Developing clinical scenarios from a European perspective: Successes and challenges

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SUMMARY

This paper presents developmental work involving students from the University College Dublin (UCD), Ireland (n = 9), University of Surrey, England (n = 8) and University of Ljubljana and University of Maribor, Slovenia (n = 5) participating in the Erasmus Intensive Programme. The Erasmus programme offers a two week 'Summer School' in the Faculty of Health Sciences, University of Maribor, Slovenia. Using a participatory approach, facilitators from both the UCD and Surrey engaged with students from all of the universities to develop scenarios for simulated learning experiences, in the care of older people, for utilisation on an e learning facility and within the simulated clinical learning environment. Students developed key transferable skills in learning, such as information literacy, cultural diversity, team working, communication, and clinical skills acquisition whilst exploring differences in healthcare delivery in other European countries.

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Introduction

Nursing and midwifery training needs to ensure that new registrants are able to deliver safe and effective care (McCallum et al., 2010). The Nursing and Midwifery Council (NMC), the professional and regulatory body for the United Kingdom (UK), states that any registered nurse has 'a duty of care to patients and clients who are entitled to receive safe and competent care' (Nursing and Midwifery Council, 2008a, p4). Historically concerns have been raised both nationally (NMC, 2004) and internationally from the International Council of Nurses (ICN, 2002) and the World Health Organisation (WHO, 2006) regarding the training and assessment healthcare professionals receive in physical care skills (Scobie et al., 2003). The traditional 'apprenticeship' model of learning has resulted in anxieties amongst healthcare educators and professional and regulatory bodies regarding the robustness of the supervisory relationships that students receive in practice (Nicol and Glen, 1999). The Fitness for Practice's report (United Kingdom Central Council for Nursing, Midwifery and Health Visiting, 1999) identified patient care skill deficits in newly qualified nurses. As a result "essential skills clusters" for pre-registration nursing and midwifery programmes have been developed, by the Nursing and Midwifery Council (NMC, 2007). The clusters offer a comprehensive list of "essential skills," aimed to reflect the skills required for "fitness for practice" and safety at point of care, however their impact has yet to be evaluated. Such initiatives have

also been undertaken in Europe through the European Healthcare Training Accreditation Network (2004a,b) and the World Health Organisation's (2009) "Global standards for the initial education of professional nurses and midwives." However given the global challenges for healthcare educators, inequities in funding and delivery resulting in a lack of evidence based practice to enhance the safety and effectiveness of patient care mean global standards are not achievable for all at this point in time. The NMC, ICN and the WHO acknowledge the role simulated learning plays in developing competent and safe practitioners and their view that it should be embedded in the curricula is to be applauded, however as Gaba (2004) suggests, simulation is a technique rather than a technology, thus its delivery, both nationally and internationally, is dependent upon the learning experiences created and the facilitation of these experiences.

This paper draws upon work developing clinical case scenarios, as a learning strategy, through working with a group of pan European student nurses, participating in a ten day Intensive Programme (also known as 'Summer School'). The Summer School was sponsored by the European Union Erasmus Lifelong Learning Programme which seeks to enhance the quality and reinforce the European dimension of higher education by encouraging transnational cooperation between universities. Student nurses and nurse educators from higher education institutions (HEIs) in Dublin (Ireland), Surrey (England, UK), Ljubljana and Maribor (Slovenia) participated in the school.

The Summer School enabled delegates drawn from adult, child, mental health nursing and pre hospital care to utilise simulated learning to develop their knowledge and understanding of the care of older people, thus gaining insight into the differing modalities of healthcare provision and nurse education in the participating countries. A key outcome of the Summer School was that students

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extended their skills in scenario development, within the theme of older person nursing care, for simulated and e-learning. The generation of scenarios involved group work with peers from the Summer School requiring familiarisation with key transferable skills such as data extraction and analysis to provide information for scenarios contemporaneous with healthcare practice. Scenario development required the building of evidence based decision trees for care; delegates found this challenging as clinical guidelines varied across students' countries. One such variation in clinical guideline was in the delivery of breaths during cardiac arrests. The Surrey and Slovenian students followed the European Resuscitation Council (2005) and the Dublin students the American Heart Association (2005) guidelines. Such variations in clinical guidelines not only provide challenges for students and academics in scenario development, but also exemplify why a mobile healthcare workforce may be problematical if effective orientation programs are not in place for new staff seeking employment in other countries. Workforce mobility has resulted in changes in demographic patterns, evolving multiracial and multiethnic groups (Horton et al., 2008) thus a more culturally diverse society and healthcare workforce have developed requiring educators to be more creative in the delivery of education and training.

The Erasmus program supports this mobility recognising it as a result of the global market and internationalisation of organisations and advocates that transparent processes for accreditation and qualification are at its centre. However as our students identified that qualifications and credits are only part of the story as for practitioners to be truly mobile employers need to be assured of the clinical competency of their employees. Healthcare systems, as a result, are evolving as medical advancement based on developments in pharmacological and physiological research and the implementation of technology (Fagerberg, 2003) and healthcare education needs to keep pace with these advancements by utilising simulated learning to facilitate mobility of the healthcare workforce without reducing patient safety.

