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A Simulated Learning Experience in Advanced Care Planning Conversations

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Table of Contents

Abstract

Background: The CDC (2012) reports that 1/3 of Americans have no advance care planning (ACP), which is essential for maintaining autonomy when people are no longer able to communicate wishes directly. IOM (2014) reports that providers have limited training in communication techniques and low confidence in holding advanced care planning conversations. Nursing simulation is an effective method of teaching clinical skills in a safe environment. The development of a high fidelity (HF) standardized patient simulation, using the Jeffries Simulation Framework, combined with evidence-based practice classroom curriculum, may increase knowledge and confidence in holding ACP conversations for nurse practitioner students. **Methods:** A pilot study with 44 APRN FNP students that received classroom communication training using evidence-based ELNEC materials and role play opportunities. One month later students participated in a palliative care standardized patient simulation experience in a HF medical office environment. FNP students were required to communicate bad news of a poor diagnosis to a family member and begin the advance care planning conversation using the SPIKES protocol. **Results:** Significant increase in post intervention ACP communication knowledge scores, self-confidence in holding ACP conversations $M= 30.55$, $SD=2.992$, 95% CI 29.64, 31.46, ($Mdn=$ 31), range 11, 35, and satisfaction with the learning experience $M= 18.14$, $SD= 2.11$, 95% CI 17.50, 18.78, $Mdn= 19$, with range between 13 and 20.

Keywords: Advanced care planning, end of life care planning, palliative care, nursing simulations, standardized patient, communication

A Simulated Learning Experience in Advanced Care Planning Conversations

Advanced care planning (ACP) is an important part of respecting the patient's autonomy and right to choose. Autonomy presumes that the patient understands the risks, benefits, and the consequences of whatever decision is made. The Institute of Medicine (IOM, 2014) regarding improving end of life care reports that the majority of patients near the end of life will not be cognitively or physically able to make care wishes known and most will be cared for by providers that do not know the patient well (IOM, 2014). The CDC (2012) reports that approximately only one-third of people have completed any ACP, even while most people report wanting to die at home.

The current lack of knowledge and understanding of ACP options leaves people vulnerable to aggressive care at the end of life that increases suffering and distress, of both patients and families. There is often a disconnect in understanding of the goals of care, with patients reporting a treatment to be curative while physicians report the treatment as palliative (Mack et al.,2012). Elderly people and those with chronic illnesses are particularly at risk for the adverse outcomes associated with a lack of ACP, such as unwanted interventions, unnecessarily suffering of self and family, and not having the dignified death most imagine (IOM, 2014). The IOM (2014) made recommendations to improve communication between patients, families, and providers during end of life planning. The report also recommends improved education and training for medical providers regarding ACP option and for providers to use new strategies for making the information understood and relevant to patients and families (IOM, 2014).

Nursing simulation is an effective way of providing students with specific experiences to teach or improve skills in a supportive learning environment (Hayden et al., 2014). Simulation allows students to practice skills in a controlled environment, maintain patient safety, and

provides learning opportunities that students may not otherwise experience. Communication skills are critical for advance practice providers to have effective advanced care planning conversation with patients due to the emotional and complexities of the death and dying process (IOM, 2014). Standardized patient (SP) in a high-fidelity simulation environment has been shown to be an effective technique for cognitive learning (Kim, Park, & Shin, 2016). SP have been found to be effective in teaching nursing students in end of life care planning communication (dos Santos Nogueira de Góes et al., 2017). The intervention is to provide communication education modules, video examples of provider-patient conversations, opportunities for role play of patient-provider conversations, and a high-fidelity SP simulated nursing experience regarding advanced care planning conversations to Family Nurse Practitioner (FNP) students

Problem Statement

Communication skills with patients and families are critical for advanced practice nurses to learn to provide patient centered care. Medical providers often have limited training or practice in communication effectively with patients (Deveugele, 2015). Clinical training experiences for FNP students cannot guarantee practice in communication with patients regarding end of ACP concerns or holding ACP conversations. Simulation has been used successfully when there is limited availability during clinical training for certain activities (Hayden et al., 2014). Communication skills training is important for providers to have confidence in holding conversations with patients and promote patient autonomy at end of life (IOM, 2014).

Purpose

The purpose of the translational research project was to determine the effects of implementing a communication education module on ACP with lecture and role-playing activities, followed four weeks later by a nursing simulation with a standardized patient scenario on learner satisfaction and confidence in holding ACP conversations. Objective knowledge was measured by a pre and posttest related to communication and ACP knowledge. The following specific research questions were the focus of the study.

Research Questions

1. After a didactic education module on communication techniques and ACP options followed four weeks later by a nursing simulation experience, is there a statistically significant change in knowledge scores regarding communication techniques and ACP options?

2. What effect does the intervention have on the learner's satisfaction and self-confidence in holding ACP conversations?

3. Are any demographic characteristics associated with knowledge scores on the pre- or posttest or learner confidence levels?

Background

Advance care planning can help preserve the patient's autonomy when they are unable to speak for themselves, as many people are near the time of death, by outlining their preferences and wishes. Approximately one third of the public has completed some form of advance care planning (CDC, 2012). A lack of end of life care planning can leave people at risk for increased aggressiveness of care at end of life and reduced autonomy. Elderly people may be more vulnerable due to lack of knowledge, experience in care planning, high burden of illness, and possibly a fear of dying (DeChesnay & Anderson, 2016). Conversations and end of life care

planning are needed while the person retains the ability to plan well, not when the person is in

crisis at the time of the terminal illness (IOM, 2014).

Patients do not always understand that there are treatment choices, what end of life

options are available, or what those choices entail (Mack et al, 2012). Patients report that

providers will begin the conversation when necessary, but providers report that patients will

initiate the conversation when it is relevant (Mack et al, 2012). The lack of effective

communication, and even which party should begin the discussion, leaves patients and providers

without guidance on beginning ACP. The IOM calls for the normalization of end of life care

planning, improvements in provider and patient education, and increase in communication

training for providers to allow patients to understand and express their end of life care choices

(IOM, 2014). FNP primary care providers, with the necessary communication training, are in the

ideal position to hold ACP conversations routinely with patients and assist patients to understand

and express end of life care goals.

Theoretical Framework

The NLN Jeffries Nursing Simulation Theory was used to guide the study. This theory is

derived from the NLN Jeffries Nursing Simulation Framework that was developed and refined in

2005, 2007, and 2012 (Jeffries & Rodgers, 2015). The theory uses standardized concepts to

allow application for effective nursing simulation development; context, background, design,

simulation experience, facilitator and educational strategies, participant, and outcomes (Jeffries,

2005).

Context

The context of the simulation includes the setting, location, and the broad goals of the

nursing simulation (Jeffries & Rodgers, 2015). This sets the stage for the simulation, whether it

is in the nursing simulation lab, a simulation in a practice environment, and if the broad goal is

for educational or evaluation of the student.

Background

The background includes the specific goal of the simulation and how the simulation

achieves the nursing program's outcomes (Jeffries & Rodgers, 2015). This also includes the

available resource and experiences that lead up to the simulation.

Design

The simulation must be designed with specific learning objectives, appropriate scenarios,

education content, and complexity to meet the abilities of the participants (Jeffries & Rodgers,

2015). This also includes determining how to achieve high fidelity in both physical and verbal

responses, how the scenario progresses with various responses, and how to be debriefed at the

end of the simulation.

Simulation Experiences

The simulation experiences provide an interactive environment that allows the participant

to immerse in the scenario but is also responsive to the input of the participant (Jeffries &

Rodgers, 2015). The experience must have high fidelity and realism, as these are both associated

with increased authenticity and allows the participant to suspend disbelief.

Facilitator and Educational Strategies

The facilitator designs and directs the simulation and is responsible for using techniques

and strategies to enhance the experience and ensure that the participants need are met (Jeffries &

Rodgers, 2015). The facilitator is also responsible for adapting the simulation, if necessary, and

providing feedback during and after the simulation.

