Faran Y P-519  
Farkas-Patenaude A P-283  
Farouk M A-24  
Farrell N P-717  
Farvacques C A-479  
Fassbender K A-85, A-712  
Fatolahbeigi F P-750  
Faucher J P-683  
Fay JS P-633  
Feigon M A-595  
Feio M A-608  
Fellows L A-213  
Feng A-C P-123, P-134, P-136, P-514  
Fenn K S1919-3  
Fennell P P-174  
Fergus K P-696, S1910-1, S1921-2, S1921-4  
Ferguson M A-42, A-44, A-45  
Ferguson N S1919-1  
Ferguson S A-340  
Fernandes ML A-608  
Fernandes-Taylor S A-555  
Ferrell B P-701  
Figueiredo AP P-691  
Fillion L A-488, A-540, A-733, P-53, P-631, S1813-2, S1822-2, S1822-3, S1822-4, S1919-4  
Filsinger S A-534, A-538  
Fisher C A-509  
Fitch MI A-309, A-743, A-795, P-696, W-904, S1822-1, S1847-2  
Fitchpatrick C A-655  
Fitzpatrick TR P-17  
Flahault C P-142  
Fleming C A-150  
Fleshner N P-62  
Fletcher J A-368, P-364  
Flood K S1910-3  
Florence C-G P-484  
Florensa A A-411  
Flyger HF A-48  
Folkes A A-469  
Fonseca M A-435  
Forbes JF A-236  
Forbes R A-288  
Fortier M P-183  
Fortin P P-242  
Foster TL P-198, P-322, S1841-2, S1841-3  
Fotheringham J P-646  
Fournier E P-477  
Frechette D P-121  
Freeman E W-507  
Freitas Z W-742  
Fried G S1816-2  
Friedlander M A-357  
Friedsam J A-248  
Fritzsche K A-154, A-210, A-259, P-211  
Fujimori M P-384  
Fulk J A-768  
Fung K A-303  
Fung S P-109  
Funk M A-490  
Furukawa TA P-57, P-90, P-208  
Gagin R S1816-2  
Gagliese L S1924-2, S1924-3  
Gagnon P P-631, P-637, S1813-3  
Galinsky D S1924-3  
Gallagher P A-304, A-312  
Gallhofer G A-730  
Gallinger S A-625  
Gan HK A-167  
Garcia C A-361  
Gardiner RA A-42, A-45  
Garland SN A-299  
Gartshore K A-731  
Gary F A-201  
Gascard G P-291  
Gaudreau J-D P-637  
Gauthier-Frohlick D A-323, A-439  
Gava A P-284  
Gaytan A P-64  
Geffen D P-519  
Gélinas C A-733  
Gensheimer LK P-770  
Gerhardt CA P-283, P-322, P-723, S1841-2, S1841-3  
Gerin-Lajoie C S1820-1  
Gessert A S1910-2, S1910-3

- Gherlinzoni F P-284  
 Ghilardi M P-19, P-20  
 Ghofranipour F P-574  
 Giancarlo I P-279, P-282  
 Gibon A-S A-479  
 Gidron Y A-300  
 Gielissen M A-216  
 Giese-Davis J A-307, A-335, A-344, A-349, S1918-1, S1918-2  
 Giesler JM A-293  
 Gilbert E P-234  
 Gilbert J A-628  
 Gill F A-431  
 Gilles D A-504  
 Gilmer MJ P-198, P-322, S1841-2, S1841-3  
 Gimenez-Roquelo A-P A-260, A-262  
 Ginette M A-504  
 Giorgi I P-548  
 Giovannini L P-256  
 Girgis A A-38, A-101, P-43, P-315, W-36, S1810-1, S1810-2, S1810-3  
 Girouard L A-743  
 Giuliani S P-685  
 Gleeson A P-227  
 Glimelius B A-464  
 Glynn R A-407  
 Goddard S A-108  
 Goedendorp MM A-418  
 Goelz T A-209, A-210, A-259  
 Golant M S1910-2  
 Goldstein DP A-167, S1810-3  
 Goldstein MG P-717  
 Goldzweig G A-606, A-607  
 Gomez E A-612  
 Gorman G P-590, W-533  
 Goswami S A-75  
 Gotto J P-764  
 Götze H A-483  
 Gough K A-366, A-375, A-383  
 Gould J A-768  
 Gould R S1816-3  
 Govindan R A-301  
 Graffigna G P-457  
 Grainger L A-125, A-177, A-178, A-680, P-130, P-179  
 Grassi L A-97, P-255, P-256, P-604, S1808-3, S1829-3, S1916-4  
 Gravelle D S1847-2  
 Gray M A-394, A-422  
 Gray-Donald K A-491  
 Green E A-358, A-628, S1847-1, S1847-2, S1847-3, S1847-4, S1861-1  
 Green HJ A-359  
 Green J A-625  
 Greenberg A W-904  
 Greenfield D A-552  
 Greer G W-788  
 Gregan J A-87, P-173  
 Greig D A-162  
 Grey M A-29  
 Griffiths M A-172  
 Groff S A-647, S1918-1, S1918-2, S1918-3  
 Grogan S A-370  
 Grootenhuis M A-455, P-433, P-437, P-576  
 Gros L P-478  
 Grosman H A-300  
 Grossenbacher JC P-198, P-322  
 Grunfeld E A-469  
 Grutsch J A-135  
 Gsell-Herold G S1846-4  
 Guerra M P-720  
 Guex P W-678  
 Guger S A-50  
