



A contextual clinical assessment for student midwives in Ireland



Agnes Phelan ^{a,*}, Rhona O Connell ^a, Margaret Murphy ^a, Geri McLoughlin ^a, Olive Long ^b

^a School of Nursing and Midwifery, Brookfield Health Sciences Complex, University College Cork, Cork, Ireland

^b Cork University Maternity Hospital Wilton, Cork, Ireland

ARTICLE INFO

Article history:
Accepted 24 October 2013

Keywords:
clinical assessment
midwifery education
OSCE

SUMMARY

Newly qualified midwives are required to be competent, safe practitioners providing high standards of care for mothers and babies. The role of educators is to teach for a sense of salience to enable students to meet this challenge with confidence and competence and to develop clinical reasoning skills. The difficulties of formulating an assessment that captures all these elements is challenging for all involved in midwifery education. Although the Objective Structured Clinical Skills Examination (OSCE) is a useful format for assessing aspects of practice, it does not capture the students' simultaneous interaction with a woman and her baby while performing routine care where a variety of issues can be assessed in a contextual way. In University College Cork, a clinical assessment has been developed whereby students perform an aspect of clinical care followed by a low-fidelity simulated pregnancy complication or emergency appropriate to the student's level of learning. The students demonstrate their level of knowledge and skills in a contextual environment. Assessment in practice is challenging for midwives and educators but is essential in determining fitness for entry into the profession.

© 2013 Elsevier Ltd. All rights reserved.

Introduction

Midwifery in Ireland is a graduate profession having been fully integrated into the university sector in 2006. Six universities and one institute of education offer two midwifery programmes; a 4-year BSc (Hons) Midwifery and an 18-month Higher Diploma in Midwifery for Registered General Nurses. The increasing demands within the maternity services has challenged midwife educators and their clinical colleagues to provide quality learning that bridges the theoretical knowledge acquired with the realities of midwifery practice. It is inevitable that knowledge and skills acquired in classroom settings will be recontextualised by students in practice settings (Allen and Smith, 2007). Understanding the complexities of practice is essential as students move towards achieving competency but it is also recognised that professionals are frequently required to act, perform, and to practice in situations where they have insufficient understanding of the clinical situation (Shulman, 2005). For students, understanding of midwifery practice is an evolving process.

A strategy that seeks to address this problem is a Summative Clinical Assessment combined with an OSCE, which is undertaken at the end of each year of the programme. This contextual assessment provides an opportunity to assess students in the environment where they are expected to perform. Through this contextual clinical assessment, knowledge, skills, communication and clinical reasoning are assessed at a single performance.

* Corresponding author at: BSc Midwifery Coordinator, Brookfield Health Sciences Complex, University College Cork.

E-mail addresses: agnes.phelan@ucc.ie (A. Phelan), r.oconnell@ucc.ie (R. O Connell), mgt.murphy@ucc.ie (M. Murphy), G.McLoughlin@ucc.ie (G. McLoughlin), Olive.Long@hse.ie (O. Long).

Teaching for Professional Practice

In considering the challenges of contemporary health care, Benner et al. (2010) recommend that educators foster student learning through the integration of clinical and classroom teaching. Vitello-Cicciu (2010), in reviewing Benner et al.'s, (2010) work, suggests that educators emphasise teaching for a sense of salience, with the application of practical knowledge and skills in the context where the student is expected to perform. Teaching for a sense of salience requires the student to develop clinical reasoning skills, which involves multiple ways of thinking alongside the development of a professional identity (Vitello-Cicciu, 2010).

Shulman (2005, p. 52) used the term *signature pedagogies* to describe the unique way in which various professions prepare students for entry into their professions. This essentially involves preparing students to think, perform and act with integrity as a professional (Shulman, 2005, p. 52). Signature pedagogies reflect the culture within a profession and characterise the way in which professional knowledge is analysed, criticised, accepted or discarded (Shulman, 2005, p.54). For midwifery, signature pedagogies give the student and the novice an idea of what it is to be a midwife and prepares them for the realities of their future role as a Registered Midwife.