Global recognition of the contribution simulation has to the development of clinical skills is widely acknowledged, although research is largely limited to the 'real life' simulated clinical environment, where its positive attributes are well documented (Kneebone et al., 2004; Melnyck, 2008; Neudorf et al., 2008). This project developed scenarios for both the virtual and "real life" simulated environment however the efficacy of the virtual simulated environment to clinical skills development has yet to be evaluated (McCallum et al., 2010, p.2). Whilst the relationship between simulated or actual clinical performance and critical thinking skills remains unclear (Fero et al., 2010), it would appear that nurses are able to develop high levels of vigilance and clinical judgement to identify changes in patient status requiring nursing or medical intervention (Buerhaus et al., 2005).

Enhancing safety through scenario development and simulated learning

Risk reduction in patient care has implications for nurse educators and requires strengthening of curricula in areas such as patient safety and competency to practice. Consequently the role of risk reduction and the acquisition of clinical skills (Melnyck, 2008) through assessments of proficiency in clinical skills need to be addressed by educators. The responsibility for the ongoing education and assessment of pre-registration nurses in clinical skills involves both higher education and healthcare organizations (HO). Students are supervised by qualified nurses, in the United Kingdom as required by the NMC (2008b). However levels of supervision are variable across different countries as not every professional and regulatory body has a requirement for qualified mentors to support student learning. Given the available evidence one could question whether all qualified nurses are able to offer adequate levels of supervision and is this due to the knowledge deficits and difficulty in making judgements about

proficiency in practice of these nurses, a view advocated by Duffy (2004) in "Failure to fail." A further perceived challenge for practitioners is understanding the terminology adopted in clinical skills assessment, with the NMC (2005) adopting the phrase "proficiency" and healthcare organisations and other professional and regulatory bodies, such as the Healthcare Professions Council, adopting the phrase "competencies," in response to directives from the Department of Health (2004).

According to Bambini et al. (2009) the simulated clinical learning environment should offer an authentic learning experience, where students have the opportunity to practice essential clinical skills to form what Kneebone et al. (2004) view as the scaffold of knowledge and skills required for safe practice. Such authenticity aids students' clinical skills acquisition, confidence and clinical judgement to effectively build proficiency (Bambini et al., 2009; Koper, 2005). However, the challenge remains for nurse educators to clearly identify how skills acquisition should be developed and assessed especially as the development of scenarios for simulated learning is time consuming and needs to be flexible enough to allow for the different working practices and protocols for an international audience (Jeffries, 2005).

The patient safety agenda (Department of Health, 2000) has driven the inclusion of simulation in curriculum design to prepare a capable and competent workforce (Fraser and Greenhalgh, 2001). This has been further emphasised by the World Health Organisation (2009) which proposed the utilisation of a range of teaching and learning strategies including simulation to assure the development of safe practitioners. Thus the efficacy of such educational innovations and the evidence base supporting them must be explicit (Colliver, 2002) and as Bradley (2006) and Bradley and Postlethwaite (2003) propose embrace scientific and interpretative stances to demonstrate a holistic approach to the acquisition of clinical skills (Dent, 2002).

Scenarios and clinical skills acquisition

Debate exists as to the factors affecting the acquisition of clinical skills through simulation, raising the notion that clinical skills acquisition is achieved through an effective balance between fidelity of equipment, fidelity of experience, and fidelity of the environment (Alinier et al., 2004; Maran and Glavin, 2003; Schwirth and van der Vleuten, 2003). From the perspective of the professional and regulatory bodies, government policies and competency frameworks (Department of Health, 2004), in healthcare, there is a consensus that safe and effective care is of prime concern to all. Globally there is a growing focus, within healthcare, for efficiency, technological advancement, enhanced quality and cost containment (Fawcett, 2006; Hunter, 2008) thus promoting the ideal of a cohesive framework for healthcare, through the development of measurable standards, risk reduction and improved patient safety (Hunter, 2008).

Simulated learning through the utilisation of clinical scenarios enables the development of conceptual understanding through problem solving of real world issues (Wooley and Jarvis, 2006). A key benefit of simulated learning is that mistakes can be made and rectified, with problem solving skills developed through engagement with "expert" practitioners either in the virtual or real world (De Bruijn, 1995). However one could question "who is the expert?," "what is expertise?," and "should practitioners be competent, proficient or both?"

In the light of the above, this author proposes that a holistic model for skills acquisition (as demonstrated in Fig. 1) involving both key transferable skills and the stages of scenario development may offer a clearer explanation of how clinical skills are developed so that practitioners are competent to practice safe and effective care. Scenario development and delivery is integral to the development of proficiency and competence through effective learning and assessment strategies (Dent, 2002), to meet the requirements of