 Guilfoyle M A-330  
 Guirguis-Younger M P-183  
 Gulden C A-525  
 Guo SL P-365  
 Guruge S A-77  
 Gustafson DH A-301, A-379  
 Haase K A-196  
 Hachizuka M P-206  
 Hack T A-506, S1847-1, S1847-2, S1847-3, S1847-4  
 Hack TF A-754  
 Hadd V A-480  
 Haggerty M A-184  
 Haines RJ A-571  
 Haines S A-321  
 Hales S W-507, S1924-1, S1924-2, S1924-3  
 Halford K A-45  
 Hamel M W-715, W-767, S1847-2  
 Hamilton R W-152  
 Hammond C A-88, A-645, A-656  
 Hamoline R P-535  
 Hamzelouiyen M P-725, P-732  
 Hancock BW A-552  
 Hanley B A-44  
 Hans I P-314  
 Hansen RS A-712  
 Hansez I P-404  
 Harandi TF P-574  
 Harel F A-85, P-86  
 Harirchi I P-584  
 Harle I A-771  
 Harlos M A-754  
 Harris C S1820-3, S1832-4  
 Harris P A-416  
 Harrison M S1847-1, S1847-3, S1847-4  
 Harrison S A-396  
 Harth T A-682, P-285  
 Hartman M-E A-579  
 Hassard T A-754  
 Hasson-Ohayon I A-606, A-607, S1924-3  
 Hatton-Bauer J A-358, A-682  
 Hauss J A-483  
 Havaladar R A-75  
 Hawkins RP A-301, A-379  
 Hawkins Y P-234  
 Haynes WM A-65  
 Hearson B W-496  
 Heber D S1816-3  
 Hello B A-213  
 Hellström I A-400  
 Henriksson A A-92  
 Hensmans B P-318  
 Herold J A-627  
 Heruc G A-235  
 Hervouet S A-546  
 Hevey D A-528  
 Hewitt L P-710, P-723  
 Hickey M A-357  
 Hirai K P-250, P-380  
 Hirsch P A-184  
 Hirschberger N P-258  
 Hislop G A-122  
 Hlubocky F A-595  
 Hocking A A-370  
 Hodgson D P-109  
 Hoffman L S1847-1, S1847-3, S1847-4  
 Hoffmann M A-84  
 Hogan NS P-198, P-322, S1841-3  
 Hogg D A-579  
 Holland J S1922-1  
 Holloway C A-530  
 Holtlander L A-88  
 Hong Y A-209  
 Hope AJ A-167  
 Horney DJ A-627  
 Horst G W-496  
 Hou Y-C P-123, P-134, P-136, P-514  
 Hounsgaard L P-252  
 Houston D A-349  
 Howard AF A-110, A-111  
 Howell D A-309, P-365, P-735, S1847-1, S1847-2, S1847-3, S1847-4, S2000-3  
 Howells L A-544, S1910-3  
 Howes J S1919-3  
 Höyer M P-320  
 Hsu S-H P-123, P-134, P-136, P-514  
 Hsu YH P-588  
 Hudon É A-540  
 Huet C A-189  
 Hughes E A-628  
 Hughes J S1921-1, S1921-3  
 Huijter HAS A-4  
 Hulbert-Williams NJ A-334, A-341, P-338, P-345  
 Hunt J A-316  
 Hunter J A-623, S1861-1  
 Husain A S1924-2  
 Hussain N A-125, A-177, A-178, A-680, P-179, P-180  
 Hussey K P-187  
 Hutchison S P-43  
 Hvidt NC A-661

- Ibe C A-595  
 Ina R A-313  
 Inada S P-206  
 Ing J A-451, A-470  
 Ingman K P-698, P-699  
 Ingvaldstad C A-237  
 Irish JC S1843-2, S1843-3  
 Ishida H P-380  
 Ishida M P-257  
 Ivers H A-521, A-546,  
 A-621, P-549,  
 P-619  
 Iwase S P-103  
 Izzi G P-413
- Jackman M A-321  
 Jackson C A-439  
 Jacobs E P-318, P-319  
 Jacobs P A-85, P-86  
 Jacobsen PB A-592  
 Janbozorgi M A-787  
 Janes K A-150  
 Jansen A A-613  
 Jayaraman U P-382, P-386  
 Jean-Louis N P-401  
 Jefford M A-381, P-39,  
 S1810-3  
 Jenewein J A-324  
 Jenkins K A-108, A-687  
 Jens E A-313  
 Jesion T A-731  
 Jeunemaitre X A-260, A-262  
 Jevne R S1836-4  
 Jewett M A-579  
 Jian R A-190  
 Jinnai R P-118  
 Johannes B A-107  
 Johannessen-Henry CT A-661  
 Johansen C A-48, A-661,  
 P-267  
 Johansson B A-464, P-320  
 Johnson T P-726  
 Johnston P S1847-2  
 Jolicoeur L P-646  
 Jones B A-655  
 Jones G S1847-1, S1847-3,  
 S1847-4  
 Jones JM A-321, A-682  
 Jonius B P-442  
 Jovell E P-64  
 Juarez G P-701  
 Judith M P-633  
 Julie T-G A-505  
 Juraskova I A-235, A-236,  
 A-370, A-406  
 Jusko-Friedman A A-682  
 Justice H P-78
- Kaal KJ S1841-3  
 Kaimukilwa D P-16  
 Kaimukilwa H P-16  
 Kaliner L A-153  
 Kalman V P-200  
 Kamath J P-570  
 Kanagasundram S P-168  
 Kandasamy A P-71  
 Kandler LS A-2, P-5, P-763  
 Kanter C P-281
- Karanofsky M A-622  
