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Palliative Care Simulation: Nurturing Interprofessional Collegiality

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Abstract

INTRODUCTION Interprofessional collaboration is essential to ensure safe and effective patient-centred care. Health care students need to gain an understanding of the roles played by interprofessional team members to provide optimal care at the end-of-life. Interprofessional education and simulation are becoming important strategies in providing health care students with opportunities to learn interprofessionally. However, there is limited evidence in the literature on interprofessional simulation, and more specifically on interprofessional end-of-life care simulation. The aim of this research project was to provide students from four health care disciplines from the School of Health at a rural Australian university with an opportunity to experience simulated interprofessional end-of-life care. This paper will discuss the qualitative results obtained from student evaluations following an interprofessional workshop.

METHODS Fifteen undergraduate students from nursing, social work, medicine and pharmacy volunteered to attend an experiential workshop on palliative care. The central approach to learning during the workshop was a simulation scenario. Following the 15-minute simulation scenario, a debriefing session was used to understand the student's experiences. Participants also completed a short evaluation survey that included both qualitative and quantitative responses.

RESULTS Several themes emerged from this study; the most dominant theme was recognition by participants of the importance of supportive and respectful interprofessional teamwork in palliative care.

CONCLUSION Palliative care simulation provides one strategy to provide insight into palliative care in critical care using an interprofessional approach.

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Introduction

This paper reports on the findings of research undertaken with an interprofessional group of undergraduate students from four health disciplines. The aim of this research was to provide students from nursing, medicine, social work and pharmacy with interprofessional experiences with palliative and end-of-life care simulation during an end-of-life care workshop. Activities included simulations and debriefings, end-of-life decision making and organ donation presentations and discussions, and a panel discussion during which professionals shared their experience and knowledge.

A further aim of this paper is to add to the limited available research on interprofessional end-of-life care simulation, and more specifically, to discuss how students respond to involvement in a simulation of this nature. All observations and conclusions articulated in the findings or discussions section are based on the post-activity survey data and its analysis.

Health care providers globally are now using more innovative and experiential methods of teaching, including simulation, within undergraduate curricula to assist students to learn in a safe and supportive environment. Offering palliative care or end-of-life scenarios may be among the most challenging for students to participate in as professionals and as human beings whose personal experiences and culturally influenced associations with death may produce anxieties or misconceptions about working in this field.

Several themes emerged from this study including recognition by participants of the importance of supportive and respectful interprofessional teamwork in palliative care, the need to engage in effective communication between team and family members, and the importance of end-of-life decision making and issues surrounding organ donation. This paper will focus on the most dominant theme revealed during this research: recognition of the importance of interprofessional teamwork in palliative care within a critical care environment.

Interprofessional Education and Healthcare (IPE)

The importance of interprofessional collaboration
EDUCATIONAL STRATEGY

in health care environments is widely acknowledged in the literature as being necessary in improving patient outcomes internationally (Pullen, et al. 2012) and is described as being essential to ensure safe, effective patient-centred and collaborative care (Blue & Zoller, 2012). Interprofessional care is important in all health care settings, however, interprofessional care is especially important and often challenging in the provision of palliative and end-of-life care where a range of health care professionals are involved in providing care, not only to the dying patient, but to the patient's significant others. High quality palliative care requires a coordinated interprofessional team approach (Doane et al., 2012).

To enable high quality palliative and end-of-life care, health care students need to have an understanding of the roles played by the interprofessional team members. Gaining knowledge of the roles of various health disciplines is difficult in many undergraduate curricula, where most health care professionals learn in "silos" and therefore do not have the opportunity to gain an appreciation and understanding of each other's roles.

This presents a significant barrier to overcome (Robertson & Bandali, 2008). Interprofessional learning and education is now gaining more popularity among health care educators and is becoming increasingly evident in the literature (Angelini, 2011; Hall, et al., 2006; Lewis, 2012; Owen, Brashers, Peterson, Blackhall, & Erickson, 2012).

