Evaluation of Self-Efficacy and Confidence Levels among Newly Graduated Nurses Exposed to an End-of-Life Simulation: A Comparison Study

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The document mentioned above has been reviewed and accepted by the student’s advisor, on behalf of the advisory committee, and by the Assistant Dean for MSN and DNP Studies, on behalf of the program; we verify that this is the final, approved version of the student’s DNP Project including all changes required by the advisory committee. The undersigned agree to abide by the statements above.

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Dr. Debra Anderson, Advisor
Evaluation of Self-Efficacy and Confidence Levels among Newly Graduated Nurses Exposed to an End-of-Life Simulation: A Comparison Study

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University of Kentucky
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Spring 2018

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Dedication

I would like to dedicate this paper to my family who has sacrificed so much to allow me to go back to school and achieve one of my dreams. It would have been extremely difficult for me to go back to school without the amazing support of my husband, who was the very one that encouraged me to get my doctoral degree in the first place. He has done laundry, grocery shopping, picked up our children, and helped keep our house running smoothly for the past three and a half years. Despite doing all of this, he had continued to provide emotional support for me, while being my biggest “cheerleader”. Thank you for being the amazing husband that you are.

I would also like to dedicate this paper to my three boys, who have not seen their mom as much as they would like to over the past three and a half years. Thank you all for being understanding and patient with me while I studied, wrote papers, and went to class. I am so very fortunate that God has given you to us!

Finally, I would like to thank God and dedicate this paper to Him. Without Him, I would not have had the energy or motivation to work on my doctoral degree. He is my rock and strength. There were many days that I felt overwhelmed and anxious, but He gave me the peace and rest that I needed to complete my goal.
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Abstract

Purpose: The purpose of this project is to compare self-efficacy and confidence levels among a cohort of newly graduated nurses (defined as nurses who have had no nursing experience and are participating in a new graduate nursing residency) who will participate in an EOL simulation with another cohort of nurses who have been practicing for a year or more, but have not participated in an end-of-life simulation.

Methods: The study included two parts. The first portion included a pre and post-test evaluation of an end-of-life (EOL) simulation intervention with newly graduated nurses (Group One, n=22), as part of their new graduate residency program. The second portion of the study included a survey of a cohort of nurses (Group Two, n=12) who had been in practice for no more than a year, but had not been exposed to an EOL simulation intervention. The Palliative Care Evaluation Tool Kit was adapted and used for this project. The data was then compared between the two groups, in terms of self-efficacy and confidence levels regarding EOL care.

Results: There were no statistically significant differences between Groups One and Two, in regards to race, gender, and degree earned. Mean scores among Group One participants increased from pre-test to post-test in all eleven areas that were surveyed in regards to self-efficacy and confidence levels; however, only eight of the eleven areas were statistically significant ($p < .05$). When comparing Group One to Group Two, there was no statistically significant difference in the post-test data for Group One and the data from Group Two, in relation to self-efficacy and confidence levels for EOL care and views about death and dying for ten out of the eleven areas surveyed.

Conclusion: An EOL simulation intervention was successful in improving self-efficacy and confidence levels among newly graduated nurses, in regards to views about EOL and death and
dying. Additionally, mean scores for all areas surveyed, in terms of self-efficacy and confidence, increased among the intervention group.
Introduction

End-of-life (EOL) care is an issue that must be addressed in today’s healthcare system. In 2015, there were more than 2.7 million deaths in the United States (CDC, 2015); however, only 1.3 million patients utilized hospice services in 2013 (CDC, 2013). Hospice provides care for only about one third of patients who are dying in the United States, and unfortunately patients who enroll in hospice care do so late in their disease process (Casarett & Quill, 2007). Not all patient deaths require hospice care; however, these statistics suggest that EOL/hospice care might be underutilized in the United States.

Despite the advantages of hospice care, this resource is underutilized in today’s healthcare system due to such issues as third party payers, patient and family beliefs, and healthcare providers (Ogle, Mavis, Wyatt, 2002). More than 700,000 people died in a hospital setting in 2010 (CDC, 2010). While some of these deaths may have occurred at in-hospital hospice units, others may not have, leading to the need for educated and experienced healthcare providers who are able to address EOL care and know how to properly care for EOL patients and their families. Unfortunately, challenges and barriers, such as comfort levels for physicians discussing EOL care, present themselves, leading to conversations about EOL care occurring late in a patients’ disease process and ultimately use of hospice care for only a short period of time (Casarett & Quill, 2007).

Pavlish and Ceronisky (2009) found that nurses have a vital role in providing EOL care to patients, specifically in such areas as teaching patients and their family members about informed decision-making and safe self-care which includes symptom management. They also found that
nurses have an important role in caring, which they described as relating to the human aspects of the illness experience and providing emotional, physical, and spiritual support and comfort (Pavlish & Ceronsky, 2009). Nurses are able to spend time with patients and evaluate their level of stability versus instability. Nurses have the potential to provide excellent nursing care to their patients, including EOL care; however, nurses must be aware of what EOL care encompasses and how to effectively provide this type of care.

Research suggests that the main obstacles for nurses providing EOL care include challenges in communication with colleagues, patients, and/or patients’ relatives as well as a lack of knowledge about providing care for patients as they are facing EOL issues (Beckstrand, Moore, Callister, and Bond, 2009). Nurses must be educated about effective EOL care in order to provide holistic and quality care to patients at the end of their lives. Unfortunately, nurses do not always receive the EOL education that they need in their basic nursing programs which may lead to poor communication between the nurse and patient (including the patients’ family) and/or nurse and provider, as well as a lack of confidence on the part of the nurse. Newly graduated nurses enter the workforce with very little, if any, exposure to EOL issues.

In her book, From Novice to Expert, Patricia Benner developed an invaluable theory for nurses beginning their career. In her theory, from novice to expert she describes the five levels of nursing expertise to include the following: novice (a beginner, with little or no experience, who requires supervision and is not able to make discretionary judgments), advanced beginner (able to portray marginally acceptable performance), competent (a nurse who has two to three years of experience and is able manage many aspects of patient care), proficient (able to grasp clinical situations quickly), and expert (has an intuitive understanding of the problems presented). This
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theory can be applied to the newly graduated nurses who do not have patient care experience (or very little).

Newly graduated nurses would be described by Benner as novices (Benner, 1984). Before simulation was incorporated into nursing schools and nursing education in general (i.e., utilized for acute care hospital training), novice nurses relied on patient care experiences in order to gain the experience that they needed to feel more comfortable and confident. Simulation has the potential to increase confidence and self-efficacy levels among newly graduated nurses. Through a controlled and safe environment, novice nurses are able to gain essential learning experiences with specific patient populations while engaging students in independent learning (Sideras, McKenzie, Noone, Markle, Frazier, and Sullivan, 2013). Bambini, Washburn, and Perkins (2009) incorporated Benner’s theory, from novice to expert, into their research with nursing students. They found that, through the implementation of a simulated experience with undergraduate nursing students, levels of self-efficacy and confidence providing patient education increased significantly (Bambini, Washburn, and Perkins, 2009). Despite this research describing nursing students, the same could be applied to self-efficacy and confidence levels of newly graduated nurses, particularly in terms of EOL care.

EOL issues are receiving more attention in recent years among medical and nursing schools (Dickinson, 2007). Despite the increases in EOL education in nursing schools, the United States Institute of Medicine has identified large gaps in health professionals’ knowledge in strategies regarding EOL issues (Aulino & Foley, 2001). Nursing students, as well as new nurses (i.e., nurses who have been practicing for a year or less) do not always have an opportunity to care for a patient at the end of life, therefore, it may be difficult for them to learn
and understand the communication and skills that are necessary for effective EOL care. Simulation has the potential to provide this opportunity for novice nurses and nursing students.

Simulation is a very useful tool that has grown in recent years among colleges of nursing as well as hospitals. Simulation can replace real life experiences with guided experiences that replicate aspects of the real world in an interactive fashion (Gaba, 2004). It can be used to teach both technical (i.e., inserting an intravenous catheter) and nontechnical (i.e., communication) nursing skills in a safe environment that poses no harm to patients (Sanko, 2017). Simulation can be a useful tool for newly graduated nurses who are learning the multiple facets of nursing care, including safety, communication, and skill acquisition, with the hope that confidence, skill, and self-efficacy levels will increase. As mentioned, EOL care may be overlooked in schools of nursing, therefore, and EOL simulation opportunity for newly graduated nurses could increase confidence and self-efficacy in relation to provision of care for EOL patients.

Bandura (1997) discusses the difference between self-efficacy and confidence. He describes self-efficacy as the belief in one’s capabilities that can be produces, given levels of attainments. A self-efficacy assessment includes an affirmation of a capability level along with the strength of that belief. Bandura describes confidence as a term that refers to strength of belief, but may not specify what the certainty is about (Bandura, 1997).

Therefore, the purpose of this project is to examine self-efficacy and confidence levels in relation to EOL care among a group of newly graduated nurses at Kentucky One Healthcare System/St. Joseph Hospital in Lexington, Kentucky. Self-efficacy and confidence levels will be compared as part of their new graduate residency program, after being exposed to an EOL simulation. The data collected from the new graduate nurses will then be compared to a group of nurses who have been in practice for at least a year, but did not participate in an EOL simulation,
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as part of their new graduate residency program at Kentucky One Healthcare System/St. Joseph Hospital.