 Karlsen RV P-267  
 Karslioglu EH A-409, P-277  
 Kasapoglu F P-790  
 Katsumata N P-384  
 Katsumata R P-208  
 Katz A W-8  
 Katz J A-771  
 Katz V A-768  
 Kavan P A-622  
 Kaw C S1832-3  
 Kawaguchi T P-103  
 Kaymak SU A-409, P-277  
 Kazanjian A A-712, P-696,  
 S1822-2, S1822-3,  
 S1822-4  
 Kearsley J W-251  
 Keller-Olaman S S1847-2  
 Kelley J A-4  
 Kelly B S1922-2  
 Kennedy K A-500  
 Khalil A A-13, P-82  
 Khalil M A-13  
 Khalil NA A-491  
 Khatib J P-326  
 Kiayi N P-725, P-750  
 Killoran S W-328  
 Kim JJ A-167  
 Kim JM P-389  
 Kim MH P-399, P-402,  
 P-516  
 Kim SW P-389  
 Kim SY P-389  
 Kim Y A-690, A-776,  
 S1816-1  
 Kim-Sing C A-110  
 King L A-687  
 King M S1810-3  
 Kinsella L A-330  
 Kiriike N P-28  
 Kirst M A-77  
 Kissane D A-509, A-510,  
 S1816-5  
 Kitchen-Clarke L W-904  
 Kiyange F A-476  
 Klikovac T P-427  
 Knobf T A-490  
 Koerner A A-743, P-211,  
 P-426, P-511  
 Kogan N A-166  
 Kolva E A-502  
 Komatsu H P-90  
 Kondamudi P A-595  
 Konyen S W-729  
 Koopman H A-455, P-576  
 Kop J-L A-667  
 Kornblith AB A-451, A-470  
 Kornhauser I A-368  
 Kortmann R-D A-483  
 Kowalczyk JR P-711  
 Kowalski K P-535  
 Koyama A P-117, P-118  
 Kraemer H A-344  
 Krajcinovic M A-762  
 Kratt P P-741  
 Krattenmacher T A-694  
 Krawczyk A P-736  
 Krishnasamy M A-370
- Kristjanson L A-754  
 Krzeminski A A-410  
 Kubota K P-384  
 Kumano K P-206  
 Künzler A P-753  
 Kupst MJ P-283  
 Kurchakova MS P-665  
 Kuroda Y P-103  
 Kurokawa M P-206  
 Kuten A S1816-2  
 Kwon SY P-399, P-402,  
 P-516  
 Kwong SSH A-160  
 Kylma J A-88
- Labelle LE P-369, P-597  
 Lacasse Y A-540  
 Lacey J W-251  
 Lafaye A A-271, A-455  
 Lagattolla F A-671, P-669  
 Lahlou-Laforet K A-260, A-262  
 Lai M-L A-362  
 Lai Y-H P-652  
 Lamarque D A-190  
 Lambert S A-38, A-101,  
 S1810-1  
 Lamiani G P-457  
 Lamontagne J P-49  
 Lampic C A-237, P-238,  
 P-320  
 Lang A P-367  
 Lankshear S A-628  
 Lanza A P-548  
 Laperriere N P-109  
 Lapointe J A-51  
 Larkin P P-227  
 Larose C A-439  
 Larsen L P-348  
 Larsson G A-464  
 Larsson YH A-332  
 Last B P-433  
 Latimer S P-472  
 Launoy G A-410  
 Laurence D A-129  
 Lauzier S A-191, A-193,  
 P-702  
 Laverdière C A-681, A-762  
 Lavoie S S1813-2  
 Lawlor L P-369  
 Lawlor-Savage L P-597  
 Lawsin C A-385  
 Lazenby M A-490, P-326  
 Lazzari C P-19, P-20  
 Lazzarotto D A-744  
 Le Bihan A-S A-181, P-176,  
 P-182, P-185  
 Leahy R A-87, P-173  
 Leal I A-157, A-158  
 Lebel S A-358, A-648,  
 A-765, P-453,  
 P-646, P-683,  
 P-727, S1832-4,  
 S1843-2  
 Lecathelinais C S1810-1  
 Lee C-Y P-286  
 Lee J P-696  
 Lee J-H P-207  
 Lee RNF S1843-2, S1843-3

- Lee V P-249, W-532  
Lefebvre M P-646, S1832-4  
Leiberman M S1910-2  
Leis A A-591  
Lem-tayer F A-435  
Lemogne C A-190  
Leon C P-64  
Léonor F A-577  
Lepage L A-439  
Lepore S S1910-2  
Lethborg C A-83  
Leung D A-309, S1813-2  
Leung T A-390  
Leung YCT A-305, A-397, P-395  
Levesque P P-702  
Levin A P-199  
Levin AO A-739  
Levin R A-407  
Levin T A-510  
Levine E A-745  
Levy K S1919-1  
Li I-F P-207  
Li M A-336, A-358  
Li P-Y A-362, P-207  
Liang J-T P-652  
Libert Y A-272, A-479, A-578, A-697, P-403, P-404, P-441, P-442, S1816-4  
Lichtenthal W S1813-1  
Liénard A A-272, A-403, A-475, P-441  
Lieutenant F P-291, P-408  
Lim J-w A-159  
Lin Y P-356  
Linden W A-162, P-199, P-593  
Linerol S P-477  
Lingard L S1845-1  
Lipton JH S1843-1  
Lis C A-135  
Lisa S P-230  
Lissoni P P-15  
Livartowski A A-667  
Livia L-LR A-129  
Lleshi A P-256  
Llewellyn CD A-627  
Llort A P-478  
Lluch J A-411  
Lo C A-614, A-618, W-507, S1924-2, S1924-3  