Multiple definitions of interprofessional education (IPE) exist, such as "joint learning by practitioners or students of more than one profession to enhance collaborative practice" (Angelini, 2011; Barr, 2001 as cited in Baker et al., 2008, p. 373) and similarly "when two or more professions learn about, from and with each other to enable effective collaboration and improve health outcomes" (World Health Organisation, 2010). Another definition of interprofessional education states that it involves "education initiatives that incorporate interactive learning methods between different professionals in order to foster collaborative practice" (Hale, 2003 as cited in Robertson & Bandali, 2008, p. 501).

The above definitions highlight the collaborative nature of interprofessional learning. For interprofessional

practice to be successful, trust and mutual respect are essential (Dillon, Noble, & Kaplan, 2009). Each team member must have clear understandings of each other's roles and responsibilities and have an understanding of how each team member contributes to the care provided to patients in the health care setting (Dillon et al., 2009). This understanding is facilitated through collaborative interprofessional learning and education.

Interprofessional learning has been found to be more successful when applied using adult learning principles and including such strategies as linking relevance of the educational experience with future practice (Baker et al., 2008) and utilising experiential, reflective and contextual learning approaches (Baker et al., 2008). Experiential learning is defined as learning that takes place as a result of an encounter with an experience that is planned (Kolb 1984, cited in Baker et al 2008). Simulation has been described as promoting experiential learning (Dillon, et al., 2009).

Interprofessional Simulation

The use of simulation is becoming a widely utilised teaching and learning strategy in many health professions. However, there is limited research on interprofessional simulation, with the most common being found among nursing and medical professions (Baker et al., 2008; Dillon et al., 2009; Maxson et al., 2011; Reese, Jeffries, & Engum 2010; Reising, Carr, Shea, & King, 2011), and nursing and paramedics (van Soeren et al., 2011; van Soeren, Devlin-Cop, MacMillan, & Reeves, 2012). Only a few others have reported on projects involving other health professions. They include pharmacy (Barnett, Hollister, & Hall, 2011; Ruth-Sahd, Schneider, & Strouse, 2011), dietician (Hall, Marshall, Weaver, Boyle, & Taniguchi, 2011; Prentice, Taplay, Horsley, Payeur-Grenier, & Belford, 2011; van Soeren et al., 2011) social work (Hall et al., 2011; Prentice, et al., 2011), occupational therapy (Hall et al., 2011; Ruth-Sahd et al., 2011), audiology (Barnett et al., 2011), and physiotherapy (Hall et al., 2011).

Literature Review

Interprofessional Palliative Care and End-of-life Care Simulation

Added to the issue of a lack of literature on interprofessional simulation, is an even greater lack

of research on interprofessional end-of-life care simulation. To highlight this issue a literature search was undertaken by the primary author.

A preliminary literature search of the Cumulative Index to Nursing and Allied Health (CINAHL) and Medline using the key terms "Interprofessional/ Interdisciplinary" and "palliative care/end-of-life care" and "simulation" identified a total of 4 sources on interprofessional end-of-life care or palliative care simulation. The following discussion highlights key issues related to palliative care and end-of-life interprofessional simulation identified from the relevant literature.

McIlwaine, Scarlett, Venters, and Ker (2007), from the UK, report on a pilot research project undertaken with medical (n=14) and social work (n=11) students learning about death and dying as an interprofessional journey. This workshop included four different sessions designed to explore personal experience and uniprofessional and interprofessional roles and responsibilities in the death and dying process. One of the four sessions involved the use of simulation using role-play and mannequins. Findings of this small-scale study reflect students' appreciation of other professionals' roles in the care of dying patients. While this is an important study related to engaging interprofessional team members, it is limited both in number of participating disciplines (medicine and social work) and in the number of overall participants, which limits the ability to generalise the results to other health care professionals.

