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Developing inter-professional learning: Tactics, teamwork and talk

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Summary Teamwork and collaboration between all health professionals results in high quality clinical care, and increased job satisfaction for staff. Encouraging inter-professional learning (IPL) may be advantageous in developing more effective teams. There is little rigorous research in this area, but many small uncontrolled studies do demonstrate positive results. IPL involves structured learning opportunities that enhance problem-solving abilities and conflict resolution. It should be clearly differentiated from shared teaching (or multidisciplinary/multiprofessional learning), where common content is taught to many professions without any intention to develop interaction. To counteract the sometimes negative attitudes in both students and staff, educators need to commence IPL early in the programme, base it in both theoretical and clinical placements and ensure that it is valued and assessed. Difficulties with timetabling and accommodation need to be solved prior to commencement. A facilitator should be employed, and a team of committed lecturers developed, with an emphasis on teamwork and the discouragement of individualism. Opportunities for student interaction and ways of improving group dynamics within non-threatening learning environments should to be sought, and instances of conflict embraced and resolved. Future IPL programmes should be rigorously evaluated and may demonstrate enhanced inter-professional relationships and improved quality of patient/client care.
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Introduction

To ensure high quality outcomes of clinical care, teamwork and collaboration between all health professionals is essential (Payne and King, 1998; Chaboyer and Patterson, 2001; McPherson et al., 2001), as patient or client care given by any one professional on their own can never be as good as care given by a full team. Health care professionals, who understand each others' roles and can work effectively together, have been shown to provide higher quality care (Barnsteiner et al., 2007). In addition, members of efficient and collaborative

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teams experience higher levels of job satisfaction (Chaboyer and Patterson, 2001; Dechario-Marino et al., 2001).

Given these findings, we need to examine how best to prepare health care professional students for effective teamwork. Intuitively, one would surmise that encouraging all health professionals to learn together would be advantageous in developing more effective teams, with proven benefits for patients, clients and staff alike. However, there is little hard evidence to show that the immense effort that goes into developing inter-professional programmes actually has any effect. The plea for an increase in inter-professional education, practice and research is an international issue, with one review (Lavin et al., 2001) identifying 51 articles from across the globe that contribute to this debate. The first Cochrane systematic review on the topic (Zwarenstein et al., 2001), found 89 studies that examined this area, but none were sufficiently rigorous to demonstrate any significant impact of inter-professional learning (IPL) on either health care outcomes or practice. One year later the review was updated (Reeves, 2001), and six more studies were found that could be included; however, the results were variable. In 2008, the review was updated again (Reeves et al., 2008), with no further studies of a suitable quality added, which is an interesting finding given the number of published papers in the last decade describing initiatives world-wide in IPL. As there is still insufficient evidence to support or refute the recommendation to use IPL, we must fall back upon our intuition and the results of many small, uncontrolled studies.

Certainly, there are a number of committed academics and organisations that believe firmly in the benefits of IPL. The National League for Nursing (NLN) in the United States of America (USA) is one such organisation, that states that if people are going to practise together when qualified, they should be educated together also, so that they realise their common goals (National League for Nursing, 1998). They have delineated a package of core content for shared learning among all health care professionals that includes: behavioural sciences, community health, death and dying, health informatics, nutrition, ethics, interpersonal communication skills, teamwork skills and professionalism (National League for Nursing, 1998). This is helpful, not only as a guide to topics that may be taught, but also because it provides a list of issues that will give beneficial discussion opportunities for students, which is useful for exposing them to the attitudes and opinions of a wide variety of other people, from different professional backgrounds.

Shared teaching or shared learning?

It is important to differentiate between shared teaching and shared learning, as the two stem from a very different ethos. Shared teaching, (or multidisciplinary/multiprofessional learning), is the teaching of common content to a number of professions, usually in a large group, without any intention to develop teamwork or interaction (Barr, 2001). It is an arrangement usually entered into for economic rather than sound educational reasons (Horsburgh et al., 2001) and may not provide any appreciable benefits (Singleton and Green-Hernandez, 1998). At worst, if there is no class discussion and the students arrive and leave together in their own discipline-specific groups, they will not even meet or become familiar with the other student groups.

Shared learning is true inter-professional learning, which involves a structured learning process with planned learning opportunities that enhance team working skills, including problem-solving abilities and conflict resolution (Cooper et al., 2001). The aim has been described as ''to develop adaptable, flexible, collaborative team workers with high level interpersonal skills, who understand the contribution each health profession makes to patient and health outcomes'' (Horsburgh et al., 2001, p. 877). Because of this, the emphasis is not so much on learning topics such as biological sciences or health promotion, but on developing teamwork and problem-solving skills, and the focus should be on this objective from the commencement of the programme (Horsburgh et al., 2001).