Participant

The participant characteristics also impact the simulation (Jeffries & Rodgers, 2015). Age, gender, level of confidence and anxiety are considered nonmodifiable characters. Modifiable participant characteristic that impact the simulation include preparedness and what role is assigned during the simulation.

Outcomes

The overall desired outcome of the simulation from a participant, patient care, or systems perspective is called described under the outcomes section (Jeffries & Rodgers, 2015). This may include learning by the student, program outcome goals, or how the skills transfer into real world scenarios.

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Review and Synthesis of Evidence

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Patients that are given information regarding ACP options are more likely to begin ACP (Hayek et al., 2014). Toraya (2014) had similar findings using an advance directive video, with 97.6% of participants rating the video as providing enough information to begin AD planning and 78.6% planning to complete an advance directive.

The systematic review by Singer, et al., (2016) identified 124 randomized control trials (RCT) that tested the impact of interventions for end of life care (EOLC) in adults with advanced diseases of congestive heart failure (CHF), chronic obstructive pulmonary disease, dementia, and cancer along with their caregivers. Patients were identified for palliative care services most often by provider judgment of poor prognosis in 73% of studies. Home was the most frequent intervention location in 56% of studies, and in 70 % of studies involved nurses, including APRN, showing that nurses are an important part of the palliative care team. Technology, such as telephone support calls, EMR prompts, or video-based telehealth, showed significance in

improving communication and care planning in 48% of studies. Communication or care planning was improved by interventions in 67% of studies for patients and by 75% for caregivers and increased quality of life indicators. Advanced directive completion was studied in only 5% of the studies, but had a significant increase in care planning outcomes in 50% of studies.

The IOM (2014) report says ACP should be a routine part of care management for all adults, but the research evidence suggests that lack of interest on the part of the patients is a contributing factor for not participating in end of life care planning research (Volandes et al, 2011; Tuong, Larsen & Armstrong, 2014, Toraya, 2014). This fits with the findings of Epstein et al. (2015) that found people were apprehensive about discussing EOLCP but wanted to have the conversation. Epstein et al. (2013) used a video versus narrative randomized control trial followed by qualitative analysis and found that CPR video education affirmed the patient's already existing beliefs, but people continued to have gaps in medical knowledge and wanted their established physician to participate in EOLCP discussions.

Communication is an important aspect of end of life care planning between patients, providers, and family members. Conversations between providers and patients that take place within the last 30 days of life are associated with increased aggressiveness of end of life care, as measured objectively by use of chemotherapy in the last 14 days and intensive care unit admission (Mack et al., 2012). Ahulwalia et al. (2015) studied a large population diagnosed with stage IV lung or colorectal cancer and found that EOLCP conversations held within one month of diagnosis were associated with less aggressive care at the end of life. Conversations about end of life care planning between family members and patients improve concordance and decision making, but not when ineffective communication techniques are used (Scott & Caughlin, 2015).

After just one conversation both family members and patients rated concordance as high with understanding the patient's values and wishes, but when the answers were compared there was very little concordance (Scott & Caughlin, 2015). When there is only one conversation between family members there is not always understanding of the patient's wishes (Scott & Caughlin, 2015). People are vulnerable to miscommunication and misunderstanding unless there are significant discussions regarding values and goals of care for chronic conditions. This suggests that conversations need to be repeated to achieve a true understanding. Beginning ACP conversations soon after diagnosis allows the necessary time for multiple conversations between patient and providers.

Strategies to Improve ACP

Normalizing end of life planning conversations is one way to ameliorate the loss of autonomy experienced by people at the end of life that do not have documented end of life goals of care. Conversations about the effectiveness of CPR, what things a person values, and how to have a dignified death must begin earlier in, and continue throughout, the terminal disease process. Providers should not wait until a medical crisis occurs, but start end of life care planning early. These conversations are associated with less aggressive care and are tolerated well by patients and families (Mack et al., 2012; Ahulwalia et al, 2015). ACP discussions should be repeated on a routine basis (IOM, 2014; Scott & Caughlin, 2015; CDC, 2012) to prevent miscommunications and increase understanding of the patient's values. Conversations should include family, caregivers, and medical providers (IOM, 2014; CDC, 2012).

Provider Training in ACP Communication

Deveugele (2015) studied issues with medical provider communication training and found there is often a lack of formal communication training in ACP and discussing poor

prognosis with patients in medical programs (Deveugele, 2015). When training programs are in place there is often a lack of a framework guiding the training, limited integrating into the actual program curriculum, and only limited time spent. Communication skills can be improved with proper skills training, but curriculum is crowded, and research is not clear on which training techniques translate best into actual practice.

Epner and Baile (2014) implemented a one hour, once a month communication training in year one and year two of an oncology fellows training program. There was a brief discussion of framework and discussion, with most of the time spent role-playing different case scenarios. Reflection was stimulated by brief writing exercises and by discussing difficult real-life conversations with patients. Participants cited learning in empathizing with emotion, delivering bad news without decreasing hope, and reported understating of communication techniques in both mid and post course surveys. Some limitations regarding time were reported, with most participants feeling rushed in most sessions. This study supports that even limited time for communication training can be beneficial, especially if the learning techniques are learner centered.

Douglas et al., (2016) used a half day intensive training format to train physicians on communication techniques to conduct post deployment mental health screening for returning Soldiers. A quasi experimental design with multiple sites and 28 providers participated in the training. Immediately after the screening, providers were asked to specify what concerns the Solders had, while Soldiers were asked to rate the communication of the provider. Provider communication was rated higher by patients following the training, with increased identification of mental health concerns that allowed for referral to appropriate services.

Nursing Simulation

Simulation has been used effectively for training pilots since 1910 with basic models up to the highly advanced computer models of today (The National Center for Simulation, 2018). Simulation in nursing education has a long tradition, and the results depend primarily on how the learning is measured (Yuan, Williams, and Fang, 2012). The systematic review supported that nursing simulation can have positive learning outcomes, when it is done in high fidelity and incorporates appropriate learning outcomes (Yuan, Williams, and Fang, 2012).

The National Council State Boards of Nursing (NCSBN) conducted a study of 666 prelicensure nursing students from the beginning of nursing study through the first six months of employment as a registered nurse (Hayden, Smiley, and Gross, 2014). Students were separated into three clinical groups, patient care and no more than 10% simulation, patient care with 25% simulation, and patient care with 50% simulation. No differences were found in NCLEX board passage rates, clinical competency as determined by instructors, and clinical competency as determined by a supervisor after employment. This study led to the recommendation that up to 50% of clinical hours in a prelicensure nursing programs could be substituted by high fidelity simulation experiences led by instructors trained in simulation and debriefing.

Nursing simulation has been used to provide clinical experiences that are not common or guaranteed to occur. Each nursing student will have a different clinical experience, even when all the students rotate through the same clinical location. Nursing simulation can close this gap by allowing the instructor to control the interaction. Borg-Sapiano, Sammut, and Trapani, (2018) used virtual nursing simulation to show effective learning outcomes in a rapid patient deterioration scenario. Students were given three separate rapid deterioration scenarios that included rapid deterioration of cardiac, respiratory, and shock. The results showed significant

increase in post scenario knowledge, *p*<.001. These are not common occurrences for student

nurses, but are critical situations that registered nurses must be able to identify early and

intervene appropriately.

