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Learning through teaching: a peer teaching innovation in midwifery education

Sophie Whitecross (Midwifery Lecturer), Susie Moore (Midwifery Lecturer) and Sian Vaughan (Midwifery Student/Newly Qualified Midwife)

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ABSTRACT

Peer led teaching (PLT) is a method whereby one group of students is involved in the teaching of another (McKenna and French 2011). Whilst almost all universities worldwide offer some form of peer support for learning, the lack of available literature suggests that peer teaching is not well integrated into pre-registration midwifery education. This article explores the experiences of both second and third year student midwives involved in a peer teaching initiative as part of preparation for an Objective Structured Clinical Examination (OSCE) assessment. Third year students acted as peer teachers for small groups of second year students learning new practical skills related to management of maternity emergencies. The findings of this evaluation suggest significant benefits of PLT for both groups of students.

BACKGROUND

The midwifery programme at Swansea University offers both the long and short routes that lead to registration as a midwife with the Nursing and Midwifery Council. In line with most UK universities offering the same qualification students participate in a programme where teaching is shared between midwife mentors in practice and midwife teachers in a higher education environment. The aim of the programme is to support students to develop relevant and appropriate knowledge and skills as well as foster reflective practice and critical reasoning. The achievement of theoretical and practical learning outcomes is assessed in both the university and practice environment. This article outlines an educational innovation known as peer-led teaching, as support for preparing for OSCEs.

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OSCEs

OSCE's were first introduced to medical education by Harden in 1972 (Harden *et al*, 1975), in an aim to address the issues of objectivity and standardisation in the assessment of medical students' knowledge and clinical skills. Harden (1988)

first defined OSCEs as “an approach to the assessment of clinical competence in which components are assessed in a planned or structured way with attention being paid to the objectivity of the examination” (Harden 1988, p19). While this definition is still valid, since the 1970s OSCEs have been integrated into both undergraduate and postgraduate healthcare education, evolving and adapting to meet programme needs.

A variety of assessment methods are used throughout the midwifery programme at Swansea University and include OSCEs at the end of years one and two. OSCE exams may be used to evaluate a student’s ability to perform a wide variety of hands-on clinical skills such as taking a blood pressure or testing urine as well as observe the student’s ability to communicate effectively and handle unpredictable situations such as emergencies. OSCEs assess students across a number of domains and give students opportunity to demonstrate the level of their knowledge in ‘showing how’ (Miller 1990). Designed effectively the OSCE can also test cognitive reasoning.

The OSCE has been integral to the midwifery programme for over sixteen years and each year is refined and developed by the module leaders and supporting team. At the end of year one, OSCEs have been designed to assess breast-feeding support skills and in year two students are assessed on their skills & knowledge of maternity emergencies such as neonatal life support, postpartum haemorrhage and shoulder dystocia. The Nursing and Midwifery Council (NMC) require all student midwives to demonstrate competence in the management of obstetric and neonatal emergencies (NMC 2009) and it is common practice in midwifery education for students to be assessed in these emergency skills in a simulated environment via OSCEs (Nulty *et al.* 2011). In Swansea, midwifery OSCEs take place in our simulation practice suite and each student is assessed in their management of two out of a possible five emergencies.

It is widely acknowledged within healthcare education that in preparing for and undertaking OSCEs students develop deeper, more meaningful learning (Rennie and Main 2006; Jay 2007). However, the costs and resources associated with OSCEs are also well-recognised (Nulty *et al.* 2011), and supporting students to

develop all the skills and knowledge required to pass the OSCE is both expensive and time consuming. Preparing students for OSCEs in many higher education institutions requires a team of well trained and clinically updated teaching staff to which often also includes midwives from practice. Over a number of weeks a timetable that facilitates lectures and several practice workshops for small group work must be organised to support students to develop and refine their skills; moving from 'having a go' to a realistic level of competence for practice.