**Background/Literature Review**

End of life (EOL) care is an important issue for nurses. Death is an unknown. Patients and their families may be fearful and anxious during this time. It is often uncomfortable and scary, although, caring for patients who are at the end of their lives requires nurses who have the confidence to know the right words to say, when to be silent, and/or how to talk with the families and/or patients.

Simulation is a useful tool to provide EOL education to both new and experienced nurses and can be particularly useful for nurses who have never experienced caring for an EOL or dying patient. Lange et al. (2008) found that nurses with eleven or more years of nursing experience had more positive attitudes towards death and caring for dying patients (such as improved communication) as compared to nurses who had only five to ten years of nursing experience. Blazeviciene et al. (2017) conducted a study in which they examined obstacles that oncology nurses faced regarding EOL care and examined the roles of nurses in the provision of EOL care. They found that among the obstacles that nurses faced for EOL care included the nurses’ opinion that immediate EOL patient care was not valued as well as a lack of knowledge (n= 139 out of a total n= 239) as well as a lack of knowledge about how to deal with grieving family members (n= 131 out of a total n= 239) (Blazeviciene et al., 2017).

Tripathy, Routry, and Mishra (2017) studied 138 intensive care unit nurses to investigate knowledge, attitude, and beliefs toward EOL care. The majority of these nurses agreed that nurses should be involved in and initiate EOL discussions with the patient and their family/support system. However, there were several nurses who did not agree that nurses are
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well suited to initiate EOL discussions, while additional nurses were unsure if they are well suited to have these discussions. In addition, there were several nurses who did not agree with allowing a peaceful death if treatment was deemed futile. Tripathy and colleagues (2017) also discovered that work experience played a role in the nurses being a part of EOL team discussions (more experience led to more involvement with EOL team discussions) (Tripathy, Routray, & Mishra, 2017).

Simulation can be used as a tool to provide EOL education to both new and experienced nurses and can be particularly useful for nurses who have never experienced caring for an EOL patient. By creating a safe and controlled environment, novice nurses can participate in a simulated scenario dealing with EOL issues which allows them to experience various aspects of the care involved in these situations. EOL simulations can be created so that nurses are able to observe what a dying patient experiences, participate in EOL discussions with a simulated patient and/or the patients’ family/support system, and gain a deeper understanding of what EOL life care encompasses (Efstathiou & Walker, 2014). Norman (2012) completed a systematic review of literature (17 studies were included in the review) on simulation outcomes in nursing education from the years 2000 to 2010. His review revealed that simulation is useful in creating a learning environment that contributes to knowledge, skills, safety, and confidence (specifically, confidence in clinical performance) in relation to simulation-based learning in nursing education. Several of the studies suggested that the controlled environment of a simulation laboratory enhances communication skills among nursing students (Norman, 2012).

Many newly graduated nurses have not had the opportunity to observe and/or participate in the provision of EOL care to patients in their nursing programs or early in their career. Furthermore, many nursing students have not had the opportunity to get adequate training and
instruction regarding how to care for EOL patients (Dickinson, 2007). The use of simulation has the potential to be very useful in exposing newly graduated nurses to EOL care. Self-efficacy and confidence levels can increase, specifically in relation to communication with a dying patient and their families, as a result of an EOL simulation (Lewis et al., 2016).

Gillan, Jeong, & van der Riet (2014) performed a literature review of 16 articles from year to year, related to EOL care simulation. They found that this type of simulation is a strong pedagogical approach to learning, specifically in relation to positive effects on acquisition of knowledge, communication skills, self-confidence, student satisfaction, and level of engagement. In addition, Efstathiou & Walker (2014) found that through the implementation of an interprofessional simulation-based training in EOL communication, communication improved; for example, students reported feeling more confident with knowing how and when to talk about EOL plans with their patients. Further, Lewis and colleagues (2016), in response to concerns from undergraduate nursing and medical students about the feeling of emotional distress and a lack of preparation to provide care to patients at EOL, evaluated the attitudes of 19 undergraduate nursing and fourth year medical students about EOL care, before and after a simulated EOL scenario. They found that through an EOL simulation intervention, the attitudes of these students improved regarding the student’s attitudes toward EOL care (Lewis et al., 2016). Simulation is a tool that can be used for newly graduated nurses in order to provide them with hands-on experiences related to EOL care and potentially increase their confidence, communication, and knowledge (Gillan, Jeong & van der Riet, 2014).

**Overview of Project**

The purpose of this project was to compare the self-efficacy levels of newly graduated nurses who participated in an EOL simulation with those of nurses who had been practicing for a
year or more and did not participate in the simulation. Newly graduated nurses were defined as nurses who had had no nursing experience, or very little, at the time of the study and were participating in a new graduate nursing residency. This project was designed to evaluate whether one year of nursing experience might be comparable to an EOL simulation intervention with newly graduated nurses. Furthermore, this project was designed to analyze the effects of an EOL simulation on newly graduated nurses, as part of their new graduate nursing residency program.

The Kentucky One website (n.d.) mentions the Kentucky One Healthcare system as one of the largest health systems in the Commonwealth of Kentucky, with more than 200 different locations, including physician’s offices, hospitals, and home health agencies in Kentucky and southern Indiana. St. Joseph Hospital, located in Lexington, Kentucky is part of the Kentucky One Healthcare System. The hospital was founded in 1877 and has grown into a 433 bed medical center. St. Joseph Hospital has been nationally recognized in the areas of cardiology, stroke care, and orthopedics by U.S. News and World Report and Thomas Reuters.

St. Joseph Hospital provides a mandatory new graduate nursing residency program for all newly graduated registered nurses who are employed by the hospital. Phase I of the new graduate nursing residency program is approximately six to eight weeks in length and includes a blend of interactive activities, such as working with chest tubes and practicing suctioning in a low fidelity simulation environment with hospital staff nursing educators. The residency program participants also participate in higher fidelity simulation experiences, such as caring for a patient with sepsis, acute myocardial infarction, and/or an acute stroke; these higher fidelity simulations are performed in the simulation laboratory of the hospital, led by the staff nursing educators at St. Joseph Hospital. The final simulation is an EOL scenario, in which the nurses must be able to
communicate with an EOL patients’ family member and provide care and effective communication to the dying simulated patient.

St. Joseph Hospital has an EOL simulation (Appendix A) that is included in the new graduate residency program for newly hired nurses. The hospital’s education/simulation department has used the EOL simulation since 2016; however, the effects of the simulation have not been evaluated. After speaking with St. Joseph’s Clinical Nurse Specialist (CNS) and simulation expert at St. Joseph Hospital, it was discovered that there was a cohort of approximately 15 nurses who had been practicing for one year or less, who were not able to participate in the EOL simulation that was developed for the new graduate residency program. These two groups of nurses in order to evaluate the effect of an EOL simulation on nurses.

**Methods**

The project was identified in May of 2017 through an initial meeting with St. Joseph’s CNS and simulation expert. During the meeting, EOL care was discussed as an area that newly graduated nurses may need additional training and education. St. Joseph’s CNS/simulation expert also mentioned that she would like to see the simulations performed at the hospital evaluated for effectiveness, thus, the project idea was initiated. Through more meetings and discussions, it was decided that an EOL simulation would be implemented for St. Joseph Hospital’s new graduate residency program. This simulation would be evaluated and then compared to a cohort of nurses with a minimum of one year of nursing experience to analyze the differences in self-efficacy and confidence levels between the two groups.

**Setting**

The project was implemented at St. Joseph Hospital, in the simulation laboratory. A low-fidelity simulator (the EOL patient) was utilized for this simulation and St. Joseph’s
CNS/simulation expert participated as the patients’ daughter. The room was set up with dim lighting, soft music, pictures, and cards in order to simulate how a realistic hospital room would appear. The PI was also in attendance for the EOL simulation. All equipment, staff members, and other personnel were available and provided, as part of the new graduate residency program at the hospital. St. Joseph’s CNS/simulation expert was in charge of the EOL simulation (making sure equipment is ready, ensuring availability of space for the simulation, providing the actual EOL simulation scenario, and ensuring each of the participants were in attendance). An additional clinical educator was in another room so that she would be able to monitor the simulation and provide sound for the simulator (i.e., she would respond for the patient, as needed, during the simulation).

**Participants**

Participants for the EOL simulation intervention were recruited from the new graduate residency program cohort. This cohort of nurses was required to participate in St. Joseph Hospital’s EOL simulation as part of the residency program; however, they were not required to participate in the project. Due to two absences for the project implementation day, there were 22 participants (out of a total of 24 participants in the new graduate residency program). For the comparison group, St. Joseph Hospital’s CNS/simulation expert identified a cohort of nurses who had already been in practice for one year or less, but had not participated in an EOL simulation as part of their new graduate residency program upon hire. These nurses were recruited by their hospital clinical mentor and provided the opportunity to participate in the study.

There were two independent convenience samples for this project. The first sample, which will be referred to as Group One, was newly graduated, English speaking, registered
nurses in various areas of specialty (i.e., critical care, medical/surgical care, etc…) at St. Joseph Hospital. Nurses who had been practicing for over six months were excluded from Group One. Group One included 22 newly graduated nurses (practicing less than six months and/or graduated in May, 2017) and included both Associate Degree (ADN) and Bachelors of Science in Nursing (BSN) nurses (see Table 1). Most of these nurses have already taken the national licensing exam (NCLEX), however, a few had not taken the exam prior to implementation of the project. There were two male nurses in this sample and 20 female nurses. 21 of the nurses in Group One are Caucasian; one nurse was of Puerto Rican ethnicity. The entire group of newly graduated nurses who started at St. Joseph Hospital in June 2017 and were actively participating in the new graduate residency program, was included in the simulation; however they were given the choice to participate in the survey.