Lobb E W-251, S1810-3  
Lohman D S1916-1  
Loiselle CG A-191, A-213, A-650, A-722, A-731, A-743, P-249, S1842-1  
Lord K A-275, A-276, P-130, P-270, P-274, P-454, P-573, P-684  
Loscalzo M A-567, A-568, A-596  
Lossignol D P-417  
Lotfi-Jam K A-381, A-383  
Louis A A-579  
Lounsberry J A-299  
Louv DA P-775  
Lowry S P-119  
Lowthian P A-368  
Lu J A-189, A-191  
Lund S A-278  
Luong K P-70  
Lupi S A-608  
Lyu CJ P-399, P-402, P-516  
Ma T A-490  
Mabbott D P-109  
MacEwan L A-439  
MacGregor K P-696, S1910-1  
MacIntyre L W-152  
MacKenzie G A-150, A-160  
Mackenzie K S1919-2  
Madan B A-504  
Madhavan P A-368  
Magri V A-97  
Magrin ME P-670  
Mah K S1843-1, S1843-2, S1843-3  
Maheu C A-77, P-79, P-646  
Maican A P-94  
Makabe R P-27  
Malfitano C A-336  
Mallik SB P-777  
Malova J P-436  
Manabe A P-250, P-380  
Mancini A P-200  
Mancini J A-465  
Manii D S1820-2  
Manly-Lampkin S P-317  
Marc H A-689  
Marchal S A-272, A-479, A-578, P-403, P-441, P-442  
Marchiori P P-15  
Marcoux S A-762  
Marcus BH P-717  
Mareike P A-313  
Marie D S1846-2  
Maroco J A-157, A-158  
Márquez M S1837-1, S1837-2  
Martin M P-741  
Martinho K A-87, P-173  
Marx E S1846-3  
Mason W P-109  
Mather J S1844-1  
Mathieu J S1919-4  
MatosNeto JN P-218  
Matsuda Y P-28  
Matsui T P-28  
Matsunaga H P-28  
Matsuoka H P-117, P-118  
Matthew AG A-579, P-62  
Mattioli V A-671, P-669, P-674  
Maunder R A-336  
Maunsell E A-193, P-702  
Maurice-Stam H P-437  
Mawhinney J W-729  
Mayer C A-439, S1919-2  
Mayo S P-772, S1847-1, S1847-3, S1847-4  
Mazza O A-300  
Mazzei A P-674  
McCaffery K A-406  
McCallum M P-646  
McCarthy N A-236  
McClement SE A-754  
McConnell D P-593  
McCorkle R A-490, P-658, S2000-2  
McDonald M A-518  
McDonough MH A-480  
McDougall A S1845-1  
McElduff P A-642  
McGoldrick D A-184, A-461  
McGrane J S1810-3  
McGrath K A-682  
McGurk M A-627  
McHarg L A-731  
McKeown SB A-571  
McLaughlin M A-768  
McLeod D P-696, S1847-1, S1847-3, S1847-4  
McLeod D S1861-1, S1861-2, S1910-1, S1919-3, S1921-1, S1921-2, S1921-3, S2000-1  
McMahan A A-544  
McMillan M A-439  
McTavish F A-301  
McVey L A-731  
Mead K A-29, A-394, A-422  
Meader N A-126, A-641, P-572, P-643  
Medeiros J A-89  
Meeske K A-768  
Mehta A W-767  
Meijer-van den Bergh E P-437  
Meiser B A-357  
Melchor-Beaupré R S1845-2  
Melissa H P-230, P-633  
Mella S P-255, P-604  
Melnyk T W-704  
Menko F A-612, A-613  
Merckaert I A-272, A-475, A-479, A-578, A-697, P-403, P-404, P-441, P-442, S1816-4  
Mesch V A-300  
Messina G P-15  
Messner HA S1843-1  
Metcalf K A-530, P-716  
Meunier J A-272, P-403, P-441  
Meybodi FA P-725, P-732, P-750  
Michaux G A-84  
Miedema B A-186, P-149, P-187, W-152  
Mignon A A-410  
Mikulincer M P-258  
Mileshkin L A-370  
Milhabet I A-410  
Millar J A-623

Miller F	P-529	Nakaguchi T	P-57	Olsson M	P-444
Milner S	A-44	Nam Y	A-768	Olver I	A-47, S1836-1, S1836-2, S1836-3
Mina DS	P-62	Namkoong K	A-301	O'Malley C	A-431, A-432
Minden M	A-614, A-618	Nandrino J-L	A-128	Omar AM	A-24
Mingoo R	P-605	Nanni MG	A-97	Omer W	S1924-3
Mints M	S1837-1	Nannya Y	P-206	Omidvari S	P-584
Missoten P	A-435	Narabayashi M	P-257	Ong J	P-605
Mitchell AJ	A-125, A-126, A-177, A-178, A-275, A-276, A-641, A-680, P-124, P-130, P-131, P-179, P-180, P-270, P-274, P-454, P-572, P-573, P-643, P-684, P-686	Narciso D	P-255, P-604	Ongania L	P-200
Mitchell D	A-517	Naros S	A-530	Onishi H	P-257
Miyamoto K	P-118	Nasr M	A-737	Oosterwijk J	A-612
Miyazaki N	P-206	Nassar N	A-4	Oppenheim D	S1824-1
Möbius C	A-483	Nattress K	A-235	Osborne R	A-193
Moeller B	A-694	Ndukwe N	A-687	Oster R	P-741
Moffat H	A-490	Neal C	A-184	O'Sullivan B	A-167