Hall et al. (2011), from Canada, also report on a pilot project undertaken using a wide range of health care students, however, 89% of participants (n=126) were from medicine. Although this study involved a range of health professionals including spiritual care counsellors (n=7), occupational therapists (n=1), physiotherapists (n=1), and unknown (n=6), the implications are limited due to the over-representation from the medical profession in comparison with other health professionals, with the authors acknowledging that their results cannot be generalised to other professions. Despite this limitation, the use of clinical simulation in three palliative care scenarios is significant and is one of the few available research studies involving interprofessional palliative care simulation. Findings of this pilot study highlight the

potential of IPE using simulation and may provide impetus for further programmes and research utilising more interprofessional participants.

Donovan, Hutchison, and Kelly (2002), from the UK, report on a project undertaken using a standardised patient and self-selecting participants from nursing and allied health professions (physiotherapists, dieticians and radiographers). However, minimal information is provided on the actual participants involved and the simulation process. While the simulation scenario involved a patient with cancer and focused more on the development of communication skills than on palliative care or end-of-life care, the report is an important contribution to the limited literature on interprofessional palliative care simulation. A key finding of this research was that participants felt using actors as standardised 'patients' added to the realism of the experience, with participants having the opportunity to interact with 'patients' in a controlled learning environment, working realistically with emotions and feelings generated by the 'patient'.

Finally, the study by Pullen et al (2012), from the USA, using several interactive teaching methods, including simulation, reports primarily on involvement of associate degree nursing students (n=140), and 25 students from the allied health professions who participated in classroom and clinical simulation experiences. In this study it is unclear which allied health students participated. Key findings from this study were that participants indicated that they had a greater appreciation for end-of-life care, had less fear and more confidence in caring for a dying person, they enjoyed working as a team and collaborating with interprofessional team members and that they gained an awareness of ethical issues at the end-of-life.

The issues highlighted by these studies reinforce the importance of involving a range of health professionals to truly explore interprofessional team roles and experiences. Our study sought to involve students from four health disciplines, including medicine, nursing, social work and pharmacy, providing a uniquely Australian perspective on interprofessional palliative and end-of-life care simulation. Funding for the interprofessional workshop was provided by the Australian Government's Department of Health and Ageing Palliative Care Curriculum for Undergraduates (PCC4U).

Palliative Care Curriculum for Undergraduates (PCC4U)

In Australia, in response to evidence that suggests undergraduate education may not adequately prepare health care professionals for end-of-life care (Ramjan, Costa, Hickman, Kearns, & Phillips, 2010; Yates, 2007) the Australian Government Department of Health and Aging funded the Palliative Care Curriculum for Undergraduate Students (PCC4U) program as an initiative to develop skills of primary care providers to provide quality care to people with life limiting conditions (Yates, 2007).

The focus of PCC4U education is to ensure all health professionals are equipped with fundamental skills in the palliative care approach (Yates, 2007). The PCC4U program offers engaging learning resources including palliative care case studies and scenarios for use by academics (Ramjan et al., 2010). One module stimulates critical thinking about media-influenced promotion of particular images about death and dying and enables in-depth discussion about how care of people who are dying has been influenced by cultural perceptions. The PCC4U program utilises a range of video vignettes as a vital part of their learning resources. Videos show various stages a person goes through when facing a life limiting illness from diagnosis to end-of-life care as well as videos of health care professionals providing palliative care. PCC4U offers a range of resources and support for interdisciplinary palliative care education. PCC4U provided support for the research project, which was designed to bring together a range of health professionals in a simulated learning environment.

The research project was developed considering adult learning principles including the experiential learning methods of simulation incorporating a hybrid model including actors as standardised patients and use of medium fidelity mannequins (Twigg & Lynn, 2012).

Methods

The primary objective of this study was to expose students to a highly realistic end-of-life scenario (Table 1, following page, depicts an overview of the scenario) in a high quality simulation environment that provided opportunities to experience being a member of an interprofessional team. Pharmacy, medicine, nursing and social work students at advanced levels of study

Table 1*Outline of Scenario*

Silvia's History: 56 year old

Diagnosis: extensive Non Small Cell Lung Cancer 4 years ago. Right Lobectomy. Full course of radiotherapy following recovery from surgery. Monthly chemotherapy for 4 months- ceased due to side effects.