The other sample, which will be referred to as Group Two, was English speaking nurses who had been in practice for a year at St. Joseph Hospital, participated in the new graduate residency program at St. Joseph Hospital, and completed it during the summer of 2016; however, Group Two had not been exposed to an EOL simulation as part of their new graduate residency program. The only exclusion criteria for Group Two was registered nurses who have been practicing for over a year. All of the nurses in Group Two are Caucasian. Participants in Group Two were given the choice to participate in the survey.

Participation in this project was voluntary for both groups (Group One and Group Two). Participants were given the option to participate, and informed of the confidentiality associated with the survey. A Waiver of Documentation of Informed Consent was completed/included (Appendix C) and informed consent was implied as part of the completion of the survey. A cover letter was included with the survey (Appendix C), explaining the study details and the statement
“completion of the survey implies consent to participate in the study” was included in the cover letter. All data were maintained, confidentially, by the PI.

As an incentive to have Group Two complete the survey, a random drawing of the participants was performed and a $25 gift card to Starbucks Coffee Company was awarded to the chosen participant. A participant was also randomly drawn from Group One and awarded a $25 gift card to Starbucks Coffee Company as a token of appreciation for participating in the survey.

Approval for the Project

The chief nursing officer for St. Joseph Hospital was contacted via email regarding this project and approval was granted (Appendix E) by her and the division of research manager at the Institute of Research and Innovation for Kentucky One Health. After approval was received (Appendix D) from the University of Kentucky’s Medical Review Board (IRB approval), the project was implemented.

Project Implementation for Group One

The EOL project was implemented in the simulation center at St. Joseph Hospital on August 17, 2017. The EOL life simulation is attached (Appendix A) and provides details regarding the simulation scenario. Simulation participants were given a brief bedside report on the patient and were then instructed to provide care. The PI for this project did not participate in the simulation, but was present in the simulation laboratory for each of the simulations completed. Participants were divided into three groups, therefore the simulation was performed a total of three times so that the number of nurses participating in the simulation would not be excessive (no more than six participants each time the simulation was performed). Participants were able to access resources such as laboratory personnel and providers (additional simulation
personnel filled these roles). In addition, a hospital chaplain was available for consult by the students when requested.

The simulation was performed consistently each time it was presented. A time of debriefing was provided after each simulation in which St. Joseph’s CNS/simulation expert would ask several open-ended questions, such as “what was the biggest take-away from this simulation?” and “describe how this simulation made you feel?”.

The project included a pre and posttest descriptive design for Group One. The study included a quantitative approach with Likert type surveys (Appendix B) administered to participants before and after implementation of the EOL simulation intervention. Group One participants, after agreeing to participate in the study, completed a pre-survey (Appendix B) which assessed their confidence and self-efficacy levels regarding EOL care. Once the simulation was completed, the nurses then completed the same survey that was administered prior to the simulation (Appendix B) as a post-survey.

**Simulation Debriefing for Group One**

At the completion of each of the three simulations performed, each group participated in a time of debriefing, which lasted approximately 20 to 25 minutes. The debriefing process took place in the simulation lab, at the simulated patients’ bedside. In attendance were two clinical educators, who helped with the simulation, along with St. Joseph Hospital’s CNS/simulation expert. The PI was also in attendance for the debriefing process; however, she did not participate. The debriefing was led by the CNS/simulation expert. During the debriefing, the simulation participants were able to voice their feeling regarding the simulation.

An additional clinical educator helped with the debriefing process and discussed some of the cultural differences seen in EOL situations with patients and patient families. Do Not
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Resuscitate (DNR) status and living wills were mentioned, as part of the debriefing process, and students were able to ask questions regarding these issues.

Data Collection for Group Two

On August 18, 2017 through September 30, 2017, surveys (Appendix B) were administered to the nurses in Group Two. Surveys were provided to 15 potential participants; however, 12 were completed and returned. The survey was the same survey that was administered pre- and post-simulation to Group One, however, Group Two only participated in the survey once. These surveys were provided, along with an unmarked envelope, to each participant in Group Two by their assigned clinical educators for the hospital. Participants filled each survey out, anonymously and confidentially, and returned them in a sealed envelope, to their assigned clinical educator. Each survey was then given to the PI.

Instrument

The Palliative Care Evaluation Tool Kit/Palliative Care Self-Efficacy Scale (Eager et al., 2004) was utilized for this project; however, only tool 2.1 (Appendix B) was used. Eager and colleagues (2004) designed this tool for the purpose of providing a way for palliative care services and initiatives to be monitored, measured, and evaluated. Due to the diversity in palliative care services, particularly in terms of goals, size, duration, and evaluation experience of the participants, this toolkit provides a range of tools that allow data to be effectively collected, and provides the ability to assess participant’s attitudes and confidence regarding the provision of palliative care (Eager et al., 2004).

Phillips, Salamonson, and Davidson (2011) investigated the psychometric properties of the Palliative Care Self-Efficacy Scale, specifically tool 2.1. After administering tool 2.1 to 405 healthcare professionals in long-term care facilities, they performed a Cronbach’s alpha test to
evaluate content validity. Cronbach’s alpha of tool 2.1 (the scale and subscales) ranged from 0.87 to 0.92, which demonstrates good validity and reliability of the tool, suggesting that the tool can be useful for assessing and monitoring clinicians’ perceived capacity to provide palliative care (Phillips, Salamonson, & Davidson, 2011).

The tool was adapted to meet the needs of this project after permission to utilize and adapt the Palliative Care Evaluation Tool Kit was provided by the primary author of the tool (Appendix F). The adapted tool was administered to both Group One and Group Two, however, Group One completed the survey twice (pre- and post-simulation), while Group Two only completed the survey once.

**Statistical Analysis**

After data were collected from Group One (N= 22), both pre and post-simulation, the means and standard deviations were calculated for each of the questions (as seen in Tables 3 and 4). All data compilation and evaluation was done using SPSS 23. The means and standard deviations for the pre and post-simulation intervention were compared and p values were calculated, using a Paired Samples T-test in order to calculate 2-tailed significance. The means and standard deviations were then calculated for the data collected from Group Two (N=12). The post-simulation means and standard deviations for Group One were then compared to the means and standard deviations for Group Two; p-values were calculated, using an Independent Samples T-test. Levene’s Test for Equality of Variances was evaluated, and for p-values less than <0.05, significance was determined using a 2-tailed significance value.

Demographic information was collected for both groups (Group One and Two) and compared, using Fisher’s Exact Test. Table 1 contains the demographic information for both groups, along with the p-values for each demographic category.
Results

Table 1 reveals that there were no statistically significant differences when comparing the demographic information between Group One and Group Two. Using a $p$-value of $<$0.05 for significance, there were no statistically significant differences between Group One (N=22) and Group Two (N=12) for race or gender. Using the same $p$-value for significance in relation to comparison of highest degree earned between Group One and Group Two, there was no statistically significant difference between the two groups.

For Group One (N= 22), the simulation intervention group, there were statistically significant results related to the EOL simulation. For the seven questions related to confidence and self-efficacy levels with EOL care, each of the mean scores increased from pre-simulation to post-simulation (Table 2). The mean score for answering patients’ questions about the dying process increased from 1.6 (SD= 0.7) to 2.4 (SD= 0.8) with a $p$-value of $<$0.01. The mean score for supporting the patient or family member when they become upset increased from 2.1 (SD=0.9) to 2.8 (SD= 0.8) with a $p$-value of $<$0.01 while the mean scores for informing people of the support services available and discussing patients’ wishes pertaining to after their death increased (pre-test score:2 [SD= 0.8], post-test score 2.9 [0.8] with a $p$-value of $<$0.01 and pre-test score 2.2 [0.9], post-test score [1.1] with a $p$-value of .011, respectively). Additionally, the mean score for reacting to and coping with terminal dyspnea increased from a pre-test score of 1.9 (SD=0.6) to a post-test score of 2.6 (SD=0.7) and $p$-value of .001. There were two areas that were not statistically significant. The mean score for answering queries about the effects of certain medications increased from 2.3 (SD= 0.8) pre-simulation to 2.6 (SD= 0.9) post-simulation; however, the $p$-value was 0.056 ($>0.05$). The mean score for reacting to reports of
pain from the patient increased from 2.9 (SD= 0.9) pre-simulation to 3.1 (SD= 0.8) post-simulation; however, the p-value was 0.135 (>0.05).

When comparing confidence and self-efficacy levels regarding views about death and dying before and after the EOL simulation education for Group One, the mean scores before and after the simulation increased (Table 3); however, two out of the four were statistically significant. Mean scores regarding the nurses views of comfort levels discussing end-of-life ethics, do not resuscitate orders, and advance directives increased mildly from a pre-simulation mean score of 2.7 (SD= 1.4) to a post-simulation mean score of 3.2 (SD= 1.3), however the p-value was 0.69 (>0.05). The mean scores for the participants feeling more comfortable with caring for a dying patient (pre-test mean score 2.9 [SD=1.2], post-test mean score 3.5 [1.2], p-value .007), talking to families about death (pre-test mean score 2.9 [SD=1.2], post-test mean score 3.6 [SD=1.2], p-value .021) and feeling comfortable with EOL communication skills (pre-test score 2.9 [SD=1.3], post-test score 3.3 [SD=1.3], p-value .057) all increased after the EOL simulation intervention.