High fidelity simulation (HFS) has been linked with high self-confidence score on the

NLN Self Confidence and Satisfaction with Learning tool (Samawi, Miller, Haras, 2014). A

meta-analysis of simulation based on fidelity level for specific learning was conducted. (Kim,

Park, Shin, 2016). The goal was to determine efficient size based on fidelity, as implementation

costs tend to increase as fidelity increases. The simulation outcome guides the fidelity level, as

low fidelity simulation (LFS) has been shown to be effective for certain types of task learning,

but high-fidelity simulation (HFS) has been effective in other more complex tasks. Studies were

selected between January 1995 and July 2013 and used the Case Control Study Checklist

(CASP) to identify nursing simulation-based study with cognitive, psychomotor, or affective

outcomes measured. Fidelity was determined by realism and ability to respond. Standardized

patients (SP) were coded separately from HFS due to the unique nature of facial expression,

interactions, and feedback given. Studies that met the inclusion criteria and indicated learning

from simulation, *n*=40, with across all domains, with pooled random effect of .70. Cognitive

effect size was highest for HFS at 0.50 for HFS. Affective outcomes were .80 for HFS and .73

for SP

A small qualitative study with 14 Posts graduate intensive care nursing students(ICU)

focused on communication learning outcomes (dos Santos Nogueira de Góes et al., 2017). The

participants attended a confirming communication skills training day that was followed by a SP

simulation experience that was both audio and video recorded which students later viewed.

Students reported that the simulation provided a challenging learning environment for both the

simulation experience and watching themselves on video. Increased self-confidence was reported in communication techniques.

Gaps in Research

Studies that investigated aggressiveness of EOLC rated if there was a provider and patient conversation (Mack et al., 2012, Ahluwalia et al., 2015), but did not attempt to quantify the quality or specifics of the conversations. It may be that high-quality conversations are as important as the timing of the conversations, but any conversation between provider and patient may improve patient participation in ACP behaviors (Toraya, 2014).

ACP research is limited by the complex and emotional nature of the topic. People are resistant to participating even when the information is very relevant to them (Kwak, Ko, and Kramer, 2014). Many of the research studies use sample population with terminal cancer, which can limit the generalizability of the data. The Singer et al. (2016) systematic review is unique because it studies a wide range of chronic illness in addition to cancer. This improves the generalizability and usefulness of the results for primary care practice, where ACP conversations can begin early in the disease process.

A descriptive qualitative study on simulation research gaps of members of International Nursing Association for Clinical Research, $n=90$, with a 20% response rate of an internet survey using open ended questions. The members reported that most of professional time was spent in academia, research, simulation specialist, clinical education with only 3.33% of respondents having less than a MSN degree. The themes found most of the current research focuses on psychomotor skills development, but is lacking in other areas such as communication skills and transferability of simulation skills to practice and critical thinking skills (Mariani & Doolen, 2016). That is similar to the findings by other studies that found simulation training has been

used to improve interpersonal communication (King et al., 2016) and team dynamics (Emani, et al., 2018), but there is limited research on nursing simulation's effectiveness in improving communication technique in real world practice.

Methodology

Project Design

The design for this translational research project was a pilot study. The subjects in the study received an education intervention via PowerPoint with lecture followed by a chance to practice the communication techniques through role playing with peers. All students received a folder with a unique participant number, copy of consent, copy of the PowerPoint slides, copy of a physician order for life sustaining treatment, and a copy of the role play case study. Each student was also given a ring of laminated conversation cue cards. The conversation cue cards included the SPIKES protocol, which stands for the setting, perception, invitation, knowledge, emotions, and strategy, protocol for delivering bad news (Baile et al., 2000). Materials used in the education intervention were used with permission from End of Life Nursing Education Consortium (ELNEC) after the PI attended a train-the trainer course in February 2018. The ELNEC is an educational initiative to improve palliative care in the U.S. and is a partnership between American Academy of Nursing (AACN) and City of Hope. Evidence based curriculum is provided to trainers for education at the undergraduate and graduate levels. The curriculum is updated annually, and trainers must re-buy the curriculum every three years to keep recommendations in line with new evidence.

Four weeks later, the subjects participated in a standardized patient experience at the Mercer Clinical Development and Assessment Center (CDAC). The student assumed the FNP role to discuss ACP goals of care with a patient's family member. The standardized patient case

study was previously developed and used by the Mercer CDAC and will be used with permission for a case cost of $1060 paid by the PI.

Data was collected regarding demographics, pre- and post-knowledge test, and post intervention survey for learner satisfaction and confidence.

After receiving IRB approval, the participants were recruited from the Georgia College graduate nursing programs. Students that were enrolled in the Advanced Assessment graduate level course and had a desire to participate in the study were eligible. As the material presented is important for all graduate level nursing students, all enrolled students received the education intervention, materials, and participated in the nursing simulation, even if they choose not to participate in the research study. Before the intervention began, informed consent was signed with one copy for the PI and one copy for the participant. A unique participant number was assigned at this time to protect the confidentiality of the participants. The unique participant number was used on all other documents, with the PI only having access to the name.

A pre-test was administered to the participants on communication and ACP knowledge utilizing questions from the ELNEC test questions. The demographics survey was completed at this time. Then the 45-minute communication education module using ELENC PowerPoint slides was given followed by one-hour time frame for role-play. The case study for role play, "Breaking Bad News: Case Study #3" was developed by ELNEC for use during communication module teaching. During the role play time one student was the patient and one was the FNP. After 10-15 minutes the roles were reversed, and the case study repeated. After all students had been both the patient and the FNP, there was a debriefing discussion with time for reflection on the communication techniques practiced.

Four weeks later during Lab Immersion Skills Week, the students returned for a 20-minute recap of education material given previously and a 30-minute role -play of the same scenario played one month previously. Following this re-education session, the post knowledge test was given. At the end of the week the students went to the Mercer CDAC as routinely scheduled for the course. In addition to the simulation experiences already planned for the course, there was standardized patient experience for ACP conversation. The case scenario was developed by the CDAC for use with Mercer Medicine students in 2012 by Dr. Patrick Roche, Dr. Steve Williams, and Ann O'Neal and used approximately once per year since then (A. O'Neal, personal communication, November 2, 2018). After the 15 minutes simulation experience the students wrote a progress note documenting the visit. At the end of the simulation, the students completed the satisfaction with learning and confidence in learning survey. There was a debriefing session at the end of each simulation day where students asked questions, received feedback from the SPs, and spoke about the experience with the PI.

Concept Definitions

Self Confidence. Self Confidence can be defined as one's general feeling of trust in abilities, qualities, and judgement in a broad range of situations (Oxford University Press, 2018). Self-confidence is made up of the self-efficacy, personal belief that one can succeed at specific tasks, and self-esteem, which is the general feeling of worth or value a person has (Artino, 2012). Self-efficacy is defined as task, or area specific, self-confidence (Artino, 2012). This distinction is important because feelings of self-efficacy can be dramatically different in different situations. Self-confidence can improve overall as self-efficacy increases. Nursing students that have increased confidence levels may perform better in all areas.

Standardized patient (SP). A live person that is trained to portray a patient in a specific case scenario (Lopreiato et al, 2016). The person is trained for specific responses, including the physical, verbal, nonverbal, emotional, and personality characteristics. The training is such that the performance is realistic and repeatable so that learners will receive the same feedback and cues from the SP.

High Fidelity Simulation. Defined in nursing simulation as a simulation experience that is highly realistic and allows the for a high level of immersion into the experience by the learner (Lopreiato et al, 2016). This includes the environment, manikins, trainers, virtual reality, and all equipment that provides a realistic portrayal of a real clinical environment.

Satisfaction. Defined as meeting the needs and expectations of the experience as well as the enjoyment the experience provided. (Oxford University Press, 2018)

Measurement Tools

Demographic survey. The demographic survey was developed by the primary investigator and questions include age, gender, ethnicity, perceived confidence level in holding ACP discussions, years as a nurse, as well as specific time spent working in the emergency room and intensive care unit.

National League for Nursing (NLN) Student satisfaction with learning and self-confidence in learning. The National League for Nursing (NLN) Student Satisfaction and Self-Confidence in Learning measurement tool was developed by the NLN in conjunction with Laerdal specifically for nursing simulation research (NLN, 2018). It is available for download with permission and without cost for noncommercial use from the NLN website (NLN, 2018). The measurement tool was developed using pre-licensure nursing students and has a reading comprehension set for that level.