Palliative care: referral for support during chemotherapy and symptom management. Regular home visits for symptom management and support.

Disease progression: Spread of cancer to Left lung 2 years ago. Left lobectomy (1 lobe removed). Further radiotherapy and chemotherapy. Requiring Oxygen intermittently. Commenced on trial of oral chemotherapy drug, discontinued after several months due to side effects. One year ago, follow-up X rays showed extensive cancer growth in remainder of both lungs.

Symptoms: severe breathlessness- O2 continuous, Constipation due to opioids, panic attacks.

Psychosocial: husband providing all care; three daughters aged in early 30's. Oldest daughter recently diagnosed with Breast Cancer.

Present: Emergency admission to local hospital via ambulance following acute respiratory arrest- resuscitation and intubation initiated by ambulance, no Advanced Care Directive. Transferred to Critical Care unit at local hospital. Family in attendance.

Medical and interprofessional team rounds: review of condition by doctor, initiates discussion on end of life decisions and ceasing futile treatments.

- **Nursing staff:** in attendance to support husband and family, monitoring of patients condition.
- **Social worker:** in attendance to provide support to family and discuss the sensitive issue of organ donation and possible retrieval of corneas.
- **Pharmacist:** in attendance during interprofessional rounds to review medication and consult with medical and nursing staff to optimise medications during extubation and transition to end of life.

participated. Inclusion criteria were limited to students enrolled in their final or third year of these four health care disciplines to ensure they had substantial skill and knowledge preparation. The intended number of students was intentionally set low: the goal was to have four students from each of the four professions to enable scenarios to be conducted comfortably and effectively and to ensure active participation by all. One medical student was unable to participate at the last minute (n=15). Experienced actors played family member roles (spouse and daughter).

Ethics approval was obtained from the university's Human Research and Ethics Committee. Care was taken to ensure participants knew who to contact if participation incurred emotions that required talking to a counsellor. There was also agreement that any volunteers who had very recently gone through a loss would be discouraged from participating at this time. Students who had not been in the simulated learning environment before were given the chance to be orientated to the clinical lab area prior to taking part, and had the opportunity to ask questions.

At the conclusion of the day, students were asked to respond in writing to a survey they submitted anonymously but with an indication of the profession they represented. Questions on the survey were categorized into five areas: 1) what was learned that they foresaw would be of value as a graduate of their profession; 2) what had increased in their awareness about aspects of working in palliative care; 3) what had increased in their awareness about working on an inter-professional team; 4) how they ranked the value of the learning through the simulation experience compared to the workshop, panel and debriefing sessions, and 5) their suggestions regarding how the activities could be improved. In this paper, we focus our discussion on analysis of responses to the first three questions: the ways in which student awareness in relation to aspects of the interprofessional team experience in palliative care settings was enhanced.

Results

Among the fifteen students who participated in the workshop, the overall feedback was positive, demonstrating that this had been an important learning opportunity. Thematic analysis revealed that experiencing how it felt to be part of an interprofessional team in a palliative care setting generated insights that could be categorized into five distinct themes. Discussed individually below, the five areas are: understanding roles of other professions in palliative care; ensuring clear communication among team members and with family members; increased respect and collegiality with members of other professions; support as a fundamental principle among team members; and adopting a 'team mentality' approach to palliative care.

Discussion

Understanding roles of other professions in palliative care

Understanding the roles of each profession is important and necessary, yet there appears to be a gap in what members of one profession know about others. A medical student pointed out that their learning benefited from the roles of specific allied health professions being made very explicit in the role-play. Feedback reflected new awareness of others' roles, such as a nursing student saying they didn't know what role a pharmacist played in palliative

care, or a medical student acknowledging they now understood what social workers do in such situations. In addition to learning more about their individual roles as health care professionals, the demonstration by students of an increased understanding of the roles of multidisciplinary team members is important given the true nature of day-to-day clinical practice in a palliative care setting.