Moghrabi A	A-762	Neal R	A-334	O'Sullivan C	P-658
Mohamed S	P-168	Neilson K	A-29, A-394, A-422	O'Sullivan D	A-760, P-758
Moja EA	P-457	Nekolaichuk C	A-329, W-328	Otsuoka M	P-117
Moleri C	P-19, P-20	Nelson F	W-496	Oumima N	A-181, P-176, P-182, P-185
Montanaro R	A-671, P-669, P-674	Neri E	A-307, A-344	Owen J	S1910-2
Montazeri A	P-574, P-584	Néron S	P-611	Ozalp E	A-409, P-277
Monteiro L	A-264	Neto FF	P-498	Ozawa M	P-250, P-380
Montella M	P-520	Netter P	A-730	Ozier D	P-781
Moore C	A-470	Neu J-C	P-738	Özkan M	A-398, S1829-2
Moore CW	A-451	Neves S	A-608	Özkan S	A-398
Mor P	P-66	Neville B	A-414	Pagani L	P-9
Morck A	S2000-1	Ng MHC	P-605	Pailler M	P-726
Moreira S	A-634, P-638	Nicholas D	A-192, S1841-1	Palli C	A-411
Morel E	P-291	Nicholls W	P-338	Panzarella T	P-109
Mori H	P-353	Nicolas V	A-10	Papadakos J	A-682
Moritake H	P-250, P-380	Nicoll I	A-439	Paquet L	P-119, P-121, S1832-4
Morrison D	S1916-3	Niederwieser D	P-203	Park B	A-510
Morrison EJP	P-718	Niki M	P-117, P-118	Park ER	A-451, A-470
Morrison V	A-334	Nilbert M	A-212, A-663	Parkinson M	A-536, P-781
Mortensen S	A-135	Nilsson M	P-444	Pascal A	P-401
Moseley-Giannelli JV	P-593	Ninot G	P-226	Pasquin E	A-744
Moser MT	P-753	Nissim R	A-288	Patenaude AF	P-710, P-723
Motlagh MK	P-740, P-750	Nitkin P	A-536	Pati S	A-91, P-67, P-68
Motta C	P-668	Nolasco C	A-300	Patkau T	S1910-1
Moucheux A	A-479, P-441	Nomizu T	P-27	Patrao I	A-157, A-158, A-474
Muanza T	A-622	Nomura S	P-257	Patrick-Miller L	A-525, A-595
Muller K	A-708	Nonino A	P-218	Patterson H	A-719
Murdock K	A-316	Nordin K	A-237, P-238, P-320	Patterson P	A-246
Múrias R	P-720	Norman P	A-416	Pawlowski K	A-525, A-595
Muriel AC	A-451, A-470	Norris A	A-721	Pearce A	A-246
Murphy L	A-517, A-714	North N	A-108	Pearson A	A-719
Murray E	P-202	North V	A-108	Peate M	A-357
Muthny FA	A-415, A-609	Novy D	A-6	Pedersen A	A-506
Muto K	P-103	Nussbeck F	P-753	Péligier S	A-667
Muzzatti B	P-255, P-256, P-604	Obadia Y	A-446	Pelletier G	A-239, A-299
Mwangi-Powell	F A-476	O'Brien S	W-742	Penberthy L	A-630
Nacinovic AD	P-297	O'Brien T	A-304	Pendlebury S	S1832-2
Nagarathinam C	P-382, P-386	Occhipinti S	A-45, P-43	Pereira JP	A-493, P-463
Naglieri E	P-674	O'Connor R	P-688	Pereira MG	P-551, P-691
Nagumo Y	P-103	O'Donnell E	A-431	Peretti-Watel P	A-446, A-465, A-497
Nakagawa K	P-103	Ogata A	P-250, P-380	Peretz T	P-258
		Ogez D	P-290, P-291	Pérez-Campdepadrós M	P-429, P-478
		Ohtake T	P-27	Perry S	A-74, P-73
		Okamura H	P-659	Perry-Brinkert J	A-462
		Okuyama T	P-57, P-90, P-208	Pertl MM	A-528
		Oldenburg H	A-37	Perz J	P-232, P-233, P-234
		Oliveira M	P-720	Pessin H	A-502
		Oliver J	S1919-1		
		Oliver T	S1847-2		
		Olopade O	A-525, A-595		
		Olsen S	A-351		

- Pestell S A-108  
Peter E A-309  
Peters MEWJ A-418  
Peters O A-650  
Petersen HV A-212  
Petersen LK P-252  
Petersson L-M P-444  
Petit S A-271, A-455  
Petranovic D P-297  
Petrelli F P-19, P-20  
Petrovic K P-364  
Peyrat J-P A-410  
Phillips J A-115  
Picard L A-531  
Picard M A-508  
Piemme K A-307  
Pierre D A-504  
Pina PR A-608  
Pinto BM A-580, P-717  
PintoNeto JV P-218  
Pirbaglou M P-62  
Pires Z A-264  
Pirl W A-451, A-470  
Pisa A P-64  
Pisu M P-741  
Plat-DeKoter T A-361  
Poll M W-244  
Pollard A A-29, A-394, A-422  
Poppito S S1844-3, S1845-3  
Porcino A A-639, A-703  
Porebiak MI P-428, W-145  
Potter P A-351  
Powell R A-406  
Power C A-65  
Power T A-623  
Pratt LM W-715  
Price M A-165  
Prigerson H A-451, A-470  
Prins J A-216  
Pritchard Z W-328  
Prokasheva S P-519  
Proudlove M A-544  
Ptolemy E A-571, P-195  
Pucheu S A-181, P-176, P-182, P-185  
Pugh A S1861-3  
Qi E A-768  
Quaranta T P-668  
Quinlan E P-535  
Raat H P-576  