This measurement tool is a 13-item questionnaire that is self-reported on a Likert-type scale from one to five, with one being strongly disagree with the statement and five being strongly agree with the statement. There are two separate sections to this tool, satisfaction and self-confidence, and the scores can be added separately or combined. Questions one through five measure satisfaction with the learning experience and questions six through thirteen measure self-confidence. Higher scores indicate more satisfaction and self-confidence.

An electronic search of google scholar returned that this measurement tool has been cited in 50 studies. The tool was found reliable with a high Cronbach's alpha at .87 for self-confidence and .94 for satisfaction (National Council State Boards of Nursing, 2009).

Franklin, Burns, and Lee (2014) tested the psychometric properties of the measurement tools after the scales were being widely used. Overall scale reliability was found to be high with Cronbach's alpha of 0.92, with satisfaction being 0.92, and self-confidence being 0.83. Item number 13 was found to be a poor fit for model and content and its removal increased Cronbach's alpha to 0.91 for self-confidence.

Pre -and Post Knowledge Test. Knowledge pre- and post-test- developed by ELNEC from a knowledge test originally with 106 questions, reduced to 25 questions involving communication techniques and ACP information covered in ELNEC PowerPoint presentation. Used with permission, train-the trainer.

Setting

The setting was a state university classroom for the education modules and role play activities. The standardized patient simulation occurred at the Mercer CDAC facility, a high-fidelity medical office environment.

Data Collection

Data was collected prior to the education intervention, in the form of the demographics and pre-knowledge test. The second data collection point was four weeks later after the standardized patient simulation and included a post-knowledge test and the NLN Student Self-Confidence and Satisfaction with learning. All data was combined for statistical analysis and reporting.

Sampling Plan

IRB approval was received for all aspects of the project from Georgia College and State University (GCSU). Recruitment of participants was from the summer 2018 graduate level nursing courses held at GCSU. A voluntary convenience sample meeting the inclusion criteria with an interest in an education and simulation intervention for advance care planning was used, $n=44$. All students were made aware that participation in the study is voluntary and participation or nonparticipation will have no effect on the course grading. All students received education, materials, and simulation experience regardless of participation in the study.

Human Subject Protection

The human subject protection began with the IRB approval process and informed consent. After IRB approval, the study was explained, all questions answered, and informed consent obtained. Each participant received a copy of the informed consent and were informed that they may stop participating at any time by notifying the PI.

Participant confidentiality was maintained by assigning a unique participant number at the time the consent was signed, and was used on all further documents. The security of the documents was maintained on a secure GCSU network, by passcode protected computer, and will be destroyed after five years per GCSU policy.

Subject impact was no more distress than experienced during normal life. Each participant had the option of stopping participation at any time during the education intervention with no reason required. No participant experienced distress or needed to be referred to a mental health counselor.

Simulation

The simulation experience was developed using Jeffries Simulation Framework. The NLN Jeffries Simulation Theory allowed the PI to design and implement a nursing simulation that promoted student centered learning with a realistic and high-fidelity environment. Experiential learning and application of the communication techniques, with interactive standardized patients, can promote learning without possible harmful effects on actual patients and may increase self confidence in communication when applied in a real-life setting. The areas of the framework are discussed with details for the nursing simulation below.

Context

The context of the intervention was an academic setting for practice and learning without any associated grades or penalty. There was an interest in implementing curriculum related to end of life care planning and communication techniques, and this pilot study may be used to determine feasibility for the additional content. Resources that were available for use included the simulation center at the Mercer CDAC. This was a high-fidelity environment with pods that are designed to have the look and feel of a medical office exam room. Each room was equipped with exam table, equipment, rolling stool, and patient chair. Two cameras captured audio and video feed from separate angles. The documentation station had a computer, a printed copy of the case study, and printed list to remind the student of goals of the conversation. The standardized patients were trained in the case study, and all except two had performed this case

study previously. The standardized actors used scripts with the same information and expected

responses to cues received from the students, and have discussed their motivation and role

among themselves.

Design

This intervention was a beginning level simulation using general communication

techniques and the SPIKES protocol as taught in the classroom education modules and role play

activities. The SPIKES protocol was developed for breaking bad news and stands for setting,

patient's perception, invitation, knowledge, emotions, with empathetic responses, strategy for

future and summary of the discussion. The design for the intervention was classroom education

with communication modules from ELNEC that was followed by role play of the ELNEC case

study "Breaking Bad News" in the classroom setting.

The standardized patient simulation was developed by MERCER CDAC for use with the

medical students. The case study involved a son waiting in the medical office room after his

mother was emergently brought to the hospital. The diagnosis was hemorrhagic stroke, loss of

consciousness, unstable vital signs, and she had a poor prognosis for survival. The student FNP

was the son's first source of information and had to break the bad news using the SPIKES

protocol. The attitudes, questions, and nonverbal communication of the student triggered certain

reactions in the standardized patient. For example, the student asked the son's perception of the

situation, he gave a scripted response that allowed the student to advance the case study. If the

student forgot to illicit the invitation to discuss the information, the son would continue to pace

the room and would not give information vital to working the steps of case study. The students

had only 15 minutes for the entire patient encounter, followed by time as needed for

documenting the conversation.

At the end of each day of simulation, all the students, standardized patients, and PI gathered for a debriefing session that included general comments of student performance from the standardized patients and common themes seen by the PI. All videos and documentation were reviewed by the PI with comments and were made available to the students after review by the CDAC team.

Simulation Experience

The standardized patients provided a high-fidelity simulation experience in a realistic environment. The trained actors allowed the student to fully immerse in the simulation and suspend disbelief for a high engagement value. Multiple students commented on the realism of the simulation during the debriefing process each day.

Facilitator and Educational Strategies

The facilitator was the PI of the study. The PI has been prepared as MSN, FNP-C and was enrolled in a DNP program. Specific training includes completion of ELNEC train the trainer course that included additional courses in communication techniques for advanced care planning. The PI has experience participating in standardized patient experiences. The educational strategies have been used and developed by ELNEC and MERCER CDAC and included providing feedback to students on the simulation and debriefing at the end of the simulation experience. Additional educational strategies included providing each student with materials for reference, power point slides, links to examples communication videos, and a set of communication techniques cue cards that includes the SPIKES protocol. The variety of educational support materials is geared to different learning preferences among students.

Participant

Each participant was a registered nurse that assumed the role of FNP during the simulation. Every student has participated in the classroom training, role play, and had a chance to ask questions before the simulation experience. Every participant brought different life and nursing experiences to the simulation that impacted how the simulation unfolded.

Outcomes

The outcomes that were measured were participant focused and included knowledge, self-confidence in holding ACP conversation, and satisfaction with the simulated experience. The results section will detail the data collected.

Results

The data from the research sample were analyzed for the following research questions using IBM SPSS Version 24. Some variables were normally distributed, while others were not. Nonparametric tests were used to allow comparisons between variables.

Sample Description

There are 44 participants, with 93.2% female, 6.85 male. Ethnicity was 75% White, 18.2 % Black/African American, 4.6% two or more ethnicities, which are not being reported to prevent identification of the participants as the sample is small, and 2.3% prefer not to say. Age M= 32.77, SD 8.36, range of 23 through 53, with one participant prefer not to say. Years as a registered nurse (RN) M=6.74, SD= 6.03, with a range of one or less to 28, years of intensive care unit (ICU) experience M= 1.40, SD= 2.17, with a range of 0 to 7.5, years of emergency room (ER) experience M= .68, SD= 1.46, with a range of 0 to 8 years. Perceived self-confidence in holding ACP conversations (as measured, low, average, or above average) was 27.3% reported low, 59.1% reported average, and 13.6% reported above average.