Ensuring clear communication among team members and with family members

An often repeated message in the survey responses was that communication among health care team members was now understood as being absolutely essential. For example, a pharmacy student identified the importance of the ability to come together with the team when discussing the medication used for palliative care. The importance of interprofessional collaboration when communicating with the patient was also highlighted by some students, who recognized the complexity of the task and the value of demonstrating a spirit of being united in support and service to the patient and family. A shared vision among members of a palliative care team can lead to the "*optimizing in-team communication*" suggested by a medical student as being desirable.

Increased respect and collegiality with members of other professions

Student feedback suggested the overall goals of enhancing positive interprofessional attitudes and collaboration were achieved. This was evident in the comments from all students who appeared to develop a degree of understanding of other health professionals within a team and professional respect for one other. Respect for one's profession equally with another's was also expressed: as one nursing student commented "*we all play an important role on the team.*" Another pointed out that each member relies heavily on the expertise of all team members. One participant observed that the learning environment was characterized by respect for equality in the importance and value of each profession. A pharmacy student noted that working together meant focusing on the relationships between members of the interprofessional team, which can generate greater respect and collegiality.

Deeper understanding appeared to develop about the importance of interdisciplinary teamwork in the

delivery of effective palliative care. This comment reflects one participant's feelings: *"I hope that all health professionals learn throughout their degree how important inter professional work is, and use it in their career"* (social work student). The uniqueness of each profession's contributions was also acknowledged.

Support as a fundamental principle among team members

Feedback from the students demonstrated appreciation that, through having this learning opportunity, much was gained in relation to working in a critical care setting with a patient already under palliative care. They described what they found challenging and how they felt their practice may change in future as a consequence of the simulation workshop. A key learning experience for all students was how it felt to be actively involved in managing a death as a team. They described how they benefited from team involvement while identifying key experiences such as: *"providing support for each other especially in regards to sensitive issues such as palliative care patients"* (pharmacy student) and *"the whole simulation experience allowed me to encounter aspects of palliative care (both emotional and medical) for the first time in a safe environment"* (medical student).

Working together was not only valued, but sharing the load *"without letting everything fall onto one person"* was seen by one medical student as a key benefit. A nursing student became aware of new options for support by participating in the simulation and noted that the sort of support that *"typically comes from other nurses"* had been shared during the scenario between the medical student and nurse. Students shared the perspective of a nurse who concluded that *"working with and being supported by the multidisciplinary team was so valuable."*

Adopting a 'team mentality' approach to palliative care

Student responses acknowledged gaining what one described as *"working in a team mentality with other professionals,"* and what a medical student articulated as *"(becoming)...more deliberate in considering roles and contributions of members."*

As mentioned earlier in the paper, the structure of university health degree programs can unintentionally create "professional silos" unless efforts are made to unite students from diverse professions. Even following

one brief interprofessional simulation (perhaps intensified due to it being focused on end-of-life care), a shift in perspective with regard to collaboration and affirmation of others' contributions in the setting was seen. A medical student's comment synthesizes both a team mentality and the other themes discussed above, when they underscored the importance of *"ensuring patients know what each member of the team can contribute to their care."*

Limitations

Limitation One: The sample size was not large enough to generalise results to a larger student population. The authors recognize that findings are preliminary and that further studies with greater numbers of participants are warranted.

Limitation Two: Participant self-selection may create some bias in that students who volunteered to participate may have done so because of an interest in palliative care or a preference for simulation as a teaching strategy. While eagerness to learn more in the subject area might be helpful for providing responses that reflect insight and affirmation, a process of selection or invitation that reflects greater neutrality would be advisable. For example, a similar study that involved all students registered in a specific course or unit in their discipline could diminish the self-selection limitations.

Limitation Three: Use of a simulation environment in which "life-like" mannequin patients are used does not permit feedback to be offered from a human patient who is acting. Future studies could incorporate sharing feedback from actors cast in the roles of family members, however, if deemed relevant to a study's aims.

The authors acknowledge these limitations but still find that the results highlight the importance, and support the continued use, of providing existential end-of-life care experiences, especially in an interprofessional setting.