Signature pedagogies for midwifery require educators to consider surface, deep and implicit structures (Shulman, 2005, pp. 54–55) of what it is to be a midwife. The *surface structure* concerns itself with what is visible; the 'how to' of the profession, e.g. the knowledge and skills required to assist a woman at her birth. This can be learnt in the classroom or clinical skills laboratories. The *deep structure* requires more thoughtful consideration; it is the means of how best to impart knowledge, e.g. an understanding of the progress of labour and the support that a midwife can provide to a woman. The best way for a student

midwife to learn this is from an experienced midwife in practice settings. Finally, the *implicit structure* involves an ethical component where the attitudes, beliefs and values of a profession are demonstrated, e.g. promoting holistic, individualised woman-centred care, where the woman and the midwife are in partnership towards achieving a common goal. For student midwives, this may involve an inherent understanding of the philosophy of normal childbirth and the emotional component of supporting a woman through her labour and birth.

Assessment of Professional Practice

Assessment in practice is challenging for midwives and educators but is essential in determining fitness for entry into the profession (Fraser, 2000). Following the transfer of midwifery education to higher education institutions, the stringent assessment of theory has highlighted the need to develop robust forms of assessing clinical practice. This became focused on the attainment of competencies in practice settings (Fraser, 2000, Norman and Griffiths, 2007). In addition to utilising competency frameworks, strategies such as Objective Structured Clinical Skills Examinations (OSCE) (Harden et al., 1975) are widely used to assess student performance for clinical skills (Jay, 2007) and emergency drills (Barry et al., 2012). Although competencies are assessed in practice settings, and skills and drills are assessed using OSCEs, there is no single method appropriate for assessing the totality of clinical competence. Concerns remain about the general transferability of knowledge gained in the classroom to the realities of practice settings. This is particularly difficult where the assessment is required to reveal whether students have achieved 'the complex repertoire of knowledge, skills and attitudes required for competent practice' (Norman et al. 2002, p. 133).

The lack of effective clinical practice assessment strategies is problematic (Heaslip and Scammell, 2012; Lake and McInnes, 2012). An effective partnership between education and service providers is challenging (Holland and Lauder, 2012) and thus aiming to develop a 'catch all' clinical assessment is difficult. Approaches to assessment have been developed to meet the requirements and standards of the regulatory bodies, but there is little evidence surrounding effective strategies for assessing practice which takes into consideration the changing needs of practice (Norman et al., 2002; Bradshaw et al., 2012), and ultimately the need to provide safe, evidence-based care to mothers and babies.

In Ireland, midwife preceptors support learning and are responsible for assessing the competence of student midwives as they progress through their programme (An Bord Altranais, 2005). Progression towards competency is the mainstay of this assessment, which is focused on the student acquiring midwifery knowledge and skills over time. Strategies used include observation of practice, interviews, reflection on practice and the supervised performance of skills. Learning outcomes are available for each clinical area and reflect different levels of learning appropriate to the stage of the programme. The completion of a Competency Assessment Book provides formative evidence of student learning and attainment of competency but is not without problems (McCarthy and Murphy, 2010; Fahy et al., 2011). This includes the difficulties in assessing performance where preceptors are required to contend with diverse clinical responsibilities.

Aspects of clinical practice are increasingly assessed by the use of OSCEs, which have gained acceptance as a valid measure of assessing student learning (Brosnan et al., 2006; Smith et al., 2012). They are perceived to be a meaningful and fair form of assessment with students feeling more prepared for, and more confident about, clinical practice. In addition, they are well evaluated in terms of learning (Byrne and Smyth, 2008; Barry et al., 2012). OSCEs enable educators to provide a standardised assessment and provide students with the opportunity to display skills not easily observed in clinical areas such as responses to emergencies. However, the predictable format can lead to rehearsed performances and does not give any indication of how a student may perform in a 'real' clinical environment (Mitchell et al., 2009), or in an unpredicted situation (Levett-Jones et al., 2011). Artificiality in the

environment and the lack of human interaction have also been highlighted as problematic (Major, 2005; Jay, 2007). This is a challenge for educators using OSCEs. An approach that captures the student interaction with the woman in the real setting of the clinical area, combined with an OSCE offers an opportunity to assess firsthand the student's progress and acquisition of learning.