Development and evaluation of inter-professional learning programmes

Despite the fact that there is little or no robust evidence to show that inter-professional education is effective (Cooper et al., 2001; Reeves et al., 2008) the consensus view of academics world-wide appears to be that it should be encouraged (Atkins and Walsh, 1997; Barr et al., 1999; Jiffry, 2002; Clinton et al., 2006). Pilot programmes have been introduced in the USA (Buck et al., 1999; Rodehorst et al., 2005; Selle et al., 2008), Canada (Banks and Janke, 1998; Kearney, 2008), Australia (Copley et al., 2007; Braithwaite et al., 2007), Sweden (Hylin et al., 2007), South Africa (Olckers et al., 2007) and the United Kingdom (Carpenter, 1995; Reeves and Pryce, 1998; Salmon and Jones, 2001; Ker et al., 2003; Watts et al., 2007). The results of most of these initiatives are positive but, unfortu-

nately, most programmes are not introduced within the context of a randomised, controlled trial. The majority of 'evaluations' conducted are at the very basic level of appraising the reaction of students and/or staff to IPL with, sometimes, an evaluation of students' learning. These types of assessment are at the two foundation levels of evaluation (Fig. 1) and do not really estimate the full potential of IPL (Cooper et al., 2001). Cooper et al explain how one needs to evaluate students' behaviour in the practice areas, to demonstrate whether or not a transfer of learning into practice has taken place (Cooper et al., 2001). This is probably the minimum level of evaluation that should occur, and to measure the full effect of IPL one should, preferably, evaluate the effect that these students have on the practice environment (Fig. 1), and, by extension, on the quality of patient/client care.

A number of challenges to IPL have been noted, mainly centered around negative attitudes in both students and staff, which are present in some students as early as their first year (Carpenter, 1995; Singleton and Green-Hernandez, 1998; Parsell and Bligh, 1998). In particular, it is difficult to overcome pre-existing role stereotypes (Nisbet et al., 2008) as students arrive with preconceived ideas about the other professions (Hean et al., 2006). Regardless of their own discipline, all health care students regard doctors as having an ascendant role over all other health care professionals (Horsburgh et al., 2001).

In general, IPL is seen in the literature as a positive intervention, with no literature demonstrating very negative results (Reeves et al., 2008), and it does make intuitive sense. It is, however, a complex activity that takes considerable time and energy (Lindquist and Reeves, 2007), and tends to require more small group learning, which can be resource-intensive (Cullen et al., 2003; Ahluwalia et al., 2005). Certainly more rigorous research is needed, but in the meantime we need to examine how we can achieve successful inter-professional learning, which requires preliminary work, and considerable diplomacy, to ensure success. An analysis of the literature on IPL seems to indicate