Table 1

Demographic Variables

Variable	n	Percentage
Total Population	44	100
Gender		
Female	41	93.2
Male	3	6.8
Confidence Perceived Pre-Intervention		
Low	12	27.3
Average	26	59.1
Above Average	6	13.6
Ethnicity		
White	33	75
Black/African American	8	18.2
Two or more Ethnicities	2	4.6
Prefer not to say	1	2.3
Characteristic	*M (SD)*	Range
Age	32.77(8.36)	23, <53
Years RN Experience	6.74(6.03)	>1, 28
Years ICU Experience	1.40 (2.18)	0, 7.5
Years ER Experience	.68 (1.46)	0, 8

Research Questions

Research Question 1: After a didactic education module on communication techniques and ACP options followed four weeks later by a nursing simulation experience, was there a statistically significant change in knowledge scores regarding communication techniques and ACP options? Wilcoxon Signed- Rank test was used to compare pre and post test scores. Knowledge test results were significantly greater after the education intervention (*Mdn*= 21) than before (*Mdn*= 20), (z= -4.165), (p= .000), with a medium effect size (r= -.444).

SP rated student communication skills during simulation overall Excellent 54.7%, Good 37.7%, and Fair 7.5%. Communication regarding withholding/withdrawing life support was rated Excellent 41.5%, Good 45.3%, and Fair 13.2%.

Research Question 2: What effect did the intervention have on the learner's satisfaction and self-confidence in holding ACP conversations? Reported on the NLN Student Self-Confidence and Satisfaction. Question number 13 removed from data, as discussed above in the survey tool section.

The Cronbach's alpha for the satisfaction section was .928. This section has a possible point total of 25. Satisfaction was reported as *M*= 18.14, *SD*= 2.11, 95% CI 17.50, 18.78, *Mdn*= 19, with range between 13 and 20.

The Cronbach's alpha for the self-confidence section was .803. This section has a possible point total of 35. Self-confidence, *M*= 30.55, *SD*=2.992, 95% CI 29.64, 31.46, (*Mdn*= 31), range 11, 35.

Table 2

Response-option frequency for NLN Student Satisfaction and Self-Confidence in Learning Scale

	SD	D	UN	A	SA	Mean +- (SD)
1. The teaching methods used in this simulation were helpful and effective.	0%	0%	2.3%	38.6%	59.1%	4.57(.55)
2. The simulation provided me with learning material and activities to promote my learning the medical surgical curriculum.	0%	0%	2.3%	40.9%	56.8%	4.52(.63)
3. I enjoyed how my instructor taught the simulation.	0%	0%	4.5%	40.9%	54.5%	4.5(.59)
4. The teaching materials used in this simulation were motivating and helped me to learn.	0%	0%	0%	40.9%	59.1%	4.59(.50)
5. The way my instructor taught was suitable to the way I learn.	0%	0%	6.8%	34.1%	59.1%	4.52(.63)
6. I am confident that I am mastering the content of the simulation activity that my instructors presented to me.	0%	9.1%	25.0%	47.7%	18.2%	3.75(.87)
7. I am confident that this simulation covered critical content necessary for the mastery of medical surgical curriculum.	0%	0%	4.5%	43.2%	52.3%	4.48(.59)
8. I am confident that I am developing the skills and obtaining the required knowledge from this simulation to perform necessary tasks in a clinical setting.	0%	0%	11.4%	52.3%	36.4%	4.25(.65)
9. My instructors used helpful resources to teach the simulation.	0%	0%	2.3%	47.7%	50.0%	4.48(.55)
10. It is my responsibly as the student to learn what I need to know from this simulation activity.	0%	0%	0%	25%	75%	4.75(.44)
11. I know how to get help when I do not understand the concepts covered in the simulation.	0%	0%	0%	50%	50.0%	4.5(.51)
12. I know how to use simulation activities to learn critical aspects of these skills.	0%	0%	2.3%	54.5%	43.2%	4.41(.54)

Note. SD= Strongly Disagree, D= Disagree, UN= Undecided, A= Agree, SA= Strongly Agree

Research Question 3: Were any demographic characteristics associated with knowledge scores on the pre- or posttest or learner confidence levels? The nonparametric test of Spearman's rho was used to determine correlations between demographic variables and pre/posttest knowledge, learner self-confidence, and satisfaction. Gender was not included as 93.2 % of the participants were female (41 out of 44). Posttest knowledge scores were negatively correlated with years as RN, (r_s= -.357), (p= .017), ER experience (r_s= -.329), (p= .029), and age (r_s= -.400), (p= .008). Perceived confidence prior to the intervention was positively correlated with years as RN, (r_s=.345), (p= .022), years ICU experience, (r_s= .435), (p= .003).

Instrument Reliability

The reliability testing of the NLN SSCS as used in this sample was calculated using SPSS and the scores for each question on the scale. The NLN does not provide scoring information on question 13, when e-mailed by the PI, a response was given that could not be definitive, but recommended reverse coding this item. It was suggested that the only way to determine how to code it would be to contact previous investigators that have used the tool. The reliability for the self-confidence section Cronbach alpha = .705 when straight coded, .701 when reverse coded, and when removed entirely rose to .803. It was decided to remove the question from the analysis, leaving the self- confidence scale with a possible total of 35 instead of 40. The total scale Cronbach alpha = .914, and for subscale self-confidence= .803, and satisfaction was .928. This is lower than the previously given reliability scores for the instrument (Franklin, Burns, and Lee, 2014).

Discussion

The results of the study show that a brief education module along with role play activities does lead to statistically significant increases in knowledge score testing. The Jeffries Framework was an effective model to develop the simulation and promoted learning in a high-fidelity environment. The participants were not required to practice or study the material outside of the teaching time spent in class. This is similar to other research on brief education intervention that showed improvement (Douglas et al., 2016; Epner and Baile, 2014) Overall, pre-test knowledge scores show a need for this type of communication education, because even as participants rated themselves high in confidence, the knowledge scores show a deficit in knowledge.

The NLN Satisfaction and self-confidence in learning survey tool showed high levels of satisfaction and self-confidence in this group. Franklin, Burns, and Lee (2014) reported an average of 4.3 for most of the questions in a sample of 2200, while this study showed an average of 4.4 for most questions. Satisfaction with the learning experience and self-confidence in performing these communication skills may increase the likelihood that participants will incorporate the new skills into actual patient practice. This also shows support for the nursing program to incorporate this type of training in other semesters and with other cohorts.

Implications for Practice

This project supports the need for continued education and training for providers regarding ACP communication about serious illness goals of care and synthesis of best practices. Nurses with higher age and experience levels reported more confidence in communication, but knowledge scores were better in younger and less experienced nurses. Knowledge scores were significantly increased by a short training module and resources that are publicly available

online. Finding time to add new content to already full provider training programs is difficult,

but this study shows that even short didactic education is effective.

Nursing simulation using HFS and SP, while an expensive simulation technique, is

appropriate for teaching complex cognitive skills, such as ACP communication skills. There was

feedback from the participants regarding the high level of realism of the simulation and how that

allowed them to fully immerse in the scenario. A lower level of fidelity using manikins would

not allow the participant to receive nonverbal feedback cues that are essential to helping process

emotions. Satisfaction and self-confidence were both high following the simulation, further

support for this teaching technique.

Limitations

This project has several limitations. The convenience sample size was small. The

majority of participants were female, which is similar to the findings of the NLN (2014) that

only 13% of master's degree level nursing students are male. The NLN survey tool measures

soft outcomes of self-confidence and satisfaction, but more research is needed to determine

translate to actually learning or skill in practice (Mariani & Doolen, 2016). Additionally, the tool

reliability had a lower Cronbach's alpha of .80 than the pyrometric testing by Franklin, Lee, and

Burns (2014) of .91, with question number 13 removed.

The project occurring in the very first class of FNP training also presents limitations. The

students have not yet accepted the role of medical provider and have no clinical FNP experience.

The lack of role acceptance limits the ability and possibly perceived authority to fully direct the

plan of care with the patient. Ideally, this class will continue communication regarding ACP

conversations. The early initiation would then be used as a step in an overall communication

skills training program that extends the length of the FNP program.