Contextual Clinical Assessment

Midwifery educators work in partnership with clinicians to prepare midwives who can perform safely and efficiently within the complexities of practice while maintaining the philosophical underpinnings of being a midwife (Burns and Paterson, 2005). In Cork, this partnership with one hospital, Cork University Maternity Hospital, has provided an opportunity to develop a unique clinical assessment for midwifery students that contextually links theory and practice. Students complete their Competency Assessment Booklet and in addition to this, a formal clinical assessment combined with an OSCE is undertaken with each student. For this, a midwifery lecturer is paired with a hospital-based midwife or a midwife involved in education or practice development for the assessment. There is 1 day of assessment per student intake and the assessment is 1 hour per student.

For assessors, meetings are organised to ensure a standardised approach and assessment criteria agreed to provide consistency and objectivity. This is loosely based on Levitt-Jones et al.'s (2011) criteria, who describe their assessment as being contextually responsive by seeking to understand more than observed behaviours but also 'the knowledge, values and attitudes that inform the student's practice' (p. 66). The assessment includes procedural knowledge (knowing how), declarative knowledge (knowing that) and schematic knowledge (knowing why) of aspects of a woman's care (Shavelson and Huang, 2003). The standard for assessment acknowledges that students have limited clinical experience, knowledge and skills.

Students are prepared with pre-assessment learning material. For them, the assessment involves the presentation of a woman's case notes, the provision of an aspect of routine care such as postnatal assessment of maternal well-being, followed by a low-fidelity simulation conducted in an off-ward setting. Students on Year 1 and Year 2 of the BSc Midwifery, and Year 1 of the Higher Diploma in Midwifery programme select a low-risk woman for their assessment. Third year and fourth year BSc Midwifery and Year 2 Higher Diploma in Midwifery students are expected to select a woman with more complex maternity care needs.

On the assessment day, with the consent of preselected antenatal or postnatal women, the student presents her care of the woman. Initially, the case notes are reviewed, with assessors asking questions appropriate to the student's level of learning, e.g. advice for the antenatal period, interpret a cardiocotograph (CTG). The student is then observed as she performs an antenatal or postnatal examination and provides the appropriate care and advice to the woman as required.

The final part of the assessment is the simulation of clinical skills that cannot be easily performed at the bedside. A list of skills is provided to the student, appropriate to their level of learning. For final year students, this will include the management of childbirth emergencies with low-fidelity simulation (Wilson et al., 2005) where their knowledge and skills for active participation within the multi-disciplinary team can be assessed. More junior students can be assessed on their understanding of the mechanisms of labour, or vital signs.

Assessors complete an account of the assessment and award a judgement of 'unsatisfactory,' 'adequate,' 'good' and 'very good' in relation to performance. An overall 'pass' is given if the student is successful or a 'refer' is provided if the standard is not reached. This student will be required to repeat the assessment at an appropriate time. Feedback is provided on the day to all students by e-mail. Students who are not successful are contacted directly as they require extra support.

The students' experience understandable anxieties in advance of the assessment but undertaking this assessment each year builds on their

familiarity with the process. Their increasing knowledge and the confidence gained by the observation of their practice is reassuring for all concerned. The student has the opportunity to demonstrate the depth of their understanding and clinical judgement and it is evident from their performance if they can successfully integrate theory with practice in the real-world setting by providing direct care. As their confidence grows, they develop their professional identity (Arndt et al. 2009) as midwives and this is particularly apparent in their final year assessment.