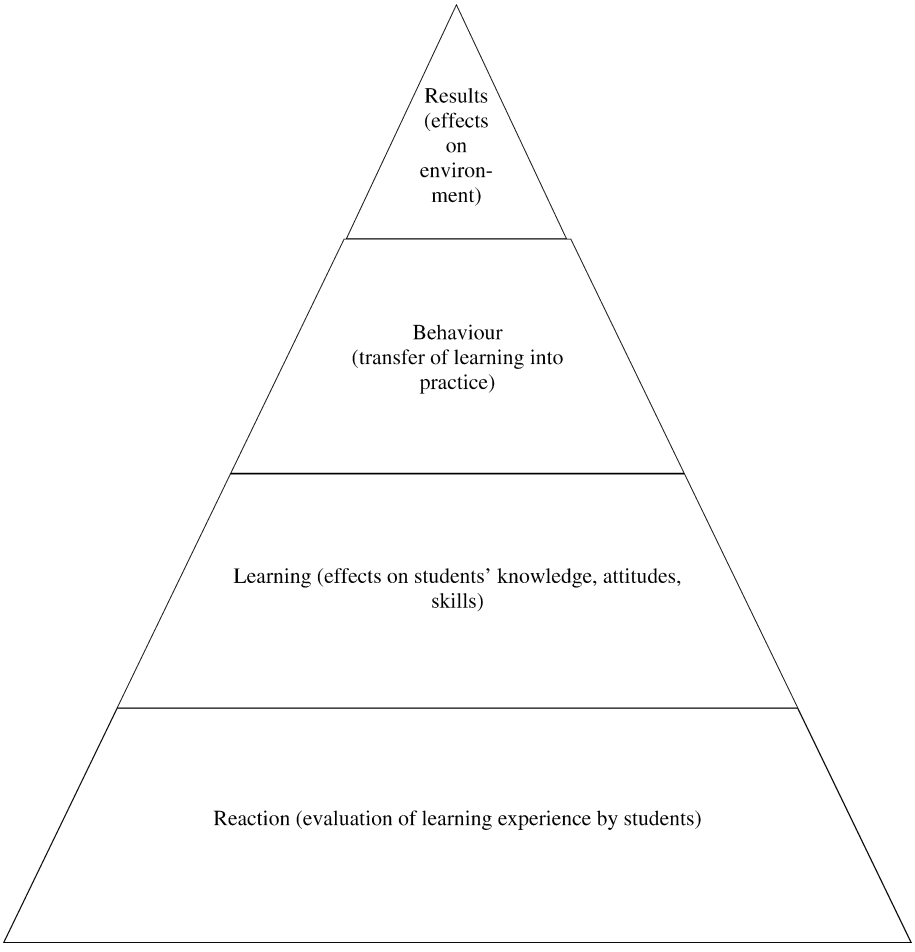

Fig. 1 Evaluation of inter-professional shared learning in health care (developed from Cooper et al., 2001).

three areas under which preparation for, and strategies for overcoming resistance to, inter-professional working and learning need to be considered: tactics, teamwork and talk.

Tactics

Commence inter-professional learning early in the programme

It has been suggested that IPL is not successful until the later stages of the programme, when each health care student fully understands their role (Mariano, 1999). That is an understandable view, and certainly most role-play situations, team problem-solving or discussion of intricate inter-professional clinical scenarios are best left until the more senior years. It is important, though, to introduce collaborative working early in first year (Parsell et al., 1998), while teaching more practical topics (Ker et al., 2003), in order for students to develop positive attitudes towards each other before they become inflexible in their own professional identity. At this time they are most open to learning together (Cooper et al., 2005; Coster et al., 2008) and have more positive attitudes towards their own and other professional groups (Hind et al., 2003). Of all the health professions, nursing students are the ones most open to IPL (Russell et al., 2006; Curran et al., 2007), and females (Pollard et al., 2006; Curran et al., 2007) tend to be more open to IPL than males. In particular, the attitudes of medical students towards other health professionals have become entrenched by the time they reach their final year (Barrington et al., 1998), so early learning together is essential (Hall and Weaver, 2001).

Ensure that inter-professional learning is valued

IPL should be a compulsory, standard part of the health professionals' programme, otherwise it will not be valued by students (Cooper et al., 2005). In addition, IPL should be assessed in same way, and with equal weighting, as discipline-specific education (Reeves et al., 2007), as students are motivated strongly by examinations and assessments (Reid et al., 2007).

Meet students' short-term learning needs

Usually, health care students are inspired and stimulated by taking part in patient/client care (Sathishkumar et al., 2007), so it makes good sense to base IPL in clinical placements (Anderson et al., 2006; Lloyd-Jones et al., 2007; Jung et al., 2008) or simulated clinical environments (Freeth and Nicol, 1998; Freeth et al., 2001; Reeves et al., 2002; Ker et al., 2003). Such exposure to the working of a collaborative team, even in a simulated setting, is beneficial in developing and sustaining a more inclusive attitude in health professionals (Morison and Jenkins, 2007). Role modelling demonstrated by academic staff within these situations also assists students to learn (Selle et al., 2008).

Teamwork

Meet the challenges

There are many technical and administrative challenges to overcome in organising IPL, especially when a number of disciplines are included (Parsell et al., 1998). Usually large cohorts are involved, with differing accreditation requirements, so that discussion is often necessary to reach a consensus or compromise view of suitable shared course content. Timetabling can be difficult, and there is usually a lack of suitable facilities to teach large groups together and the numerous small groups separately (Pirrie et al., 1998). These challenges need to be identified early, and suitable arrangements made in advance of commencing IPL initiatives, otherwise they may fail.

Involve committed people

For IPL to succeed, there needs to be commitment from senior management as support and facilitation are key to success. Committed, enthusiastic staff who stay in the organisation are also essential to maintain the impetus of the programme (Freeth, 2001).

Employ a facilitator

A permanent facilitator, who understands group learning theories and has experience of working inter-professionally, is needed to co-ordinate the initiative. They should understand the issues relating to practice in each of the health professions involved, and have the confidence to teach an inter-professional group (Holland, 2002). To encourage and support IPL initiatives throughout clinical placements, facilitators may also be required in the practice area (Armitage et al., 2008). Facilitators must be prepared well for their

post (Connor and Rees, 1997; Mhaolrúnaigh and Clifford, 1998), and there should be ongoing support provided for this very challenging position (Lindquist and Reeves, 2007).