Conclusion

Increased communication skills training for ACP conversations between medical providers and patients is needed to promote patient autonomy at the end of life (IOM, 2014). Simulation training has been used to fill the gaps for clinical nursing experiences (Hayden et al., 2014). The purpose of this translational research project was to determine the effects of a communication education module combined with role-play and followed by a HF simulation with SP using the Jeffries Framework as a theoretical model.

A review of recent literature supports the need for increased provider training (Deveugle, 2015). Short targeted education training sessions can have significant impact (Epner & Baile, 2014; Douglas et al., 2016) Epstein et al. (2015) found that patients want to have ACP conversations with an established physician. Ahulwalia et al. (2015) found that conversations that occurred between patient and provider within one month of stage IV lung or colorectal cancer diagnosis were associated with less aggressiveness at end of life. However, these conversations should be repeated because Scott and Caughlin, (2015) found that with only one conversation there is low understanding of the patient's wishes. HFS has been linked with high self-confidence (Samawi, Miller, Haras, 2014). Using SP as part of HFS has been shown to be effective in teaching cognitive skills, such as communication, (Kim, Park, & Shin, 2016; dos Santos Nogueira de Goes et al., 2017).

The study design was a pilot study using a convenience sample of 44 FNP students and received IRB approval from the University. The students all received the education, role-play, and HFS at Mercer CDAC using SP, but no grades were impacted and not all students chose to participate. The results showed significant increase in post intervention ACP communication knowledge scores, self-confidence in holding ACP conversations $M= 30.55$, $SD=2.992$, 95% CI

29.64, 31.46, (*Mdn*= 31), range 11, 35, and satisfaction with the learning experience *M*= 18.14,

SD= 2.11, 95% CI 17.50, 18.78, *Mdn*= 19, with range between 13 and 20.

Increasing knowledge regarding ACP options is essential to increase patent's autonomy

at the end of life and ensure that the patient's wishes and values will be followed, even when the

patient can no longer communicate. Effective teaching methods for primary care providers to

learn important communication skills are critical for transferring skills into real world

conversations with patients. Perceived self-confidence may not indicate high levels of abilities

and years of experience are no guarantee of effective communication. Communication

techniques are complex, and when combined with an emotional subject such as end of life care,

providers need frequent and ongoing skills training.

Beginning this skills training in the early part of FNP education is the first step in giving

students the knowledge and time to practice before becoming responsible for these conversations

with real patients. The didactic education intervention using evidence-based modules from

ELNEC and high-fidelity SP simulation, did show increased knowledge in ACP communication

techniques. Self-confidence, satisfaction, and SP rating of student performance in the simulation

were all high. More research is necessary to determine if these skills are transferable to practice.

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Appendix A
Informed Consent Form
Georgia College and State University
Informed Consent Form

A Simulated Learning Experience in Advanced Care Planning

PURPOSE OF RESEARCH

You are invited to participate in a research study for a simulated learning experience in advance care planning. The primary goal of this research study is to determine whether a communication education module and standardized patient simulation will increase knowledge and self confidence in holding advance care planning conversations as well as learner satisfaction with education intervention.

VOLUNTARY PARTICIPATION

Your participation in this study is entirely voluntary. Your participation or nonparticipation in the study will not impact your grade in the course in any way. You are free to terminate your participation in this study at any point without reason. If you decide to terminate your participation, please notify Brandy Ellis during the study or by email @ brandy.ellis@bobcats.gcsu.edu

INCLUSION AND EXCLUSION CRITERIA

By signing this informed consent, you are agreeing to the sample criteria. Please read through the inclusion and exclusion criteria entirely.

Inclusion Criteria:
- Male or female over age 18 years old
- Enrolled in Georgia College nursing program
- Be willing and able to sign an informed consent

Exclusion Criteria:
- Younger than 18 years old or unable to sign informed consent form
- Not enrolled at Georgia College nursing program
- Unwilling to sign informed consent

DURATION OF STUDY INVOLVEMENT

The participant's education and data collection period is scheduled to take 2 hours of class time and time already scheduled for the simulation at Mercer CDAC. This research study is expected to take place over the summer semester from May-June 2018. There will not be any activities outside of scheduled class times.

PROCEDURES

If you choose to participate, you will be asked to complete a pre- and post-intervention knowledge test along with a pre-intervention demographics questionnaire and two post intervention surveys about the intervention. The initial surveys are estimated to take less than 15 minutes to take and the post surveys are estimated to take 20-30 minutes.

The intervention for this study consists of a communication education module/ role play lasting approximately 2 hours during immersion week followed by a standardized patient simulation experience at Mercer CDAC.

Risks:
The risks associated with the education intervention are minimal. Participants are able to stop participating at any time by notifying Brandy Ellis.

The results of the study will remain anonymous and will not be linked with your name. The results are to be used for research purposes only.

PARTICIPANT RESPONSIBILITIES

As a participant, your responsibilities include:
- Complete the pre- and post- knowledge test
- Complete the demographics questionnaire
- Participate in communication module and role play
- Participate in standardized patient simulation experience
- Complete 2 post intervention surveys
- Ask questions as needed
- Tell the researcher if you would like to terminate your participation

WITHDRAWAL FROM STUDY

If you first agree to participate and then change your mind, you are free to withdraw your consent and discontinue your participation at any time. If you decide to withdraw your consent to participate in this study, you should notify Brandy Ellis at brandy.ellis@bobcats.gcsu.edu

POTENTIAL BENEFITS

The researcher cannot guarantee or promise that you will receive any benefits from this study. You will receive conversation cue cards, educational handouts, and standardized patient simulation experience with feedback. Research in communication and advanced care planning for graduate level nurses benefits all humankind by supporting patient autonomy.

PARTICIPANT'S RIGHTS

You should not feel obligated to agree to participate. You will receive all education materials, training, and simulation experiences even if you do not choose to participate in this study. Your questions should be answered clearly and to your satisfaction. If you decide not to participate, tell the researcher, Brandy Ellis.

FINANCIAL CONSIDERATIONS

There are no costs associated with this research study. All necessary supplies will be provided during the study period.

CONFIDENTIALITY

The purpose of this research study is to obtain data or information on knowledge and confidence in advance care planning conversations after an education and simulated learning experience; the results may be disseminated in medical journals, healthcare conferences, and poster presentations. Your identity and/or your personal health information will not be disclosed. Prior to beginning the study, you will receive a unique identification number that you will be prompted to input on each questionnaire rather than your name.

_____   _____
Signature of Adult Participant   Date

Unique Participant Number:_____

Appendix B
Demographic Survey

Unique Participant Number:_____

1. What is your gender?

   Male

   Female

2. What is your age?

   _____

3. How confident are you in your skills for having conversations regarding advanced care planning?
   A. Above Average
   B. Average
   C. Low

4. How many years have you been a nurse?

   _____

   How many years have you worked as a nurse in:

   ICU_____

   ER_____

5. Which categories describe you? Please circle all that apply
   - White
   - Hispanic, Latino, or Spanish origin
   - Black or African American
   - Asian
   - American Indian or Alaska Native
   - Middle Eastern or North African
   - Native Hawaiian or Other Pacific Islander
   - Some other race, ethnicity, or origin
   - I prefer not to say

Appendix C
End-of-Life Nursing Education Consortium (ELNEC)
Knowledge Test Items

Unique Identification Number: _____

1. The nurse knows that patient assessment in end-of-life care includes physical, psychological, social and spiritual dimensions. The nurse is performing an admission assessment of a client with amyotrophic lateral sclerosis (ALS). Which principle should the nurse use to determine the priorities for care of this patient?
    a. The control of symptoms is essential before assessment of other dimensions.
    b. The interdisciplinary team should determine which dimension is most important.
    c. The client and family should decide which dimension is critical to them.
    d. The nurse should identify the most important dimension after assessment.