Radiotis G P-211, P-511  
Radomski J A-502  
Radtke FM P-637  
Radu LM P-445  
Rahim SA P-666  
Rajvanshi A P-261  
Ramakrishnan V P-382, P-386  
Rancourt K A-344  
Rapp E P-285  
Ratti MM P-668  
Rauch PK A-184, A-451, A-470  
Rauf A A-278  
Raymond A-421  
Razak A A-167  
Razavi D A-272, A-475, A-479, A-578, A-697, P-403, P-404, P-417, P-441, P-442, S1816-4, S1928-1  
Reaby L A-236  
Reblin M P-472  
Recchi D P-498  
Rechis R A-184, A-461  
Reece J A-394, A-422  
Regina M A-162  
Regnault A A-662  
Reich M P-477, P-738  
Reiman A P-149  
Remie M W-33  
Remmer J A-310, P-17  
Renata B P-611  
Rennie H S1910-3  
Renton C A-660  
Rey D A-446, A-497  
Rey-Herin D A-465  
Reynaert C A-272, A-475, A-578, P-403, P-404, P-441, P-442  
Rezende SN P-672  
Rhee MA P-399, P-402, P-516  
Ribeiro A A-264  
Richardson A A-278  
Richardson B A-648, A-765  
Richter D P-426  
Rigney M A-719  
Rinehart R A-568  
Ringash J A-167, A-336  
Ritvo P P-62  
Rix BA A-327, A-331  
Rizvi K A-752  
Robaey P A-762  
Robert F S1919-4  
Roberts N P-203, P-511  
Robertson S P-535  
Robinson J A-501, A-647, P-369  
Robinson JW A-114, A-115  
Robinson L A-598, A-599, P-187, P-202, P-449  
Robitaille M-A A-733  
Rochon MG A-759  
Rodin G A-288, A-309, A-321, A-336, A-614, A-618, W-507, S1843-2, S1843-3, S1924-1, S1924-2, S1924-3  
Rodney P A-111  
Roesler C A-154  
Roganovic J P-543  
Rogers HL A-512  
Rogers K A-642  
Rokbani L P-291  
Romanello F P-9  
Romer G A-694  
Romito F A-671, P-669, P-674  
Rosberger Z P-736  
Rose P A-278, A-396  
Rosenfeld B A-502  
Rosenquist R A-237, P-238  
Rosenthal MA A-133  
Rosenzweig M A-556  
Roshanai A A-237, P-238  
Rosin M A-122  
Ross B A-639, A-703  
Rossetto K A-655  
Rosti G P-284  
Roter D P-472  
Roth M A-771  
Rothenmund H A-625  
Rourke S A-660  
Rovelli S A-357  
Rowland W W-904  
Roy M-A P-637  
Roygnan C A-181, P-176, P-182, P-185  
Ruccione K A-768  
Ruebsaat S A-150  
Rusu AI P-445  
Rusu D P-445  
Rutledge R A-598, A-599  
Ryan D A-304, A-312  
Rydall A A-288, A-336, A-614, A-618  
Sábado T P-478  
Sabiston CM A-480, A-491, A-508  
Sabo B A-46, S1921-1, S1921-3  
Sadeghi S P-732  
Saed ML P-445  
Sagawa R P-57, P-90, P-208  
Saita E P-457  
Sakai K P-117  
Sakamoto R P-117  
Sakata N P-103  
Sakura O P-103  
Sala E A-411  
Salley C P-710, P-723  
Salvador P P-735  
Samardakiewicz ME P-711  
Samonigg H A-695, P-679  
Sample S W-487  
Sanders S A-768  
Sanderson C W-251  
Sands C A-525, A-595  
Sanson-Fisher R A-366, A-375, A-534, A-538  
Santiago SM A-676, P-93, P-498, P-672  
Sarno L P-668, P-685  
Sasaki Y P-257  
Sasso LD A-744  
Saunders C A-357  
Savage B A-278  
Savard J A-521, A-546, A-621, P-314, P-549, P-619, S1832-1, S1832-4  
Savard M-H P-549  
Sawka C A-628  
Scaillet P A-475  
Scheer R A-461  
Schimmer A A-614, A-618

Schmidheiser H	A-525, A-595	Shun S-C	P-652	Streich G	P-200
Schmidt R	P-426	Sibbritt D	A-26	Strohschein FJ	A-722, A-731
Schneiderman G	S1841-1	Siddons HM	A-52, A-133	Strowbridge R	A-568
Schoene S	A-730	Simard J	A-51	Stubenrauch S	A-209, A-259
Schofield P	A-366, A-370, A-375, A-381, A-383, P-39, S1810-3	Simard S	A-540, S1832-1, S1832-4	Stuckless N	A-625
Scholten L	P-433	Siminoff LA	A-512, A-630	Subramanian KK	P-382, P-386
Schorn PW	P-225	Simondi C	A-667	Sullivan K	A-571
Schover L	A-45	Simpson J	S1847-1, S1847-3, S1847-4	Sultan S	A-577, A-662, P-142, P-226, P-550
Schrauwen W	P-318	Sinardo H	A-705, A-707	Summers A	A-623
Schröder C	P-203	Singer S	A-481, A-483	Sun V	P-701
Schryer C	S1845-1	Singh A	P-94	Sundquist K	A-38, A-101, P-232, P-234
Schuermeyer I	P-94	Siu LL	A-167	Susanne B	A-313
Schuler T	P-241	Skoko-Poljak D	P-543	Suzuki S	P-250