Table 4 shows the comparison between the post-simulation scores for Group One and Group Two. The mean scores for all of the seven areas related to confidence and self-efficacy levels with EOL care between these groups differed, as expected. Group Two had consistently higher mean scores for all seven questions; however, only six of the seven questions were statistically significant.

When asked about confidence and self-efficacy levels related to reacting to reports of pain from the patient, the mean score, post-simulation, for Group One was 3.1 (SD= 0.8), while the mean score for Group Two was 3.9 (SD= 0.3) and a p-value of <0.05. There was no statistical significant difference between Group One and Group Two for the following areas:
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answering patients’ questions about the dying process (mean score 2.4 [SD=0.8] for Group One, 2.9 [SD=1.0] for Group Two, with a *p*-value of 0.4), supporting the patient or family member when they become upset (mean score 2.8 [SD=0.8] for Group One, 3.6 [SD=0.7] for Group Two, with a *p*-value of 0.2), informing people of the support services available (mean score 2.9 [SD=0.8] for Group One, 3.5 [SD=0.7] for Group Two, with a *p*-value of 0.9), discussing patients’ wishes pertaining to after their death (mean score 2.8 [SD=1.1] for Group One, 3.2 [SD=0.8] for Group Two, with a *p*-value of 0.2), answering queries about the effects of certain medications (mean score 2.6 [SD=0.9] for Group One, 3.3 [SD=0.6] for Group Two, with a *p*-value of 0.1), and reacting to and coping with terminal dyspnea (mean score 2.6 [SD=0.7] for Group One, 2.8 [SD=0.9] for Group Two, with a *p*-value of 0.6)

Table 5 shows the comparison of confidence and self-efficacy levels with views about death and dying between Group One and Group Two. The mean scores for Group Two were consistently higher than Group One for all four questions; however, there was no statistical significance for any of the areas evaluated. There were no statistical differences among the mean scores between both groups in terms of comfort levels for the following areas: caring for a dying patient (mean score 3.5 [SD=1.2] for Group One, 4.1 [SD=1.2] for Group Two, with a *p*-value of 0.6), talking to families about death (mean score 3.6 [SD=1.2] for Group One, 4.1 [SD=1.2] for Group Two, with a *p*-value of 0.5), end-of-life communication (mean score 3.2 [SD=1.3] for Group One, 3.8 [SD=1.1] for Group Two, with a *p*-value of 0.4), and discussing end-of-life ethics such as DNR orders and advance directives (mean score 3.4 [SD=1.3] for Group One, 3.8 [SD=1.3] for Group Two, with a *p*-value of 0.8)

Qualitative data were collected anecdotally by the PI from Group One. Several of the participants in Group One made comments after the EOL simulation intervention. Among the
comments made by participants were the following: “I am still not completely comfortable caring for a patient at the end of their life, but am definitely more comfortable than I was before the simulation,” “this simulation made me understand how to talk with the families of dying patients, something I was not at all comfortable with,” and “thank you for providing us with this simulation. While I still have a lot to learn, I feel more comfortable dealing with end-of-life situations now”. This data suggests that the EOL simulation was effective in increasing confidence levels for newly graduated nurses exposed to an EOL simulation.

**Discussion**

Effective end-of-life (EOL) care is essential in healthcare and nurses must be equipped to work with patients dealing with EOL issues. Nurses’ confidence and self-efficacy levels should be high enough that EOL patients feel comfortable about the care that they are receiving. The literature has shown that nurses do not always have the training and experience they need to care for EOL patients, particularly newly graduated nurses who may not have had the exposure to these types of situations. An EOL simulation intervention has the potential to provide an increase in confidence and self-efficacy, based on the data retrieved by this project.

Through the implementation of an EOL simulation, as utilized in this project, newly graduated nurses had the opportunity to speak to an EOL patient as well as the family member of the patient. Participants were able to discuss EOL issues, such as palliative care and DNR status, in a controlled environment. Tripathy, Routray, and Mishra (2017), through their research, discovered that most nurses feel that they should be involved in and initiate EOL discussions; however, the terms end-of-life and palliative care were not familiar to some of the nurses. These findings suggest a need for nurses, particularly newly graduated nurses who have not been exposed to EOL patient situations, to become more aware of what EOL care is and how to
effectively provide this type of care to both the dying patient and their family. Exposure to EOL care is necessary for nurses to have so that the best care and communication can be provided. Many newly graduated nurses have not had exposure to EOL situations, therefore, cannot understand the care involved.

Through their research, Efstathiou & Walker (2014) discovered that an EOL simulation improved nursing student’s communication about EOL care with patients. As shown in Tables 2 and 3, an EOL simulation intervention can improve self-efficacy and confidence levels among newly graduated nurses. Mean scores for such areas as feeling comfortable with answering patients’ questions about the dying process, discussing patients’ wishes pertaining to after their death, and supporting the patient or family member when they become upset increased significantly after the implementation of an EOL simulation. Additionally, simulation participants’ comfort levels increased significantly in relation to caring for a dying patient, talking to families about death, and feeling comfortable with end-of-life communication skills (i.e., giving bad news, talking with family, discussing prognoses, and discussing various treatment options). Despite mean scores increasing from pre-simulation to post-simulation, there was no statistically significant difference with self-efficacy and confidence levels in relation to reacting to reports of pain from the patient, answering queries about the effects of certain medications, and comfort levels discussing end-of-life ethics, DNR orders, and advance directives. This data suggest the need to increase education in these areas of EOL care.

When comparing the mean scores for self-efficacy and confidence levels between Group One (simulation group) and Group Two (non-simulation group), there was no statistically significant difference in relation to many aspects of self-efficacy and confidence, particularly in relation to comfort levels caring for a dying patient, talking to families about death, EOL
communication skills (i.e., giving bad news, talking with family, discussing prognoses, discussing various treatment options), and discussing EOL ethics, DNR orders, and advance directives. These findings suggest that an EOL simulation intervention could be comparable (but not equal) to one year of nursing experience in terms of self-efficacy and confidence levels for many aspects of EOL care.

**Implications for Clinical Practice**

The first implication for clinical practice is that an EOL simulation has the potential to be highly effective for improving confidence and self-efficacy levels among newly graduated nurses caring for EOL patients. As mentioned, simulation has been shown to increase confidence and self-efficacy levels among nursing students (Bambini, Washburn, & Perkins, 2009).

A comparison of the confidence and self-efficacy levels of newly graduated nurses before and after an EOL simulation intervention revealed several areas of significance (see Table 2). The mean scores for every area surveyed increased from the pre-simulation survey to the post-simulation survey. Six out of the seven areas were statistically significant, indicating that the nurses were more confident/comfortable with the following: answering patients’ questions about the dying process, supporting the patient or family member when they become upset, informing people of the support services available, discussing patients’ wishes pertaining to after their death, reacting to reports of pain from the patient, and reacting to and coping with terminal dyspnea (all $p$-values for these areas were <0.05). The two areas that were not statistically significant related to confidence and self-efficacy levels with EOL care before and after the EOL simulation were related to answering queries about the effects of certain medications and reacting to reports of pain from the patient.
When evaluating confidence and self-efficacy levels with views about death and dying, pre- and post-simulation, the mean scores increased for all four areas evaluated. This data indicates that the nurses surveyed were more confident/comfortable with the following areas, post EOL simulation: caring for a dying patient, talking to families about death, EOL communication skills (i.e., giving bad news, talking with family, discussing prognoses, and discussing various treatment options), and discussing EOL ethics, do-not-resuscitate (DNR) orders, and advance directives. Of importance, the two areas that were not statistically significant are the following: comfort levels with EOL communication skills and EOL discussions, such as DNR orders and advance directives. Additional study would be recommended in these areas.

Based on the data received from the newly graduated nurses who participated in the EOL simulation, the intervention was successful in increasing confidence and self-efficacy levels. This information has measurable clinical significance. Oftentimes, new nurses are very fearful providing care to EOL patients, as many of them have not been exposed to this type of nursing care and/or have not been educated in nursing school related to EOL care. An EOL simulation, as part of a new graduate nursing residency program, has the potential to provide the necessary experience caring for an EOL patient in a controlled and safe environment. Additionally, through the process of debriefing, simulation participants (nurses) are able to self-reflect, with guidance from experienced nurses who can help these new nurses work through their feelings and help improve nursing skills related to EOL care.

EOL education should be increased in the education of new nurses. Ideally, EOL care should be increased early on, in nursing school, so that once new nurses have graduated and enter the workforce, they already have an idea of what EOL care is (i.e., recognition of terms such as palliative care and DNR orders). EOL education should also be incorporated into new
graduate residency programs, as it has shown to be effective in increasing self-efficacy and confidence levels among newly graduated nurses.

The second implication for clinical practice is that an EOL simulation for newly graduated nurses (Group One) could be comparable to one year of nursing experience (Group Two), in relation to the provision of care to EOL patients. As mentioned, newly graduated nurses may not get the education they need in nursing school in order to effectively know what to do or how to care for EOL patients (Dickinson, 2007). As has been discussed, the data retrieved by this project suggests that an EOL simulation can increase confidence and self-efficacy levels among newly graduated nurses. Survey data were also retrieved from nurses who had been in practice for approximately a year, in order to evaluate their levels of self-efficacy and confidence.