2. The nurse is performing a self-assessment prior to beginning work in a hospice setting. Which factor places the nurse at risk for an increased emotional response to a client's death?
    a. lack of home care experience
    b. the loss of a loved one within the past year
    c. frequency of death experienced in the hospice setting
    d. experience with clients who have advanced diseases

3. The nurse is having a discussion about barriers to quality end-of-life care with a co-worker. Which comment by the co-worker indicates <u>misunderstanding</u> and the need for more information?
    a. "A significant obstacle is health care professionals' lack of education about end-of-life care."
    b. "One reason people don't seek palliative care is that they are reluctant to give up hope."
    c. "The failure of health care professions to acknowledge the limits of traditional medicine is a major barrier."
    d. "It's essential to know someone has six months or less to live for end-of life care to be started."

4. When caring for patients at the end of life, the nurse can anticipate that these patients will have which two most common fears associated with death?
    a. death itself and not finishing tasks
    b. pain and being a burden to family
    c. altered body image and not knowing what to expect
    d. losing control and use of life-sustaining technology

5.   An 84 year old widow with diabetes and end-stage renal disease has been sent to the hospital from a nursing home. She has gangrene of the left foot with multiple, open infected wounds. Surgery is recommended, but the client does not want any invasive procedures. She wants to go back to the nursing home. She is alert, oriented, and has good decision-making capacity. Her children are emotionally distraught and pull the nurse aside to say, "We want the surgery. We want to do everything that can be done." What should the nurse do first?
      a. Ensure the client and family understand the treatment options and risks.
      b. Ask the hospital ethics committee to consider this case as soon as possible.
      c. Offer to discuss the children's preferences with the physicians.
      d. Encourage the children to talk their mother into having the surgery.

6.   The hospice nurse is caring for a dying patient whose family disagrees with the patient's decisions about end-of-life care. Which action should the nurse take first?
      a. Present the case to the agency's ethics committee for a resolution.
      b. Ask the health care team to make decisions regarding end-of-life care.
      c. Initiate a referral to social services and request a home visit.
      d. Encourage the family and client to discuss the conflict.

7.   While caring for a woman with advanced multiple sclerosis, the hospice nurse is discussing advance directives with her. Which statement by the patient indicates understanding of advance directives?
      a. "I need to ask my attorney to prepare the advance directive."
      b. "I can't change my health care proxy once the document is signed."
      c. "I can revise my end-of-life options in the advance directives."
      d. "I must also complete a living will when I'm admitted to a hospital."

8.   The nurse is caring for a man hospitalized with advanced metastatic disease. He has declined further treatment, and he is aware that his disease may progress more rapidly. The patient is considered to have good decision-making capacity. Who should make the decision to terminate treatment for this patient, and what ethical principle is applicable?
      a. The patient refuses treatment for himself according to the right to self-determination.
      b. The physician decides to withdraw treatment based on the principle of medical futility.
      c. The family declines further treatment, exerting their option to claim surrogacy or proxy .
      d. The executive board determines the patient's competence and applies hospital policies.

9.   In palliative care, the nurse cares for people of many cultures. When conversing with persons of another culture, the nurse should:
      a. Use the patient's first name to establish warm rapport.
      b. Determine who makes decisions for the patient and family.

    c. Speak primarily to the translator rather than the patient or family.
    d. Act as if the patient is fully informed of the diagnosis and prognosis.

10.   The nurse is part of a collaborative team providing end-of-life care. Which remark by another team member indicates the best understanding of culturally sensitive end-of-life care?
    a. "I ask the patient who he wants to include in conversations about his illness."
    b. "I hold the patient's hand and get physically close to her to show I care."
    c. "I can predict how members of a particular ethnic group will respond to pain."
    d. "I feel it's our obligation to tell a patient bad news, even if the family objects."

11.   Nurses are concerned with religion and spirituality of patients in palliative care. Which question is the least appropriate during a spiritual assessment?
    a. "What church do you attend?"
    b. "Are spiritual beliefs important in your life?"
    c. "What aspect of your faith gives your life most meaning?"
    d. "How would you like me to address spirituality in your care?"

12.   The nurse is caring for a client who just had surgery that revealed stage IV ovarian cancer. The client does not know her diagnosis. Which action should the nurse take in preparation for the client to be told her diagnosis?
    a. Make sure all team members are able to be present.
    b. Find a neutral, non-threatening location in which to tell the news.
    c. Make sure that appropriate medications for anxiety are prescribed.
    d. Find out how much the patient/family want to know.

13.   GB is a 31 year old patient with breast cancer whose disease has progressed despite treatment. She has decided to forego further treatment. The interdisciplinary team members, who have cared for GB from diagnosis through surgery, chemotherapy and radiation treatments, are distraught over her decision to stop treatment. Communication between interdisciplinary team members regarding GB's care and their feelings should:
    a. focus on helping GB see the benefits to continuing treatment in light of her current condition
    b. occur on a daily basis, including participation of disciplines in team meetings
    c. include deciding whether or not to refer GB for a psychiatric evaluation because she is clearly depressed
    d. be excluded from the written patient record to ensure that patient confidentiality is respected

14.   In preparing to discuss bad news with a patient, the palliative care nurse should:
    a. Speak from the heart, without rehearsal to convey sincerity.
    b. Determine what the patient and family already know.
    c. Presume that patients want and need to be told the truth.
    d. Be prepared to give advice about future treatment options.

15.   The nurse is caring for a man with advanced prostate cancer. He has been told that
       his therapy is not working. He asks the nurse, "*Why* is this happening to me?"
       What is the nurse's most appropriate response?
       a.   "I don't know. I wish I had an answer for you, but I don't."
       b.   "Perhaps you're being tested and this will make you a stronger person."
       c.   "I'll ask the doctor to more fully explain the disease process."
       d.   "If I were you, I'd explore additional therapies and treatment options."

16.   The nurse is facilitating a staff discussion about myths and realities of
       communication in palliative care. Which is a correct statement about
       communication?
       a.   "We can never give someone too much information."
       b.   "We communicate only when we choose to communicate."
       c.   "The majority of messages we send are non-verbal."
       d.   "Communication is primarily words and their meanings."

17.   The nurse is trying to initiate a conversation with a dying patient about end-of-life
       issues. The patient, usually talkative with the nurse, is unusually quiet and prefers not
       to talk. Which reason for the patient's silence would be a maladaptive response?
       a.   The patient is in denial about the seriousness of the disease.
       b.   The patient's need for information has been met by someone else.
       c.   The patient needs additional time to consider the diagnosis and prognosis.
       d.   The patient withdraws and will not discuss the bad news with his health team or
            family.

18.   The nurse is speaking with the family member of a patient in the Neuro ICU. The nurse
       employs attentive listening to encourage dialogue. The nurse best demonstrates
       attentive listening by:
       a.   interrupting the conversation to clarify what the family member means
       b.   using closed-ended questions to enhance the flow of conversation
       c.   periodically giving a summary of what the family member has said
       d.   using non-verbal signals such as nodding one's head and eye contact

19.   For the past week, the nurse has been caring for a client in the advanced stages of HIV-
       AIDS. The nurse hopes to find time to assess the client's emotional and spiritual needs.
       The nurse's first action to open the communication process should be to:
       a.   Find out if the client feels like talking.
       b.   Sit close to the client to demonstrate empathy.
       c.   Move the client to a setting that ensures privacy.
       d.   Discuss medical issues first to relax the client.

20.   An 85 year old client with end-stage heart disease arrives unconscious at the
       emergency department after sustaining her third myocardial infarction. The physician

has told the daughter that without resuscitation, her mother could die today. The nurse finds the daughter crying by the client's bedside. Which intervention by the nurse is most appropriate in communicating with this family member?
a. Ask the daughter if she would like to reconsider treatment.
b. Talk to the physician about moving the client to a unit with more privacy.
c. Remain present with the daughter, using silence to impart comfort.
d. Assure the daughter that she doesn't need to stay with her mother.