Conclusion

Working with a dying patient and their families in a simulated palliative care setting provided a safe environment that demonstrated to students the importance of interprofessional teamwork and encouraged them to unite as a cohesive team in

delivering patient care and supporting one another.

The need for patient- and family-centred care with a central focus on the patient and family needs was experienced by students participating in this study. The use of experienced and talented actors as family members allowed emotions and feelings to be explored, which will ultimately assist students in practice as they provide end-of-life care for families and patients. The feelings and emotions discovered and expressed by participants in this study highlighted the valuable contribution of simulation in preparing students for end-of-life care, as well as helping students to address their own thoughts and feelings around death and dying.

The evaluation of the feedback suggests that simulated caring for patients under palliative care with life-limiting illness is a suitable method, when provided in a safe environment, to demonstrate and learn about interprofessional practice. The close clinical contact with patients and family members, supported by trained interprofessional faculty team members, offers students new perspectives on clinical team working and a deeper understanding of the philosophy of palliative care.

References

- Angelini, D. J. (2011). Interdisciplinary and interprofessional education: what are the key issues and considerations for the future? *Journal of Perinatal Neonatal Nursing*, 25(2), 175-179. <http://dx.doi.org/10.1097/JPN.0b013e318212ee7a>
- Baker, C., Pulling, C., McGraw, R., Dagnone, J. D., Hopkins-Rosseel, D., & Medves, J. (2008). Simulation in interprofessional education for patient-centred collaborative care. *Journal of Advanced Nursing*, 64(4), 372-379. <http://dx.doi.org/10.1111/j.1365-2648.2008.04798.x>
- Barnett, G. V., Hollister, L., & Hall, S. (2011). Use of the Standardized Patient to Clarify Interdisciplinary Team Roles. *Clinical Simulation in Nursing*, 7(5), e169-e173. <http://dx.doi.org/10.1016/j.ecns.2010.01.004>
- Blue, A. V., & Zoller, J. S. (2012). Promoting interprofessional collaboration through the co-curricular environment. *Health and Interprofessional Practice*, 1(2), eP1015. <http://dx.doi.org/10.7772/2159-1253.1015>
- Dillon, P. M., Noble, K. A. & Kaplan, L. (2009). Simulation as a means to foster collaborative interdisciplinary education. *Nursing Education Perspectives*, 30(2), 87-90.
- Doane, G. H., Stajduhar, K., Causton, E., Bidgood, D. & Cox, A. (2012). End-of-life care and interprofessional communication: Not simply a matter of "more." *Health and Interprofessional Practice*, 1(3), eP1028. <http://dx.doi.org/10.7772/2159-1253.1028>
- Donovan, T. Hutchison, T., & Kelly, A. (2002). Using simulated patients in a multiprofessional communications skills programme: Reflections from the programme facilitators. *European Journal of Cancer Care*, 12, 123-128. <http://dx.doi.org/10.1046/j.1365-2354.2003.00394.x>
- Hall, P., Marshall, D., Weaver, L., Boyle, A., & Taniguchi, A. (2011). A method to enhance student teams in palliative care: Piloting the McMaster-Ottawa Team Observed Structured Clinical Encounter. *Journal of Palliative Medicine*, 14(6), 744-750. <http://dx.doi.org/10.1089/jpm.2010.0295>
- Hall, P., Weaver, L., Fothergill-Bourbannais, F., Amos, S., Whiting, N., Barnes, P., & Legault, F. (2006). Interprofessional education in palliative care: A pilot project using popular literature. *Journal of Interprofessional Care*, 20(1), 51-59. <http://dx.doi.org/10.1080/13561820600555952>
- Lewis, R. (2012). Interprofessional learning in acute care: Developing a theoretical framework. *Nurse Education Today*, 32(3), 241-245. <http://dx.doi.org/10.1016/j.nedt.2011.03.013>
- Maxson, P. M., Doziois, E. J., Holubar, S. D., Wroblewski, D. M., Dube, J. A., Klipfel, J. M., & Arnold, J. J. (2011). Enhancing nurse and physician collaboration in clinical decision making through high-fidelity interdisciplinary simulation training. *Mayo Clinic Proceedings*, 86(1), 31-36. <http://dx.doi.org/10.4065/mcp.2010.0282>
- McIlwaine, L., Scarlett, V., Venters, A., & Ker, J. S. (2007). The different levels of learning about dying and death: An evaluation of a personal, professional and interprofessional learning journey. *Medical Teacher*, 29(6), e151-159. <http://dx.doi.org/10.1080/01421590701294331>
- Owen, J., Brashers, T., Peterson, C., Blackhall, L., & Erickson, J. (2012). Collaborative care best practice models: a new educational paradigm for developing interprofessional educational (IPE) experiences. *Journal of Interprofessional Care*, 26(2), 153-155. <http://dx.doi.org/10.3109/13561820.2011.645958>
- Prentice, D., Taplay, K., Horsley, E., Payeur-Grenier, S., & Belford, D. (2011). Interprofessional simulation: An effective training experience for health care professionals working in community hospitals. *Clinical Simulation in Nursing*, 7(2), e61-e67. <http://dx.doi.org/10.1016/j.ecns.2010.03.001>
- Pullen, R. L., McKelvy, K., Reyher, L., Thurman, J., Benicini, P., Taylor, T. D.,...Robinson, L. (2012). An end-of-life care interdisciplinary team clinical simulation model. *Nurse Educator*, 37(2), 75-79. <http://dx.doi.org/10.1097/NNE.0b013e3182461be3>
- Ramjan, J. M., Costa, C. M., Hickman, L. D., Kearns, M. & Phillips, J. L. (2010). Integrating palliative care content into a new undergraduate nursing curriculum: The University of Notre