Practical workshops enable students to work in small groups to 'have a go', using mannequins and other practice equipment, at the skills they will need to manage a given emergency, for example, the McRoberts manoeuvre in shoulder dystocia. Teaching small groups of students tends to foster more effective learning as there is not only increased opportunity for students to fully participate but also more individualised support may be offered by the teacher, should it be required. While valuable for student learning, OSCEs cause students significant amount of stress (Muldoon *et al.* 2014), partly attributed to the experience of assessment, but also related to anxiety about the ability to master, recall and perform specific actions or tasks – a feeling which is possibly combatted through opportunities for practice, which are highly valued by students (Barry *et al.* 2012). Thorough support and preparation is therefore vital in increasing students' confidence in performing skills during the OSCE with the intention of the student fostering the ability to mirror this confidence and competence in the practice environment, upon professional registration.

Less distressing but of equal importance is the potential for teacher fatigue. It seems obvious that students would prefer their teachers to be lively, alert and focused during skills workshop. This can be difficult to sustain when, on occasions, teachers are required to demonstrate and replicate several skills numerous times as well as offer students effective and meaningful feedback. Within a small team of midwifery teachers it can often prove difficult to provide students with support to practice such skills in small groups, with opportunity for individual feedback. Feedback from previous cohorts suggested that students wanted *more* opportunity and support to master and practice the skills

that would be assessed in the OSCE. In order to address some of the issues discussed above relating to effective group sizes and staff resources, a teaching innovation of peer teaching was developed and implemented over a five-week period. The introduction of peer teaching workshops as OSCE preparation was therefore initially introduced with the potential benefits for the second year students at the forefront of the initiative.

WHAT IS PEER TEACHING?

Almost all universities worldwide offer some form of peer support for learning. This may vary from one-to-one tutorials for struggling students advancing to paid positions for teaching. There are many well documented benefits of peer teaching (see Box 1):

1. Benefits of peer teaching

- Students receive more time for individualised learning.
- Direct interaction between students promotes active learning.
- Peer teachers reinforce their own learning by instructing others.
- Students feel more comfortable and open when interacting with a peer.
- Peers and students share a similar discourse, allowing for greater understanding.
- Peer teaching is a financially efficient alternative to hiring more staff members.
- Teachers receive more time to focus on the next lesson.

Peer led teaching (PLT) differs from peer instruction where students at the same level teach each other new information; in PLT, one student is normally experienced and the other a novice. A senior student acting as a peer teacher will

often monitor and evaluate their own learning. PLT also promotes a culture whereby they are involved in the process of teaching and assessment. This can contribute effectively to autonomous midwifery practice by challenging the notions of power and authority that are traditionally associated with the medical profession and fostered within the NHS,. It can also encourage the senior student to continue discriminating good midwifery knowledge from that which is inferior. In addition, peer teaching offers senior students an opportunity to revise and hone their own practical skills just prior to professional registration. When considering preparation for OSCE teaching it therefore appeared clear that there were potential benefits available to both groups of students.

PLANNING AND FACILITATING

In developing this new initiative, the module leader contacted all third year students who had achieved a mark of over 70% in their OSCE exam the previous year. Contact was initially made via e-mail asking for volunteers to participate in small group teaching activities as part of the preparation of the current cohort of students preparing for OSCEs. Students were offered time out of practice placement hours to be involved. There was an excellent response rate and overall, eleven third year students participated, each attending one or more workshop. Students were given information via e-mail about how the workshop would be facilitated and an outline of the expectation of their role as a peer teacher.

Over the course of the module, five peer led workshops took place over five weeks, with each week dedicated to the teaching, practice and understanding of one maternity emergency. At the beginning of the workshop a demonstration took place, facilitated by one or more midwifery tutors. Second year students were then allocated to small groups of four, to practice and discuss the skills relevant to that emergency with a third year student facilitating each small group. One midwifery tutor was present, circulating throughout the workshop, overseeing all the small groups, on hand to answer any queries or concerns from

the peer teachers. This meant that students had a 1:4 peer teacher to student ratio, yet for the midwifery teaching team, only one midwifery tutor was required to host and facilitate the workshop. It seems important to note that due to other teaching and academic commitments this teacher to student ratio would have been impossible to achieve without the introduction of peer teaching, and students would have been taught in much larger groups of 10-12.