When comparing the results between Group One and Group Two regarding self-efficacy and confidence levels with EOL care (Table 4), the data were not statistically significantly different between the two groups. As anticipated, the mean scores for the experienced nurses were consistently higher than the mean scores for the newly graduated nurses in all seven areas; however, of interest, there was only one area that was statistically significant when comparing the groups. The evaluation of confidence and self-efficacy levels in relation to reacting to reports of pain from the patient was not statistically significant, suggesting that there was a difference between the group of nurses who had participated in the EOL simulation, as opposed to the group of nurses who had not participated in the EOL simulation, but had one year of experience. Based on this data, one year of experience could be more beneficial to nurses in relation to responding to reports of pain from a patient, in comparison to an EOL simulation provided to newly graduated nurses.
Again referring to Table 4, six of the seven categories (comparing self-efficacy and confidence levels with EOL care) were not statistically significant when comparing the post-simulation data of the newly graduated nurses to the survey data of the nurses with one year of experience. Despite consistently higher mean scores among the experienced nurses, the data suggests that an EOL simulation intervention could be comparable to one year of experience in the following areas: answering patients’ questions about the dying process, supporting the patient or family member when they become upset, informing people of the support services available, discussing patients’ wishes pertaining to after their death, answering queries about the effects of certain medications, and reacting to and coping with terminal dyspnea. This data provide important clinical significance, as it indicates that an EOL simulation can increase confidence and self-efficacy levels among newly graduated nurses, comparable to one year of nursing experience, as has also been shown in other literature describing other simulation scenarios increasing self-efficacy and confidence levels (Bambini, Washburn, & Perkins, 2009).

When comparing the data related to self-efficacy and confidence levels with views about death and dying, the data from Table 5 (comparison of self-efficacy and confidence levels about death and dying between Group One and Group Two) reveal consistently higher mean scores among the group of nurses with one year of nursing experience (but no simulation intervention) in all four areas surveyed; however, there was no statistical significance in any of the areas. The data from Table 5 also suggest that self-efficacy and confidence levels with views about death and dying among nurses with one year of nursing experience, without exposure to an EOL simulation, could be comparable to newly graduated nurses who have participated in an EOL simulation in the following areas: caring for a dying patient, talking to families about death, EOL communication skills, and discussing EOL ethics, DNR orders, and advance directives.
After evaluating and comparing the data between both groups of nurses (newly graduated simulation intervention nurses and non-simulation nurses with one year of experience), the assumption could be made that an EOL simulation is comparable to one year of nursing experience in relation to confidence and self-efficacy levels among several different areas of nursing care related to EOL care.

Simulation is a very effective tool for newly graduated nurses, particularly in the area of EOL care. As mentioned, the mean scores consistently improved among the EOL simulation participants when comparing pre- and post-simulation scores. The data provide a strong argument in favor of the utilization of simulation for newly graduated nurses. An EOL simulation could also be implemented in nursing schools so that nursing students might be exposed to the importance of effective EOL care.

Limitations

There were some limitations associated with this project. The first limitation was that both samples used for this project were convenience samples, thereby, preventing randomization of the samples. Group One (simulation group) was composed of nurses who were employed by St. Joseph Hospital and were required to participate in the EOL simulation, as this was a mandatory part of their new graduate residency program. Group Two was composed of nurses who had participated in the new graduate residency program a year prior, however, did not participate in an EOL simulation during their residency program. Another limitation to this project was the sample size for both groups. Group One had a sample size of 22 participants, while Group Two had a sample size of 12 participants. Due to the small sample sizes, the data collected may not be representative of a larger population, therefore, cannot be generalizable. Additionally, both groups were very homogenous (Table 1). 21 of the 22 participants in Group
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One were composed of White, Non-Hispanic subjects and only two of the participants were male. Group Two was composed of ten white, non-Hispanic females (100% of the Group Two participants were female). Furthermore, there is no data at six months or longer to determine if confidence levels are high.

The majority of participants who participated in this study had a highest degree of Associate Degree in Nursing (ADN). Group One had 19 ADN prepared nurses and three Bachelor’s in Science of Nursing (BSN) prepared nurses. Group Two had ten ADN prepared nurses and two BSN prepared nurses. The only demographic data that was collected from this study was race, gender, and highest degree earned. Other questions could have been asked of the participants, such as age and detail about their past nursing experiences.

Recommendations

Further study is needed in relation to EOL care and how to best prepare new nurses to provide this type of care. There is an abundance of research related to simulation, including EOL simulation interventions implemented; however, most of the research seems to focus on EOL simulation exercises with nursing students. There is not as much research available pertaining to EOL simulation interventions with newly graduated or even experienced nurses. EOL patients require effective nursing care and communication, which is often not provided in nursing school. EOL simulations would be an extremely beneficial part of all new graduate nursing residency programs across the country (and world).

Additional studies could be performed in relation to confidence and self-efficacy levels among nurses, incorporating more demographic information, focusing on how different demographic data leads to various approaches to EOL care with patients. Research could also be
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conducted to compare educational levels, such as an associated degree trained nurse compared to a baccalaureate prepared nurse, in regards to comfort levels with EOL care.

EOL simulations would be very beneficial to nursing schools as well. This project has suggested that an EOL simulation can lead to increased confidence and self-efficacy levels among newly graduated nurses, therefore, integration of this type of simulation scenario into schools of nursing could be very beneficial to hospitals and other healthcare institutions. Additional research could be conducted to evaluate whether increased self-efficacy and confidence levels would translate into an improvement in performance with the provision of EOL nursing care.

Conclusion

Simulation is a useful tool that can provide the opportunity for nurses to implement nursing care in a controlled, guided, and safe environment, with no fear of harming a live patient. EOL care requires nurses who have confidence and self-efficacy caring for this type of patient population. Unfortunately, not all new nurses have received EOL education in nursing school or have been exposed to EOL situations. An EOL simulation, as part of a new graduate nursing residency program, can be implemented in order to potentially increase a nurse’s level of confidence and self-efficacy.
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References


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Centers for Disease Control: Fast Facts (2013). Available at

https://www.cdc.gov/nchs/data/databriefs/db118.htm

Centers for Disease Control: Chronic Disease Prevention and Health Promotion (2017).

Available at https://www.cdc.gov/chronicdisease/overview/index.htm

Dickinson, G. E. (2007). End-of-life and palliative care issues in medical and nursing schools in
the United States. Death Studies, 31, 713-726.

Eager, K., Senior, K., Fildes, D., Quinsey, K., & Owen, A. (2004). The Palliative Care
Evaluation Tool Kit: A compendium of tools to aid in the evaluation of palliative care
projects. University of Wollongong Research Online. University of Wollongong
Australia.


i2-i10.

literature. Nursing Education Today, 34, 766-774.

Kentucky One Healthcare website (n.d.). Retrieved from

http://www.kentuckyonehealth.org/saint-joseph-hospital-lexington

for dying patients in a comprehensive cancer centre. Oncology Nursing Forum, 35(6),
955-999.

intervention on attitudes of undergraduate nursing and medical students towards end of
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Table 1: Comparison of demographic characteristics between simulation and non-simulation groups

<table>
<thead>
<tr>
<th>Demographic Characteristics for Group One</th>
<th>Simulation group (N=22) n (%)</th>
<th>Non-simulation group (N=12) n (%)</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Race</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White, non-Hispanic</td>
<td>21 (95%)</td>
<td>10 (83%)</td>
<td>0.279</td>
</tr>
<tr>
<td>Other</td>
<td>1 (5%)</td>
<td>2 (17%)</td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>2 (9%)</td>
<td>12 (100%)</td>
<td>0.529</td>
</tr>
<tr>
<td>Female</td>
<td>20 (91%)</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Highest Degree Earned</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Associate’s degree in Nursing (ADN)</td>
<td>19 (86%)</td>
<td>10 (83%)</td>
<td>&gt;0.99</td>
</tr>
<tr>
<td>Bachelor’s degree in Nursing (BSN)</td>
<td>3 (14%)</td>
<td>2 (17%)</td>
<td></td>
</tr>
</tbody>
</table>

Table 2. Comparison of Confidence/Self-Efficacy Levels with End-of-life care Before and After the Simulation Education (Group One, Simulation Group)

<table>
<thead>
<tr>
<th>Item</th>
<th>Pre-simulation Mean (SD)</th>
<th>Post-simulation Mean (SD)</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Answering patients’ question about the dying process</td>
<td>1.6 (0.7)</td>
<td>2.4 (0.8)</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Supporting the patient or family member when they become upset</td>
<td>2.1 (0.9)</td>
<td>2.8 (0.8)</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Informing people of the support services available</td>
<td>2 (0.8)</td>
<td>2.9 (0.8)</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Discussing patients’ wishes pertaining to after their death</td>
<td>2.2 (0.9)</td>
<td>2.8 (1.1)</td>
<td>.011</td>
</tr>
<tr>
<td>Answering queries about the effects of certain medications</td>
<td>2.3 (0.9)</td>
<td>2.6 (0.9)</td>
<td>.056</td>
</tr>
<tr>
<td>Reacting to reports of pain from the patient</td>
<td>2.9 (0.9)</td>
<td>3.1 (0.8)</td>
<td>.135</td>
</tr>
<tr>
<td>Reacting to and coping with terminal dyspnea</td>
<td>1.9 (0.6)</td>
<td>2.6 (0.7)</td>
<td>.001</td>
</tr>
</tbody>
</table>