Dame, Australia-Sydney experience. *Collegian*, 17, 85-91.
<http://dx.doi.org/10.1016/j.colegn.2010.04.009>

Reese, C. E., Jeffries, P. R., & Engum, S. A. (2010). Using simulations to develop nursing and medical student collaboration. *Nursing Education Perspectives*, 31(1), 33-37.

Reising, D. L., Carr, D. E., Shea, R. A., & King, J. M. (2011). Comparison of communication outcomes in traditional versus simulation strategies in nursing and medical students. *Nursing Education Perspectives*, 12(5), 323-327.

Robertson, J., & Bandali, K. (2008). Bridging the gap: Enhancing interprofessional education using simulation. *Journal of Interprofessional Care*, 22(5), 499-508.
<http://dx.doi.org/10.1080/13561820802303656>

Ruth-Sahd, L. A., Schneider, M. A., & Strouse, A. (2011). Fostering cultural and interdisciplinary awareness with "low-tech" simulation in a fundamentals nursing course to prepare student nurses for critical care clinical rotations. *Dimensions of Critical Care Nursing*, 30(5), 263-268.
<http://dx.doi.org/10.1097/DCC.0b013e318227717e>

Twigg, R. D., & Lynn, M. C. (2012). Teaching end-of-life care via a hybrid simulation approach. *Journal of Hospice & Palliative Nursing*, 14(5), 374-379.
<http://dx.doi.org/10.1097/NJH.0b013e31824ea261>

van Soeren, M., Devlin-Cop, S., Macmillan, K., Baker, L., Egan-Lee, E., & Reeves, S. (2011). Simulated interprofessional education: An analysis of teaching and learning processes. *Journal of Interprofessional Care*, 25(6), 434-440.
<http://dx.doi.org/10.3109/13561820.2011.592229>

van Soeren, M., Devlin-Cop, S., MacMillan, K. M., & Reeves, S. (2012). A virtual learning community for interprofessional education. *Journal of Interprofessional Care*, 26(2), 156-157.
<http://dx.doi.org/10.3109/13561820.2011.647124>

World Health Organisation. (2010). *Framework for action on interprofessional education and collaborative practice*. WHO: Geneva, Switzerland. Retrieved from http://www.who.int/hrh/resources/framework_action/en/

Yates, P. (2007). Developing the primary palliative care workforce in Australia. *Cancer Forum*, 31(1), 12-15.

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