Develop your team

There are two teams involved here: the team of lecturers that organise and teach on the IPL programme, and the team of students that learn together. Teamwork skills will need to be developed in lecturers from all disciplines (Hammick et al., 2007), and opportunities for collaboration and interaction facilitated. Students will need to be formed into teams that will be together for all activities in each year, to maximize interactive learning (Hart and Fletcher, 1999).

Discourage individualism

Although it is commendable, of course, to promote the corporate identity of each individual specialism, and every student needs to understand and appreciate their own discipline and its special contribution to health care, excessive partisan behaviour should be opposed. Many health care professionals exhibit a self-righteous manner and believe that they, and they alone, have the client's best interest at heart (Miller et al., 1997; Stapleton, 1998), and this attitude needs to be discouraged.

Talk

Improve the learning environment

A non-threatening learning environment should be created, to encourage inter-professional communication and to build confidence (Godson et al., 2007), as students who feel embarrassed or nervous will not contribute to discussions. Using an interactive style, giving high quality feedback and preserving a positive culture in the learning environment all enhance learning (Victoroff and Hogan, 2006).

Increase student interaction

Collaborative working implies that team members are interdependent, and have mutual respect and trust (Begley, 2003), which requires good communication (Barnsteiner et al., 2007). Opportunities for student interaction should be increased (Reeves et al., 2007) by providing self-directed learning opportunities, exchange-based seminar discussions and simulation-based learning (Reeves and Freeth, 2002; Birch et al., 2007). E-learning and video conferencing can be used to maintain contact between established teams of students when, for example, clinical placements dictate that they cannot meet face-to-face (Farrell, 2005). Problem-based learning is an ideal way of involving all students (Bruhn, 1992, Makaram, 1995), and has the added advantage of simulating real problem-solving activities in future health care teams.

Improve group dynamics

The dynamics of the group need to be addressed (Reeves et al., 2007) by ensuring a balanced mix of professionals, to prevent any larger professional group dominating (Pryce and Reeves, 1997). In particular, an even mix in each group of females and nursing students, who have been shown to be most open to IPL (Russell et al., 2006; Pollard et al., 2006; Curran et al., 2007), will help the group's positive attitude towards IPL. Similarly, each group should have even numbers of medical students, as they tend to be more negatively disposed towards other disciplines (Barrington et al., 1998). For effective learning, group sizes of 5—10 learners are recommended (Oandasan and Reeves, 2005); however, it is acknowledged that this may not be cost-effective except for teaching topics such as manual handling or cardio-pulmonary resuscitation, when small groups are essential.

Once established, it is helpful to keep group turnover to the minimum each year, to increase stability (Reeves et al., 2007), while still introducing some rotation of individuals on an annual basis. Such organisation requires effective timetabling (Oandasan and Reeves, 2005), and adequate resources need to be identified for this.

Embrace and resolve conflict

Susan Gerke, from IBM, maintains that ''Conflict is inevitable in a team . . . in fact, to achieve synergistic solutions, a variety of ideas and approaches are needed. These are the ingredients for conflict.'' (Teambuildingportal, 2008, p. 1). It does make intuitive sense that, if you employ critical, well-educated, intelligent people whom you have taught to be assertive and challenging for the good of patient/client care, there will be conflicts between them, and that is to be celebrated and encouraged. Conflict in health care teams is usually dealt with by avoidance, forcing one point of view over another, or negotiation by the less powerful party (Skjørshammer, 2001), none of which are

positive ways of dealing with conflict. The salient point is to be aware that inter-professional conflict between learners will happen, as it does in the clinical setting, and to be prepared for and work to resolve it (Hall and Weaver, 2001). It should be noted that using problem-based learning methods results in students with improved conflict-resolution skills (Seren and Ustun, 2008).

Conclusion: moving towards successful inter-professional learning

The literature demonstrates insufficient research to provide a convincing argument either for or against inter-professional learning. However, given the world-wide involvement in this technique, it would appear to be an educational development that should be encouraged. To facilitate this, the motivational tactics, ideas for development and maintenance of teamwork and good communication skills within the teams described above will, coupled with enthusiasm from you, the readers of this paper, result in the development of more IPL programmes. Evaluations of these programmes should demonstrate whether or not a transfer of learning into practice has taken place and, preferably, evaluate the effect that students prepared in this manner have on the practice environment and/or on the quality of patient/client care. Such evaluations need to be conducted within the context of properly-controlled studies so that, following meta-analysis of all rigorous research in the next Cochrane update, clear guidance on this topic can be provided for educators. Development of shared, high quality educational initiatives such as these may result in enhanced inter-professional relationships and improved quality of patient/client care in the future.

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