Discussion

Benner et al. (2010) recommends the integration of clinical and classroom teaching and suggests that educators teach for understanding of the application of practical knowledge and skills in the context where the student is expected to perform. Midwife educators are required to ensure that students are adequately prepared for the reality of midwifery practice and can ultimately present themselves to potential employers as being 'fit for purpose.' A strong partnership between education and service providers is central for providing a well-educated and professionally prepared workforce (Holland and Lauder, 2012). The synergy between academic and clinical staff in this instance is a strength of this approach to clinical assessment. It assists in bridging the gap that can exist between theory and practice. Further to this, a joint assessment between education and practice provides the reassurance that the students are at the appropriate level for the stage of their programme.

Mitchell et al. (2009) suggest that OSCEs are unable to measure context-reliant competence, professional behaviour or the integration of skills. Therefore, while OSCEs may provide information in terms of a student progress, they do not capture the students' performance in the real clinical environment that a contextual clinical assessment at the bedside provides. We suggest that a contextual clinical assessment may more effectively demonstrate that students possess procedural knowledge (knowing how) with declarative (knowing that) and schematic knowledge (knowing why) (Shavelson and Huang, 2003). The format of the assessment presented here provides educators and practitioners with a format for assessing the care of a woman in a clinical environment. In combination with the OSCE, it enables students to demonstrate their response to routine and emergency situations. The outcomes indicate which students are performing well and which students need further support.

This assessment encapsulates the surface, deep and implicit learning of the student. Overall, it offers the opportunity to assess midwifery students' ability to think, perform and act with integrity in the real environment (Shulman, 2005, p. 52).

Conclusion

Newly Registered Midwives are expected to perform to a standard that ensures that they are competent, safe practitioners. The role of educators is to ensure that this transition occurs efficiently and that students complete their programme with confidence, enabling them to meet new challenges. This contextual clinical assessment can promote a positive attitude among students regarding their approach to midwifery practice and their capacity to respond to emergency situations.

For final year students, it demonstrates a readiness for practice, the implicit structure of the 'signature pedagogy' of midwifery, whereby the attitudes, beliefs and values of midwifery are demonstrated as they become inducted into the profession. This is useful for them as they seek employment upon graduation.

Assessment of clinical knowledge and skills is an essential part of any midwifery programme and always involves a partnership between educators and midwives within the maternity services. In addition to the acquisition of competencies, this contextual clinical assessment provides an alternative to the use of OSCEs and is a beneficial strategy for

assessing the students practice in the real-world setting. A team of midwifery educators are currently evaluating this approach to assessment.

Acknowledgements

We would like to express our thanks to all midwives in practice and education involved in this assessment. Thanks are also due to the midwives working on the antenatal and postnatal wards who support the assessments and the women who agreed to participate in them.