1= Need further basic instruction, 2= Confident to perform with close supervision/coaching, 3= Confident to perform with minimal consultation, 4= Confident to perform independently
Table 3. Comparison of Confidence/Self-Efficacy Levels with Views about Death and Dying Before and After the Simulation Education (Group One, Simulation Group)

<table>
<thead>
<tr>
<th>Item</th>
<th>Pre-simulation</th>
<th>Post-simulation</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am not comfortable caring for a dying patient</td>
<td>2.9 (1.2)</td>
<td>3.5 (1.2)</td>
<td>.007</td>
</tr>
<tr>
<td>I am not comfortable talking to families about death</td>
<td>2.9 (1.2)</td>
<td>3.6 (1.2)</td>
<td>.021</td>
</tr>
<tr>
<td>I am not comfortable with end-of-life communication skills (i.e., giving bad news, talking with family, discussing prognoses, discussing various treatment options)</td>
<td>2.7 (1.4)</td>
<td>3.2 (1.3)</td>
<td>.069</td>
</tr>
<tr>
<td>I am not comfortable discussing end-of-life ethics: DNR orders and advance directives</td>
<td>2.9 (1.3)</td>
<td>3.3 (1.3)</td>
<td>.057</td>
</tr>
</tbody>
</table>

1= Strongly Agree, 2= Agree, 3= Unsure/Mixed, 4= Disagree, 5= Disagree Strongly

Table 4. Comparison of Confidence/Self-Efficacy levels with End-of-Life care between simulation group (using post-simulation survey data) and non-simulation group

<table>
<thead>
<tr>
<th>Item</th>
<th>Group One Post-simulation Mean (SD)</th>
<th>Group Two Survey data Mean (SD)</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Answering patients’ question about the dying process</td>
<td>2.4 (0.8)</td>
<td>2.9 (1.0)</td>
<td>0.4</td>
</tr>
<tr>
<td>Supporting the patient or family member when they become upset</td>
<td>2.8 (0.8)</td>
<td>3.6 (0.7)</td>
<td>0.2</td>
</tr>
<tr>
<td>Informing people of the support services available</td>
<td>2.9 (0.8)</td>
<td>3.5 (0.7)</td>
<td>0.9</td>
</tr>
<tr>
<td>Discussing patients’ wishes pertaining to after their death</td>
<td>2.8 (1.1)</td>
<td>3.2 (0.8)</td>
<td>0.2</td>
</tr>
<tr>
<td>Answering queries about the effects of certain medications</td>
<td>2.6 (0.9)</td>
<td>3.3 (0.6)</td>
<td>0.1</td>
</tr>
<tr>
<td>Reacting to reports of pain from the patient</td>
<td>3.1 (0.8)</td>
<td>3.9 (0.3)</td>
<td>&lt;0.05</td>
</tr>
<tr>
<td>Reacting to and coping with terminal dyspnea</td>
<td>2.6 (0.7)</td>
<td>2.8 (0.9)</td>
<td>0.6</td>
</tr>
</tbody>
</table>

1= Need further basic instruction, 2= Confident to perform with close supervision/coaching, 3= Confident to perform with minimal consultation, 4= Confident to perform independently
Table 5. Comparison of Confidence/Self-Efficacy Levels with Views about Death and Dying between simulation group (using post-simulation survey data) and non-simulation group

<table>
<thead>
<tr>
<th>Item</th>
<th>Group One</th>
<th>Group Two</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Post-simulation Mean (SD)</td>
<td>Survey data Mean (SD)</td>
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</tr>
<tr>
<td>I am not comfortable caring for a dying patient</td>
<td>3.5(1.2)</td>
<td>4(1.2)</td>
<td>0.6</td>
</tr>
<tr>
<td>I am not comfortable talking to families about death</td>
<td>3.6(1.2)</td>
<td>4.1(1.2)</td>
<td>0.5</td>
</tr>
<tr>
<td>I am not comfortable with end-of-life communication skills (i.e., giving bad news, talking with family, discussing prognoses, discussing various treatment options)</td>
<td>3.2(1.3)</td>
<td>3.8 (1.1)</td>
<td>0.4</td>
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<tr>
<td>I am not comfortable discussing end-of-life ethics:DNR orders and advance directives</td>
<td>3.4(1.3)</td>
<td>3.8 (1.3)</td>
<td>0.8</td>
</tr>
</tbody>
</table>

1= Strong Agree, 2= Agree, 3= Unsure/Mixed, 4= Disagree, 5= Disagree Strongly
Appendix A: End of Life Simulation (Used by St. Joseph Hospital)

Simulation: Simulation 4 Death & Dying

Expected Simulation run time: 25 minutes

Participant level: Full Handoff at bedside

Debriefing time allotted: 30 minutes
**Admission Date:** Yesterday

**Name:** Mrs. Claire KYONE

**Age:** 67 yo Female

**DNR**

**Weight:** 110 lb.s  **Height:** 5’6

**Allergies:** none

**Attending MD:** Blake/Cronin

**Past Medical History:** ED: Fall with Head Bleed/Lung Ca with Mets diagnosed 9 months ago s/p chemotherapy

**History of Present Illness:** Dehydrated & Malnutrition

**Social History:** Daughter at bedside, Husband deceased, retired school

---

Cognitive Activities Required Prior to Simulation (ie Learn Modules, articles etc) Therapeutic communication and End of life Classroom with Kathy Mattone (SJE Chaplain) nurse residency program.

**Handoff:**

**ED Patient:** Mrs. KYONE (Mother of daughter at bedside) 67 yo female fell at home and now in ED. GCS = 10, patient not able to answer questions and only moans. PERRL and only squeezing hand when asked by daughter. Maintaining airway but increased secretions and need for oral suctioning. O2 at 2L, RR 24, Lungs with scattered rales & decreased in bases, hypoactive BS, pale, pedal pulses +1. No Foley.

**NON ED Patient:** Mrs. KYONE (Mother of daughter at bedside) is a 67 year old female admitted yesterday with dehydration. The patient was diagnosed with Lung CA 9 months ago and received a full round of Chemotherapy and radiation which completed one month ago. Just 2 weeks ago she was diagnosed with bone mets and has been declining at home. She does not have home health her daughter has been caring for her at home and brought her in yesterday due to decreased level of consciousness, inability to eat and drink and increased pain. IV on left arm # 22 with NS at 50 ml/hr. Admitting labs did result in a WBC of 2.0 (neutropenia) with a platelet count of 75 and H/H 9/30. Patient on neutropenia precautions and no transfusions at this time. Na was elevated due to dehydration and Potassium was 4.0. BUN and Creatinine WNL. Labs due today. GCS = 7, patient not able to answer questions and only moans. PERRL and only squeezing hand when asked by daughter. Maintaining airway but increased secretions and
teacher with 4 grandchildren

**Nursing Diagnosis:** Altered Mental Status/ Pain & Ineffective Airway Clearance

**Significant Lab Values (with Identification of Node placement):**

**Physician Orders:** Morphine 2-10 mg IV for RR > 30 and/or pain
NS IVF at 50, NPO, Chaplaincy consult

need for oral suctioning. O2 at 2L, RR 24, Lungs with scattered rales & decreased in bases, hypoactive BS, pale, pedal pulses +1. Foley Catheter in place. Patient is a DNR.
<table>
<thead>
<tr>
<th>Timing (approximate)</th>
<th>Manikin Actions</th>
<th>Lab results &amp; Medications Admin</th>
<th>Expected Interventions</th>
<th>May use the following cues</th>
<th>Debriefing points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Node 1</td>
<td></td>
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<tr>
<td>Initial Assessment</td>
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<tr>
<td>20 Minutes</td>
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<tr>
<td>BP 90/50</td>
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<tr>
<td>HR 120 Sinus Tachycardia</td>
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<tr>
<td>RR 24</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Temp 98.4</td>
<td></td>
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</tr>
<tr>
<td>O2 sat 90%</td>
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<tr>
<td>Edema</td>
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<tr>
<td>Cyanosis lips or pale</td>
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<tr>
<td>Eyes Closed</td>
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<tr>
<td>Irregular respiratory rate</td>
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<tr>
<td></td>
<td>Lab results &amp; Medications Admin</td>
<td>Respiratory ICU Resource (LIZ)</td>
<td>Terminal Extubation</td>
<td>Platelet = 75</td>
<td>Neutropenia =2.0</td>
</tr>
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<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Expected Interventions</td>
<td>VS Recognition</td>
<td>Complete Assessment</td>
<td>Pain Assessment</td>
<td>Position the Patient Comfortably</td>
</tr>
<tr>
<td></td>
<td>May use the following cues</td>
<td>Patient is Silent but moaning and gargling sounds from airway are wet.</td>
<td>1. How do you know that she is in pain?</td>
<td>2. How do you know that she is close to dying?</td>
<td>3. What is happening?</td>
</tr>
<tr>
<td></td>
<td>Debriefing points</td>
<td>Full 5 P Handoff</td>
<td>Actively Listening</td>
<td>Verbal, Body Movement, Facial, touching Assessments of Pain</td>
<td>Pain CPOT Scoring Tool</td>
</tr>
<tr>
<td>Node 2</td>
<td></td>
<td>Lab attempts to draw labs BMP</td>
<td>Continued Family Support</td>
<td>6. Do we have to continue to</td>
<td></td>
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<td></td>
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</tr>
</tbody>
</table>