21.   The nurse is talking with the wife of a client who died recently. Which statement by the nurse is most helpful?
a. "I know exactly how you are feeling."
b. "It must be hard to accept that this has happened."
c. "His suffering is over. He's in a better place now."
d. "I'm here for you. Call me if you need anything."

22.   The nurse is caring for a 55 year old female client with metastatic breast cancer. During a home visit, the nurse finds the client's 22 year old daughter weeping at the kitchen table. The daughter explains that she just realized that her mother will not be alive when she gets married or has children of her own. Recognizing anticipatory grief in the young woman, the best nursing intervention is:
a. Educate about signs and symptoms of disease progression.
b. Foster hope by stressing that prognosis is difficult to predict.
c. Provide therapeutic presence and practice active listening.
d. Advise the daughter to focus more on the present than the future.

23.   The nurse is facilitating the monthly bereavement support group for the hospice agency. Mr. C, whose wife of 14 years died 5 months ago, states "I still can't get through a week without crying sometimes. I know I should be at least starting to move on a bit." The best response by the nurse would be:
a. "Most people find it takes six months before things get back to normal."
b. "It is still so soon after your wife's death, but you will be feeling better soon."
c. "There is no way to predict when the grief you are experiencing will be complete."
d. "Perhaps you would like to have individual counseling for more intensive therapy."

24.   The wife of a recently deceased patient states: "Last night I though I heard him say 'Good night, Honey' just like he always did. Do you think I am going crazy?" The most helpful response by the nurse will be:
a. "You might want some extra support accepting your husband's death. I'll have the doctor make a referral to a psychologist."
b. "Many persons have similar experiences of seeing or hearing the one who has died. You must miss him saying 'good night'."

    c.   "Many persons believe in ghosts or spirits who visit their loved ones. Do you believe in ghosts or spirits?"

    d.   "That must be frightening for you. Do you have a friend or relative who can stay with you so that you are not alone?

25.   The nurse is caring for a man who is imminently dying. During morning care, the man asks the nurse if he is dying. An example of the best response for the nurse to give is:

    a. "Yes. I suppose you've known this all along. I promise I'll be right with you all the way."

    b. "Not today. Why don't we look at some of the things you would like to accomplish now?"

    c. "Yes. Tell me about any concerns, fears, or questions you have about what will happen."

    d. "Why do you ask that? You look like you feel so much better today than you did yesterday!"

Appendix D
NLN Survey

Student Satisfaction and Self-Confidence in Learning

Instructions: This questionnaire is a series of statements about your personal attitudes about the instruction you receive during your simulation activity. Each item represents a statement about your attitude toward your satisfaction with learning and self-confidence in obtaining the instruction you need. There are no right or wrong answers. You will probably agree with some of the statements and disagree with others. Please indicate your own personal feelings about each statement below by marking the numbers that best describe your attitude or beliefs. Please be truthful and describe your attitude as it really is, not what you would like for it to be. This is anonymous with the results being compiled as a group, not individually.

Mark:
1 = STRONGLY DISAGREE with the statement
2 = DISAGREE with the statement
3 = UNDECIDED - you neither agree or disagree with the statement
4 = AGREE with the statement
5 = STRONGLY AGREE with the statement

Satisfaction with Current Learning	SD	D	UN	A	SA
1. The teaching methods used in this simulation were helpful and effective.	1	2	3	4	5
2. The simulation provided me with a variety of learning materials and activities to promote my learning the medical surgical curriculum.	1	2	3	4	5
3. I enjoyed how my instructor taught the simulation.	1	2	3	4	5
4. The teaching materials used in this simulation were motivating and helped me to learn.	1	2	3	4	5
5. The way my instructor(s) taught the simulation was suitable to the way I learn.	1	2	3	4	5

Self-confidence in Learning	SD	D	UN	A	SA
6. I am confident that I am mastering the content of the simulation activity that my instructors presented to me.	1	2	3	4	5
7. I am confident that this simulation covered critical content necessary for the mastery of medical surgical curriculum.	1	2	3	4	5
8. I am confident that I am developing the skills and obtaining the required knowledge from this simulation to perform necessary tasks in a clinical setting	1	2	3	4	5
9. My instructors used helpful resources to teach the simulation.	1	2	3	4	5
10. It is my responsibility as the student to learn what I need to know from this simulation activity.	1	2	3	4	5
11. I know how to get help when I do not understand the concepts covered in the simulation.	1	2	3	4	5
12. I know how to use simulation activities to learn critical aspects of these skills.	1	2	3	4	5
13. It is the instructor's responsibility to tell me what I need to learn of the simulation activity content during class time..	1	2	3	4	5

Revised December 22, 2004

Appendix E
Role Play Scenario

Case Study #3
Bad News

You are the outgoing geriatric APRN. You have been caring for Amanda A.. an 80-year-old with dementia for over 15 years. She has been fairly independent until three years ago when she developed cognitive changes. After work-up ruled out other causes, it was decided that she had dementia. Her condition was considered early stage Alzheimer's. Upon that diagnosis, she moved into assisted living. Her other medical history includes hypotension and osteoporosis. She has been fairly stable but has needed more assistance with her ADLs.

Recently, she became more confused and fell in the shower. Work up showed a chronic subdural hematoma and septicemia. She was sent to the intensive care unit. However, she is becoming comatose and appears to be dying.

Her family asks for a meeting with you to discuss future options about nursing home care.

Discussion Questions:
1. What information do you need to review before the meeting?
2. What other colleagues do you want/need to consult with?
3. How do you contemplate this bad news discussion going?
4. Who should be with you?
5. How do you start the conversation?

Appendix F
CDAC Case Study

Case Summary
"Joanna Jones" – WITHHOLDING & WITHDRAWING

Overview:
This is a seventy year old African American female with history of hypertension, found unresponsive by her son in her vegetable garden. She was brought to the Emergency Dept by paramedics, and her blood pressure on arrival was 220/140 mm Hg. Initial CT scan indicated a large left sided basal ganglion hemorrhage with extension into the lateral ventricle. The student must deliver bad news, discuss the severity of illness, identify quality of life issues and explain options of ongoing life-supportive care versus withholding &/or withdrawal of life support, discuss methods for comfort care.

Setting:

Neurology Intensive Care Unit (6 hours after arrival to the ER)

History   _____ %
Physical   _____ %
Communication   80 %
Symptom Management   20 %
Total   100 %

Diagnosis: Large Intracranial Hemorrhage
Prognosis: Poor

Problem: Whether and How to withdraw care and Comfort Patient (Palliative Care Discussion)

Student Instructions (1. <u>Chart information</u> and 2. <u>Directions for the encounter</u>)

The patient is unresponsive, intubated and on full ventilator support. She postures with painful stimuli and has no cough or gag, eyes that are deviated to her left with sluggish pupil response; she occasionally breaths over the ventilator settings.

Vital Signs: **T: 39.2   P: 123   R: 15/12   BP: 186/95**

Directions for the Encounter:
1. Break the bad news regarding the severity of hemorrhagic stroke.
2. Identify key family, legal, spiritual, cultural and quality of life concerns.
3. Educate on the options of ongoing life support and comfort measures.
4. Explain the process for withdrawal of life support and symptom management.

Appendix G
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   ELNEC Curricula

   ELNEC Team

   ELNEC Faculty

   FAQs

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Tools For Trainers

   Find a Trainer

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Appendix H
SPIKES Protocol

Setting and Listening Skills

Summary
Strategy
Follow- Up

Patient's **Perception** of Condition/Seriousness

SPIKES
Protocol

Baile, W.F., Beckman, R., Lenzi, R., Glober, G., et al., (2000). SPIKES-A six step protocol for delivering bad news. Application to a patient with cancer. The Oncologist, 5(302-311).

Explore **Emotions** and Empathize as Patient Responds

Invitation from the Patient to Give Information

Knowledge in Giving Medical Facts