References

- Allen, J.M., Smith, R.A., 2007. Introduction. In: Grainger, P., Allen, J.M. (Eds.), *Dimensions of Learning in Practice in Australian Primary, Secondary and Tertiary Education*. Hawker Brownlow Education, Heatherton, Vic, pp. 19–27.
- Altranais, An Bord, 2005. Requirements and Standards for the Midwife Registration Education Programme. An Bord Altranais, Dublin.
- Arndt, J., King, S., Suter, E., Mazonde, J., Taylor, E., Arthur, N., 2009. Socialization in health education: encouraging an integrated interprofessional socialization process. *J. Allied Health* 38 (1), 18–23.
- Barry, M., Noonan, M., Bradshaw, C., Murphy-Tighe, S., 2012. An exploration of student midwives' experiences of the Objective Structured Clinical Examination assessment process. *Nurse Educ. Today* 32 (6), 690–694.
- Benner, P., Sutphen, M., Leonard, V., Day, L., 2010. *Educating Nurses: A Call for Transformation*. Jossey-Bass, San Francisco, CA.
- Bradshaw, C., O'Connor, M., Egan, G., Tierney, K., Butler, M.P., Fahy, A., Tuohy, D., Cassidy, I., Quillinan, B., McNamara, M.C., 2012. Nursing students' views of clinical competence assessment. *Br. J. Nurs.* 21 (15), 923–927.
- Brosnan, M., Evans, W., Brosnan, E., Brown, G., 2006. Implementing objective structured clinical skills evaluation, OSCE in nurse registration programmes in a centre in Ireland: a utilisation focused evaluation. *Nurse Educ. Today* 26 (2), 115–122.
- Burns, I., Paterson, I.M., 2005. Clinical practice and placement support: supporting learning in practice. *Nurse Educ. Pract.* 5 (1), 3–9.
- Byrne, E., Smyth, S., 2008. Lecturers' experiences and perspectives of using an objective structured clinical examination. *Nurse Educ. Pract.* 8 (4), 283–289.
- Fahy, A., Tuohy, D., McNamara, M., Butler, M., Cassidy, I., Bradshaw, C., 2011. Evaluating clinical competence assessment. *Nurs. Stand.* 25 (50), 42–48.
- Fraser, D.M., 2000. Action research to improve the pre-registration midwifery curriculum Part 3: can fitness for practice be guaranteed? The challenges of designing and implementing an effective assessment in practice scheme. *Midwifery* 16 (4), 287–294.
- Harden, R., Stevenson, M., Downie, W., Wilson, G., 1975. Assessment of clinical competence using objective structured examination. *Br. Med. J.* 1 (5955), 447–451 (22).
- Heaslip, V., Scammell, J.M.E., 2012. Failing underperforming students: the role of grading in practice assessment. *Nurse Educ. Pract.* 12 (2), 95–100.
- Holland, K., Lauder, W., 2012. A review of evidence for the practice learning environment: enhancing the context for nursing and midwifery care in Scotland. *Nurse Educ. Pract.* 12 (1), 60–64.
- Jay, A., 2007. Students' perceptions of the OSCE: a valid assessment tool? *Br. J. Midwifery* 15 (1), 32–37.
- Lake, S., McInnes, R.J., 2012. Exploring cognitive skill development in midwifery education. *Nurse Educ. Pract.* 12 (5), 264–268.
- Levett-Jones, T., Gersbach, J., Arthur, C., Roche, J., 2011. Implementing a clinical competency assessment model that promotes critical reflection and ensures nursing graduates' readiness for professional practice. *Nurse Educ. Pract.* 11 (1), 64–69.
- Major, D.A., 2005. OSCEs—seven years on the bandwagon: the progress of an objective structured clinical evaluation programme. *Nurse Educ. Today* 25 (6), 442–454.
- McCarthy, B., Murphy, S., 2010. Preceptors' experiences of clinically educating and assessing undergraduate nursing students: an Irish context. *J. Nurs. Manag.* 18 (2), 234–244.
- Mitchell, M.L., Henderson, A., Groves, M., Dalton, M., Nulty, D., 2009. The objective structured clinical examination (OSCE): optimising its value in the undergraduate nursing curriculum. *Nurse Educ. Today* 29 (4), 398–404.
- Norman, I., Griffiths, P., 2007. '... And midwifery': Time for a parting of the ways or a closer union with nursing? *Int. J. Nurs. Stud.* 44 (4), 521–522.
- Norman, I.J., Watson, R., Murrells, T., Calman, L., Redfern, S., 2002. The validity and reliability of methods to assess the competence to practise of pre-registration nursing and midwifery students. *Int. J. Nurs. Stud.* 39 (2), 133–145.
- Shavelson, R.J., Huang, L., 2003. Responding Responsibly. *Change Mag. High. Learn.* 35 (1), 10–19.
- Shulman, L.S., 2005. Signature pedagogies in the professions. *Daedalus* 134 (3), 52–59.
- Smith, V., Muldoon, K., Biesty, L., 2012. The Objective Structured Clinical Examination, OSCE as a strategy for assessing clinical competence in midwifery education in Ireland: A critical review. *Nurse Educ. Pract.* 12 (5), 242–247.
- Vitello-Ciccio, J., 2010. Book Review: *Education Nurses: A call for transformation*. *J. Nurs. Adm.* 40 (6), 261–262.
- Wilson, M., Shepherd, I., Kelly, C., Pitzner, J., 2005. Assessment of a low-fidelity human patient simulator for the acquisition of nursing skills. *Nurse Educ. Today* 25 (1), 56–67.