38
| Decline | HR 100 Normal Sinus | (LIZ) | • Assess Airway Clearance  
• Comfort Measures  
• Suction  
• Consider Respiratory Therapy  
• Address Lab Draw Decision  
• Continued Family Support  
• Fielding Questions |
| 20 Minutes | RR 32 | Chaplain Resource (Karen) Visit Offer Prayer & Listening | stick her?  
7. Can I try to wake her up and feed her?  
8. When is it ok to go to Hospice?  
9. I want to just take her home and her be better again!!  
10. Can I bring her grandchildren to see her?  
11. Can I take her dentures out?  
12. Does it hurt when you suction her? |
| Sat 88% | Increased Secretions | Palliative Care RN Resource (Karen) Visit Medication Options | • Airway Clearance  
• Positioning  
• Why labs? Treat results?  
• Many Routes for Medications  
• Non-Addicting Medications  
• Treating symptom management: pain, secretions, breathing difficulty  
• Palliative Care Regimen for:  
• Dyspnea, Pain, N/V, Anxiety, Secretions, Bowel  
• Chaplain Visit with scripture reading and prayer |
|  |  | Always consult with Pharmacy: |  
|  |  | Atropine - Anti-Cholinergic 1-2 mg  
Vistaril - Anti-Histamine  
**Robinul – Anti-Cholinergic Mcg/Kg IM/IV route .2mg per Palliative Care |
## AN EOL COMPARISON STUDY

### Orders

**Morphine – Analgesia – IV, SQ, IM, PO, Transdermal 2 mg** per Palliative Care Orders – End of Life Dosages

<table>
<thead>
<tr>
<th>Node 3</th>
<th>BP 50/30</th>
<th>Family Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>Near Death</td>
<td>HR 40 Bradycardia</td>
<td>Chaplain</td>
</tr>
<tr>
<td>15 Minutes</td>
<td>RR 8</td>
<td>Monitor Off</td>
</tr>
<tr>
<td></td>
<td>Sat 80%</td>
<td>Touch patient</td>
</tr>
<tr>
<td></td>
<td>Secretions Wet Sounds</td>
<td>Comfort Measures</td>
</tr>
<tr>
<td></td>
<td></td>
<td>HA aware of patient condition</td>
</tr>
<tr>
<td>22. I want to thank you for</td>
<td>23. Keep IVF and Oxygen on until pronounced</td>
<td>24. Pronouncement</td>
</tr>
<tr>
<td>25. Family Grieving</td>
<td>26. Spiritual Support</td>
<td>27. Family as Driver</td>
</tr>
<tr>
<td>28. Dignity &amp; Respect</td>
<td>29. Death is not a Failure</td>
<td>30. Cover up Monitor</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Node 4</th>
<th>Asystole</th>
<th>Death Pronouncement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Death</td>
<td>0</td>
<td>Pastor/Chaplain</td>
</tr>
<tr>
<td>15 Minutes</td>
<td>0</td>
<td>Resources Utilized</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Post Mortem Care &amp; policy</td>
</tr>
</tbody>
</table>

### Node 3

Near Death

15 Minutes

BP 50 /30
HR 40 Bradycardia
RR 8
Sat 80%
Secretions Wet Sounds
AN EOL COMPARISON STUDY

Resources Needed:
Chaplain - Karen
Palliative Care RN - Karen
Respiratory (Terminal Extubation) - Liz
Lab Tech to draw daily BMP – Liz

Supply Needs:
Suction Set up
NT Suction Kit
Post Mortem Care Kit
Washcloth
Oral Sponges
Journal
Bible
Picture Frame
Lotion
Music
Grandchildren Drawings
Personal Home Blanket
House Adm form Funeral Arrangements
Medications & IVF with IV
Patient Personal Belongings: picture frame & quilt
AN EOL COMPARISON STUDY

Family Member
Lab Tech

Debriefing

• Tell me…..
• Open ended questions…..
• Listening…..
• Sharing…..

www.silverhour.info

• “Silver Hour” 30 Minutes before and 30 Minutes after death – Art, Literature & Poetry

www.sacredDying.org

• 4 Things that matter most “I am sorry, I forgive you, Thank you & I love you.” Ira Byok MD

Nursing Implications:

• Use of sights, smells sounds and touch (photos, music, aromatherapy, lotion for hand or back massages)

• Invite family into care..they may need help finding ways of loving and caressing a dying person often handing family a cool cloth or nice lotion can start the process.
• Encourage photos, drawing, tracing hands

• Involve Children!

• Basic nursing care is paramount…good positioning, turning, propping, hygiene especially good oral care.
AN EOL COMPARISON STUDY

- Post Mortem Care Kit – E-clinical skills
- Provisional Death Report Form & House Administrator Role

**Communication:**

- Therapeutic Communication Questions:
  - Tell me about your mom.
  - What feelings are you having today?
  - Can you share with me how you are feeling?
  - What ages are the grandchildren?
  - How long ago did you Father pass away? Where you there with him when he died?

**Cultural Aspects:**

- Cultural Discussion: Prayer Cloths – Reference of variety of cultures seen in area – Liz Morris
- Asian – low eye contact, lack of personal touch
- African American – emotional, increased tone or volume doesn’t mean angry, KODA lack of body stay as whole
- Muslim – Mecca, Males, Hour of Prayer, Rearrange Furniture, No Touch
- Hispanic – Large families, touch
- Eastern KY – Large families, pictures of dying family member, video possibly

  **Cultural – NO Labeling – Don’t put in a box – Not only one way to grieve – Tears or outward cues don’t measure the depth of grieving – grieving is personal**

- Kubler- Ross Stages of Grief: Denial, Anger, Bargaining, Depression & Acceptance
AN EOL COMPARISON STUDY

- Nursing Orders – Palliative Care Consult: MED Comfort Measures_KY
- Palliative Care Consult Tool Check PowerChart

- **Policies:**
  - Organ & Tissue Donation Procurement
  - Death of a Patient
  - Provisional Report of Death
  - Withholding and Withdrawing Care Implications
  - Advanced Directive
  - Mechanical Ventilation
  - Ethics Policy
  - Mechanically Administered Hydration and Nutrition
  - Non Beneficial Medical Treatment
  - DNR

**Wrap Up**

- What can you take away from this simulation?

- Give Pre and Post survey questions (6th Floor conference room)

**Great Take Away:**

“It’s getting close”
“That’s not good”
“Your Mother has expired”
“She’s gone” But where did she go?
AN EOL COMPARISON STUDY

“Tell me about her”
“How are you doing?”
“Have you had anything to eat today?” Given a meal voucher.
“Did she have a favorite song we can play or a favorite scripture we can read?”
“She is gone” While rubbing my back.
“Do you have any rituals you would like to perform?”
Excellent eye contact
Silence that was not awkward but therapeutic!
Played favorite songs through iphone.
Read favorite scripture aloud
Chaplain Prayed with Patient, Family and Group
Can you show me how to do oral care? Staff teaching family on oral care and suctioning.
Family asking if can give mom a bath? Staff setting up bath supplies.

Resources:

www.americannursetoday.com/managing end-of-life symptoms (pdf)
www.compassionandsupport.org
www.niaquarahospice.org  What can I expect during the final journey.
Appendix B: Survey Tool Used for the EOL Project at St. Joseph Hospital

Centre for Health Service Development

Evaluation Tool 2.1 (Modified from ‘Promoting Excellence in End-of-Life Care’)

Evaluation Tool 2.1

Palliative Care Providers

About you

1. What is your race?
   - African American
   - Asian
   - Native American
   - Pacific Islander
   - White/Caucasian
   - Other, specify ____________________

2. What is your ethnicity?
   - Hispanic or Latino
   - Not Hispanic or Latino

3. What is your gender?
   - Male
   - Female

4. How long have you been a registered nurse?
   - <1 month
   - 1 month - <1 year
   - 1 year - <5 years
   - 5 years +

5. What is the highest degree that you have earned?
   - ADN (Associates Degree in Nursing)
   - BSN (Bachelors Degree in Nursing)
   - Diploma in Nursing
   - MSN (Masters of Science in Nursing)
   - DNP (Doctorate of Nursing Practice)
   - Other (please specify): ____________________________
**Part 1: About your views on palliative care:**

Please rate your degree of confidence with the following patient / family interactions and patient management topics, by checking the relevant box below:

1 = Need further basic instruction  
2 = Confident to perform with close supervision/coaching  
3 = Confident to perform with minimal consultation  
4 = Confident to perform independently

<table>
<thead>
<tr>
<th>Degree of Confidence:</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>#1. Answering patients’ questions about the dying process</td>
<td></td>
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</tr>
<tr>
<td>#2. Supporting the patient or family member when they become upset</td>
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<tr>
<td>#3. Informing people of the support services available</td>
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<tr>
<td>#4. Discussing patients’ wishes pertaining to after their death</td>
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<tr>
<td>#5. Answering queries about the effects of certain medications</td>
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<tr>
<td>#6. Reacting to reports of pain from the patient</td>
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</tr>
<tr>
<td>#7. Reacting to and coping with terminal dyspnea (breathlessness)</td>
<td></td>
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</tbody>
</table>

**Part 2: Views about death and dying:**

Please indicate (check the appropriate box) how much you agree or disagree with each of the following statements you feel. (There are no right or wrong answers).