Schulte F	P-132	Slachmuylder J-L	A-272, A-479, P-403, P-442	Suzuki S-i	P-380
Schultz IZ	A-536	Slavish K	A-556	Swendsen J	A-271
Schulz C	A-768	Smith B	A-236	Swinton N	S1847-2
Schulz R	A-776	Smith D	A-29, A-394, A-422, A-568	Sylvain N	P-633
Schuurs A	A-359	Smith HE	A-627	Sylvie A	P-620, P-633
Schwartz F	A-682	Smith SJ	A-757	Sylvie D	A-129, A-577
Schweidtmann W	A-609	Soares P	A-608	Syme A	S1847-2, S1919-1
Scoccia E	P-548	Song H	A-768	Symonds P	A-125, A-177, A-178, A-275, A-276, A-680, P-124, P-130, P-179, P-270, P-274, P-454, P-573, P-684
Scignaro M	P-670	Song L	A-209		S1810-3
Seccareccia D	A-21	Song X	P-121		
Secombe M	A-236	Sonia M	A-505		
Seckin G	A-425	Sonkusare L	A-75		
Secord S	A-77	Soubeyran P	P-226		
Sedda A-L	P-738	Soussan PB	P-170	Sze M	
Seibaek L	P-252	Soygur H	A-409, P-277		
Sellick SM	A-2, P-5, P-763	Specu M	P-696, W-487, S1910-1		
Semotiuk K	A-623, A-625	Spezeski J	A-719	Tabori U	P-109
Semple J	A-530	Spica L	A-497	Tachble A	P-356
Seror V	A-446, A-465	Spiegel D	A-307, A-344, A-349	Tait GR	S1845-1
Serpentini S	A-744	Spiegler B	P-109	Takahashi T	P-206
Serra E	P-200	Spillers R	A-690, S1816-1, S1832-3	Takei Y	P-250, P-380
Serrano E	S1919-1	Spitz E	A-435	Takimoto Y	P-206
Servent V	P-477	Spriggs P	P-535	Tamagawa R	A-307
Setoguchi S	A-407	Stacey A-M	S1847-2	Tamim N	P-611
Sévigny A	P-183	Stacey F	S1810-1	Tang D	A-213
Shaddick H	A-361	Staines A	P-688	Tang L	A-209
Shaheed J	A-192	Stajduhar K	P-367	Tang W-R	A-141
Shallwani S	A-622	Stanzer S	P-679	Tanguy L	P-401
Shanahan K	P-724	Star P	A-349	Tannenbaum S	P-570
Sharkey K	A-370, A-383	Stefano C	P-279, P-282	Tannock I	A-660
Sharon B	P-633	Stein K	P-352, W-788, S1832-3	Tarabrina NV	P-665
Sharp R	P-94	Stephan J	S1847-3	Tarcatu D	S1844-2
Sharpe E	P-449	Stephane C	P-401	Tardif F	P-631
Sharpe K	P-352	Stephen J	A-518, P-696, S1910-1, S1910-2	Tardivon A	A-667
Sharpe L	A-385	Stephens A	P-1	Tatemichi S	P-149
Shaw RM	A-247, P-482	Stern M	P-545, W-547	Taylor B	A-307
Shearer E	P-95	Stewart S	A-603	Taylor N	A-623
Shepherd HL	A-165	Stiggelbout A	A-612, A-613	Taylor P	P-23, W-22
Shepherd S	P-106	Stoel R	A-612	Taylor-Brown	J A-534, A-538, P-696, S1910-1
Sherman D	P-53	Stokes J	A-625	Té V	P-611
Sherman ML	P-770	Stone A	P-281	Teixeira RJ	P-551
Shickle L	A-630	Stoner J	A-721	Terán L	S1837-2
Shih S-M	A-127, P-123, P-136, P-514	St-Onge M	W-692	Ternstedt B-M	A-92, A-400
Shimizu K	P-58, P-575	Storey L	A-341	Tettero I	A-12
Shin IS	P-389	Strada EA	S1808-4, S1813-4	Teucher U	A-645, A-656
Shin MJ	P-399, P-402	Strauser D	A-760, P-758	Thalén-Lindstrom A	A-464
Shin YJ	P-399, P-402, P-516			Theuns P	P-146
Shino EN	P-775			Thewes B	A-357, P-315, S1832-2
Shirai Y	P-384			Thibodeau K	W-767
Shulman J	P-590				

- Thomas BC A-115, A-239, A-647, P-356, S1918-3
- Thomas D P-251
- Thomas-MacLean R P-482, P-535
- Thompson A S1841-3
- Thompson D A-18
- Thompson S P-360
- Thornton LM A-739
- Thygesen LC A-661
- Tibben A A-612, A-613
- Tirelli U P-256
- Tobi K P-633
- Tochihara K P-118
- Tomasello P P-9
- Tomlinson G P-62
- Tondo MJ P-558
- Toner B A-795
- Toomey M P-513
- Tourigny A A-540, P-183
- Toyama T P-57
- Trachtenberg J A-579, P-62
- Trachtenberg L A-336, A-579
- Tracy M P-25
- Trancar K P-468
- Trauer T A-29
- Travado L P-263, S1916-5
- Tremblay A S1919-4
- Tresoldi V P-19, P-20
- Trinkaus K A-351
- Tripp J A-415
- Trojano V A-671, P-669
- Truant T A-639, A-703
- Truchon M A-733
- Trucotte V A-85
- Trudel-Fitzgerald C P-314
- Tsuchiya M P-118
- Tupholme T A-266, A-499
- Turcotte V P-86
- Turnbull G A-358, A-361, A-682
- Turner C P-283
- Turner D A-396, A-534, A-538
- Turner J P-43, P-696, S1910-1
- Twardowski P P-701
- Twirbutt S A-307