IMPACT OF PEER TEACHING – STUDENT PERSPECTIVE

At the end of the final workshop, second year students were asked to evaluate this new initiative, through a survey. They were given a series of simple statements and asked to indicate their agreement with each, using a minimized Likert scale of 'agree', 'disagree', or 'neutral' with opportunity to provide further free text comments related to their answer. A small number of students expressed that they had had some concerns prior to the workshops, when the concept of peer led teaching was first introduced to them. These included uncertainty about whether the senior students would have the experience or knowledge required to teach them to the standard required for their OSCEs. Interestingly they went on to identify that on the whole these concerns were unfounded and the large majority of second year students (85%) agreed that they felt able to learn effectively with a senior student leading the practical teaching group work. They thought the 'knowledge and confidence of the senior students was amazing' and commented that they 'felt able to ask questions that I would not have asked a tutor'. The majority of students (75%) agreed that the workshops should be organized in the same way in the future and noted that they would 'feel honoured' to be involved as a senior student in the future.

A small minority of students remained uncertain about the concept of peer teaching, and questioned the notion that a good OSCE result (the selection criteria for the peer teachers), always resulted in a good teacher and this is worth exploring further when planning and recruiting for peer-led teaching sessions in the future.

BEING A PEER TEACHER - UNFORSEEN BENEFITS

As discussed, this innovation was initially introduced for the benefit of the second year students, with more opportunity for practicing practical skills and opportunity for individualized feedback. Despite this, it became clear that there were numerous benefits for the senior students as a result of being involved in this initiative. Feedback via similar survey analysis was also gained from the third year students, acting as peer teachers. This identified that they could relate to the many previously documented benefits associated with PLT, including increased confidence; improvement in knowledge and clinical skills, and enhanced teaching and communication skills (Mackinnon *et al.* 2009, McKenna and French 2011, McLelland *et al.* 2013).

Similarly to the second year students, it appears there was some element of apprehension prior to being involved with the peer teaching. Students felt 'nervous prior, questioning my own knowledge and wondering what was expected of me'. The majority of students appeared to address this 'fear of the unknown' by revising topic areas before each teaching session, with more than 80% agreeing that they had spent time preparing to be a peer teacher. This was however recognised as a worthwhile investment, with students feeling more confident in their own knowledge base and clinical skills as a result of their involvement in PLT.

Students themselves recognised that getting to know second year students will be beneficial to their midwifery practice, commenting that they have already been approached more by second year students whilst on clinical placement, to ask advice or seek support. This supports the notion that as well as continuing professional development, PLT offers students the opportunity of helping to integrate the prospective future workforce, with some students involved with the education of others whom will potentially become colleagues (Ologunde and Rabi 2014).

CONCLUSION

The introduction of peer led teaching workshops as part of the preparation of second year student midwives for OSCE assessments was a very successful one. Benefits were evident for both the students and the peer teachers. In addition, the workload for the midwifery teaching team was eased, and this resulted in less fatigue and more availability for wider student support. Peer teaching in more holistic areas of midwifery teaching, for example normal labour workshops, would likely have similar benefits to those recognised, enabling integration between cohorts and sharing of skills and this is something to consider for the future.

Practice Challenges

Consider learning opportunities available in the practice placement environment. Would you feel confident delegating the teaching of a basic skill such as urinalysis for a third year student to teach to a first year?

If you are a midwifery teacher can you think of teaching sessions where you could replicate this model of peer led teaching?

As a midwife in practice, think about when you first became a mentor. Could the experience of peer led teaching give newly qualified midwives more confidence to act as mentors in the future?

Final Practice Challenge

Does peer led teaching develop skills within the future midwifery workforce that will enhance advanced practice development?

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