Agree  
Strongly Agree  
Unsure/Mixed  
Disagree  
Disagree Strongly

<table>
<thead>
<tr>
<th></th>
<th>Agree</th>
<th>Strongly Agree</th>
<th>Unsure/Mixed</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>#1. I am not comfortable caring for a dying patient</td>
<td></td>
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</tr>
<tr>
<td>#2. I am not comfortable talking to families about death</td>
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<tr>
<td>#3. I am not comfortable with end-of-life communication skills (i.e., giving bad news, talking with family, discussing prognoses, discussing various treatment options)</td>
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</tr>
<tr>
<td>#4. I am not comfortable discussing end-of-life ethics: DNR orders and advance directives</td>
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</tbody>
</table>

Adapted from: The Palliative Care Evaluation Tool Kit: A compendium of tools to aid in the evaluation of palliative care projects (2004).
Appendix C: Cover Letter for Simulation Group at St. Joseph Hospital

To the nurses at St. Joseph Hospital:

My name is Catherine Edwards. I am a Doctoral of Nursing Practice (DNP) student at the University of Kentucky (UK) and am working on a project related to self-efficacy and confidence levels in the role of new nurses caring for end-of-life (EOL) patients. You will be completing a short survey regarding self-efficacy/confidence levels in regards to EOL care. There will also be demographic information collected (race, ethnicity, gender, how long you have been a nurse, and highest degree earned). All information will be kept confidential; no names will be included on any of the surveys. You will be participating in an end-of-life simulation (on August 17, 2017) and will be surveyed (a written survey) both before and after. The survey is adapted from the Palliative Care Self-Efficacy Scale, tool 2.1. You will be completing a pre- and post-survey related to comfort levels in end-of-life care, after participating in an EOL simulation, as part of your new graduate residency program at St. Joseph Hospital/Kentucky One Health. Completion of the survey implies consent to participate in the study.

Although you will not get personal benefit from taking part in this research study, your responses may help us understand more about comfort/confidence levels related to new nurses who are taking care of patients at end-of-life stage.

We hope to receive completed questionnaires from about 22 people, so your answers are important to us. Of course, you have a choice about whether or not to complete the survey/questionnaire, but if you do participate, you are free to skip any questions or discontinue at any time.

The survey/questionnaire will take about 5-10 minutes to complete.

Your names will also go into a drawing for a $25 gift card to Starbucks, as you will be participating in the evaluation/survey process in addition to the mandatory simulation.

There are no known risks to participating in this study questions.
When assessing your level of confidence and comfort in caring for patients at end-of-life, you may experience discomfort or sadness when answering some survey questions.

Although we have tried to minimize this, some questions may make you upset or feel uncomfortable and you may choose not to answer them. If some questions do upset you, we can tell you about some people (chaplains and registered nurses with expertise in the area of EOL care) who may be able to help you with these feelings.
AN EOL COMPARISON STUDY

Your response to the survey is anonymous which means no names will appear or be used on research documents, or be used in presentations or publications. The research team will not know that any information you provided came from you, nor even whether you participated in the study.

If you have questions about the study, please feel free to ask; my contact information is given below. If you have complaints, suggestions, or questions about your rights as a research volunteer, contact the staff in the University of Kentucky Office of Research Integrity at 859-257-9428 or toll-free at 1-866-400-9428.

Thank you in advance for your assistance with this important project.

Sincerely,

Catherine Edwards, MSN, RN
University of Kentucky, College of Nursing
Doctor of Nursing Practice Program
PHONE: 859-963-6814
E-MAIL: Catherine.edwards@uky.edu

Faculty Advisor for Catherine Edwards:
Dr. Debra Anderson, PhD, RN
University of Kentucky, College of Nursing
E-MAIL: danders@uky.edu
Appendix D: Institutional Review Board (IRB) Approval Letter for Project

Initial Review

Approval Ends IRB Number
July 30, 2018 17-0558-P2H

TO: Catherine Edwards, MSN, RN 2040 Kearns Way
Richmond, KY 40475
PI phone #: (859)963-6814

FROM: Chairperson/Vice Chairperson
Medical Institutional Review Board (IRB) SUBJECT: Approval of Protocol Number 17-0558-P2H DATE: August 4, 2017

On July 31, 2017, the Medical Institutional Review Board approved your protocol entitled:

UK/O Evaluation of Self-Efficacy and Confidence Levels Among Newly Graduated Nurses Exposed to an End-of-Life Simulation: A Comparison Study

Approval is effective from July 31, 2017 until July 30, 2018 and extends to any consent/assent form, cover letter, and/or phone script. If applicable, attached is the IRB approved consent/assent document(s) to be used when enrolling subjects. [Note, subjects can only be enrolled using consent/assent forms which have a valid "IRB Approval" stamp unless special waiver has been obtained from the IRB.] Prior to the end of this period, you will be sent a Continuation Review Report Form which must be completed and returned to the Office of Research Integrity so that the protocol can be reviewed and approved for the next period.

In implementing the research activities, you are responsible for complying with IRB decisions, conditions and requirements. The research procedures should be implemented as approved in the IRB protocol. It is the principal investigators responsibility to ensure any changes planned for the research are submitted for review and approval by the IRB prior to implementation. Protocol changes made without prior IRB approval to eliminate apparent hazards to the subject(s) should be reported in writing immediately to the IRB. Furthermore, discontinuing a study or completion of a study is considered a change in the protocol’s status and therefore the IRB should be promptly notified in writing.

For information describing investigator responsibilities after obtaining IRB approval, download and read the document "PI Guidance to Responsibilities, Qualifications, Records and Documentation of Human Subjects Research" from the Office of Research Integrity's IRB Survival Handbook web page [http://www.research.uky.edu/ori/IRB-Survival-Handbook.html#PIResponsibilities]. Additional information regarding IRB review, federal regulations, and institutional policies may be found through ORI's web site [http://www.research.uky.edu/ori]. If you have questions, need additional information, or would
AN EOL COMPARISON STUDY

like a paper copy of the above mentioned document, contact the Office of Research Integrity at (859) 257-9428.

*Patricia K. Howard, PhD, RN, CEN, CPEN, /jch__*

Chairperson/Vice Chairperson
**Appendix E: Approval Letter for Project from St. Joseph Hospital**

**IRB Authorization Agreement**

<table>
<thead>
<tr>
<th>Name of Research Project:</th>
<th>Evaluation of Self-Efficacy and Confidence Levels Among Newly Graduated Nurses Exposed to an End-of-Life Simulation: A Comparison Study</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principal Investigator(s):</td>
<td>Catherine Edwards, <strong>MSN, RN</strong></td>
</tr>
<tr>
<td>IRB Protocol Number:</td>
<td>17-0558</td>
</tr>
</tbody>
</table>

**Name of Institution Providing IRB Review (Institution A):** University of Kentucky  
**OHRP Federalwide Assurance (FWA) Number:** FWA00005295  
**IRB Registration Numbers:**  
IRB00000423 U Kentucky IRB #1  
IRB00000424 U Kentucky IRB #2  
IRB00000977 U Kentucky IRB #3  
IRB00005975 U Kentucky IRB #6

**Name of Institution Relying Upon IRB Review Above (Institution B):** KentuckyOne Health/St. Joseph Hospital  
**OHRP Federalwide Assurance (FWA) Number:** 

Officials signing below agree that Institution B may rely on the above IRB review, approval, and continuing oversight provided by the University of Kentucky under its Assurance for the project identified above.

*This agreement applies only to the project named above and to no other research projects in which Institution B may be engaged in at present or in the future.*

The review, approval, and continuing oversight performed by the relied-upon IRB satisfy the requirements of the HHS regulations for the protection of human subjects at 45 CFR 46, as well as the requirements of University of Kentucky's OHRP-approved Assurance. Institution B retains the obligation to comply with all other requirements of 45 CFR 46 and as otherwise required by the FWA, or other applicable law or regulations.

Relevant minutes of IRB meetings shall be made available to Institution B upon request. Institution B remains responsible for ensuring compliance with the IRB's determinations and with the terms of its OHRP-approved Assurance.

This document should be kept on file at both institutions and must be provided to OHRP upon request.

**Signatures:**  
Authorized Official of Institution "A" ___________________________ Date ____________________  
Lisa A. Cassis, PhD  
Vice President for Research  
University of Kentucky
AN EOL COMPARISON STUDY

Jennifer McKinley
KentuckyOne Health/St. Joseph Hospital
One Saint Joseph Drive
Lexington, KY
40504
Appendix F: Approval Email for Use and Adaptation of Palliative Care and Self-Efficacy Scale

Hello Catherine

Yes, we are more than happy if you use this tool. Best of luck with your studies

Regards Kathy

----- Original message------
From: Edwards, Catherine L
Date: Sat, 8 Jul 2017 03:50
To: Kathy Eagar;
Cc:
Subject: Use of Palliative Care Self-Efficacy Scale

Ms. Eagar,

My name is Catherine Edwards. I am a doctoral student at the University of Kentucky in Lexington, KY, and am working on my final project for my Doctorate in Nursing Practice (DNP). I am working with newly graduated nurses at an urban hospital in Lexington; I will be working with them on an end-of-life (EOL) simulation and evaluating their self-efficacy and confidence levels, in comparison to a group of nurses who have not been through the EOL simulation. I discovered your scale through an internet search and realized that it would be wonderful to use in order to survey my participants, particularly tool 2.1. I am emailing to ask if I can use tool 2.1 of the Palliative Care Self-Efficacy Scale (adapted for my project) for my doctoral project. I am happy to send the data/results of the study to you when complete.

I look forward to hearing from you at your convenience.

Sincerely,

Catherine Edwards
Phone: 859-963-6814
Email: Catherine.edwards@uky.edu