- Tyson E P-113
- Tzairy E P-73
- Uchida M P-57
- Uchino B P-472
- Uchitomi Y P-58, P-384, P-575
- Ueda R P-90
- Ueno K P-659
- Ugalde A A-366, A-375
- Urowitz S A-340
- Urquhart R A-469
- Ussher J P-232, P-233, P-234
- Vachon M A-488, S1813-2
- Vahdaninia M P-584
- Vakilha M A-167
- Vale C A-264
- Vallentine P A-248
- Valteau-Couanet D S1824-1
- Van Asperen C A-612
- van Beurden M A-37
- van de Wetering M P-576
- van den Berg S A-216
- van der Linden M W-33
- van der Zanden R P-433
- van Dijk A P-437
- van Haaften J A-439
- Van Houtte P A-475
- Van Slyck M P-545, W-547
- van Vlact T P-149
- van Vliet LM P-254
- Vanderlinden L P-318
- Vanlemmens L P-477
- Vannatta K P-198, P-283, P-322, P-710, P-723, S1841-2, S1841-3
- Vardy J A-660
- Vegni E P-457
- Veillette A-M S1822-3, S1822-4
- Vennin P A-410, P-477
- Verhagen CAH A-418
- Verhoef M A-639, A-703
- Verma S P-119, P-121, S1832-4
- Veronique C P-401
- Verreault R A-540
- Verzelen A P-318
- Vézina L A-540
- Viel A P-255
- Viellette A-M S1822-2
- Vignola V P-413
- Viladrich C A-411
- Vilela L P-223
- Villa J A-621
- Villalba MB P-200
- Villaroel J A-719
- Villars P P-352
- Vinajeras Y A-655
- Vodermaier A A-162, A-164
- Vodolazsky N A-84
- Volker D A-655
- Volpe J A-192
- Vong S A-745
- Vos J A-612, A-613
- Vrijmoet-Wiersma J P-437
- Wada M P-257
- Wada T P-257
- Wade T A-26
- Wagner B P-25
- Wagner S A-760, P-758
- Wain G P-232, P-233
- Waldron JN A-167
- Walker LM A-114, A-115
- Walker TL A-739
- Waller A W-36
- Walton T A-682
- Wang G-L P-123, P-134, P-136, P-514
- Wang L A-167
- Wang S A-534, A-538
- Warde P A-579
- Warnick A W-116
- Wassersug R A-115
- Watson E A-278, A-396
- Watson M P-106
- Weber M A-768, P-25
- Wein S A-74
- Weinberger M S1922-3
- Weinman J A-627
- Weis J A-293
- Weiss E S1910-2
- Wellisch D S1816-3
- Wenham RM A-188
- Wennman-Larsen A P-444
- Whelan J A-664
- White A P-119
- White K A-246
- White M S1861-2
- White S A-316
- White W A-108
- Whitford H A-47, S1836-2
- Wiener L S1824-2
- Wilczek B S1837-1, S1837-2
- Wild R A-603
- Wiljer D A-340, A-743
- Wilkinson C A-334
- Williams A A-88, P-367
- Williams S A-334
- Wilson B A-623, P-529
- Wilson K A-341, A-500
- Wilson S A-278
- Wilson-Smith D P-345
- Winokur A P-570
- Wirga M W-677, W-780
- Wirsching M A-154, A-210, A-259
- Withers R A-336
- Wittenberg L A-349
- Wittmann L A-324
- Witzigmann H A-483
- Wolfgang L P-164
- Won SC P-399, P-402, P-516
- Wong A A-760, P-758
- Wong AYM S1843-1, S1843-2, S1843-3
- Wong J A-212, A-623, A-625, S1861-1, S1861-3
- Wong M A-639, A-703
- Wong R A-288
- Wong WKT P-232
- Wong-Kim E A-785
- Wong TWK P-233, P-234
- Wootten A A-52
- Wootten AC A-133
- Wormsbecker T A-239
- Wright S A-304, A-312, P-688
- Wu S P-241
- Wuensch A A-154, A-209, A-210, A-259
- Wurl A P-726
- Würtzen H A-48
- Wynn JD W-60
- Xenocostas A S1843-1
- Xiong L A-768
- Xu W A-579, A-660
- Yamaguchi T P-103
- Yamashita H P-57
- Yan A P-423
- Yang Y-C A-362
- Yates P S1810-3

Yeates K	P-710, P-723	Zabora JR	A-153	Zidan J	A-61
Yeh K-H	P-652	Zaider T	S1816-5	Zimmerman C	A-336
Yeoung K	P-70	Zainal NZ	P-168, P-666	Zimmermann C	A-288, A-614,
Yi J	P-70	Zamanian H	P-740, P-750		A-618, S1924-1,
Yoo G	A-745	Zanchetta M	A-77		S1924-2, S1924-3
Yoon JS	P-389	Zanetti R	A-107	Zindel A	P-753
Yoshiuchi K	P-206	Zarpellon F	A-744	Zizzetti S	A-744
You DS		Zeev R	P-611, P-620,	Zloklikovits S	P-679
You-Harada C	A-181, P-176,		P-633	Znoj HJ	P-753
	P-182, P-185	Zevon M	P-724	Zorbas H	A-357
Young J	P-39	Zhang H	A-209	Zozaya C	P-339, P-342
Yue K	S1919-1	Zhang L	A-122	Zucca A	A-248, S1810-2
Yutsis M	A-307,	Zhang W	P-570	Zupko B	A-707
	A-349	Zhang Y	A-209	Zwahlen D	A-324