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Preparing Nurses for Roles in End-of-Life Decision-Making

Susan K. Laird

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Abstract

The U. S. Census in 2010 revealed that people over the age of 65 are the fastest growing population. Often referred to as the "graying of America," aging baby boomers place increasing demands on healthcare systems overall, from emergency departments (EDs) to intensive care units (ICUs). Aging patients often present with multiple co-morbidities, yet fewer than 37% of patients have advance directives in place and have made their wishes known to family members who will be faced with end-of-life decisions. On the front lines with dying patients and family members from all age groups confronted with difficult decision-making, nurses are poised to provide information and support to this population, yet they are not adequately prepared to do so. Current literature confirms there is a need for education and training to better prepare nursing students for their support role in end-of-life decision making as they move to the acute care setting. This Doctor of Nursing Practice project has developed materials specific to the unique needs of new nurses, providing the necessary resources and tools to better prepare them for this role. By increasing knowledge of nursing students before they enter acute care settings, this project seeks to provide new nurses with the tools to increase the confidence they need to better support patients and families facing difficult decisions.

Key words: End-of-life, deaths in emergency departments, emergency nursing and death, emergency nursing and palliative care, emergency nursing and hospice, intensive care units and death, intensive care units and palliative care, nursing students and death, nursing students and end-of-life

Executive Summary

The author's Doctor of Nursing Practice (DNP) project is entitled "Preparing Nurses for Roles in End-of-Life Decision-Making." With cases often starting in emergency departments (EDs), nurses are on the front lines with patients and family members who will be faced with end-of-life decisions, but they are not generally well prepared to have those difficult conversations and provide the best support and resources. Although palliative care initiatives are on the rise, the work has not yet been integrated into all hospital settings. This DNP quality improvement project provided an intervention which included trainings for nursing students who agreed to participate in the study. An in-person instructor/facilitator led class was developed to facilitate senior nursing students' learning better ways to support patients and families dealing with the stress of decision-making under difficult conditions.

The participants included 54 senior nursing students in their last semester prior to graduation. The benefit to these participants was increased knowledge coupled with increased confidence in their ability to work with patients and families. A secondary benefit is likely to be for patients and families themselves whose care may be improved through the new nurses' increased knowledge, more compassionate care, and availability of additional resources.

Potential outcomes in the short term may be increased knowledge of nursing students and increased comfort for these nurses to engage more directly with patients and families facing end-of-life decisions. The hospitals where they work after graduation may benefit from increased patient satisfaction. Long range goals for this project are the development and implementation of "Transition Teams" to work with end-of-life issues, patterned after rapid response teams initiated over a decade ago, to serve patients and families hospital-wide. Additionally, hospitals

may experience more efficient, cost-saving use of both EDs and ICUs which are frequently used for futile cases where death is inevitable.

Introduction

"Death is often seen as a failure of the health care system rather than a natural aspect of life (End-of-Life Nursing Education Consortium (ELNEC), 2018, p. 1). According to data from the Centers for Disease Control and Prevention (CDC), there are 136.9 million emergency department (ED) visits per year (Centers for Disease Control and Prevention [CDC]. 2017). Despite an ever-increasing number of ED visits, the numbers of people actually dying in EDs have significantly diminished. Between 1997 and 2011, there was a 48% decrease in mortality within EDs (Probst & Kanzaria, 2016). At first glance, these data seem to suggest this decrease indicates saving lives in the ED is more successful. Why then, would nurses need education and training to provide improved support to patients and families during end-of-life (EOL) decision-making? The reasons are multi-factorial, including medications and sophisticated equipment that enable keeping people alive longer. According to the Pew Research Center, the numbers of people 65 and older have tripled from 4% in 1900 to 14% in 2012 ("Endof-Life Medical Treatment," 2013). Despite this rapidly growing population, sometimes referred to as the "graying of America," often presenting with multiple comorbidities, fewer than 37% of patients already have advance directives in place (Crist, 2017). Additionally, they have not made their wishes known to family members who will be faced with making difficult decisions (Pew Research Center, 2013). These decisions may be even more difficult when the populations served are far younger. There are few studies which offer concrete solutions, however the

problems identified by nurses continue to note that family members do not have a clear understanding of what resuscitating a patient or loved one truly means (Beckstrand, R. L., Smith, M. D., Heaston, S., & Bond, A. E., 2008).

Background and Significance

In the author's personal career experience and observation, these issues collectively create an opportunity for nurses to better provide support for patients and families. Faced with the need for rapid decision-making, families and loved ones often do not understand what it means to intubate someone, or to put them on a ventilator, or administer vasopressors. These challenges coupled with the current mentality of saving lives at all costs, families may make decisions to save their loved ones or prolong their lives even when the situation is futile. Nurses are well suited to assist with decision-making, but they need the resources, tools, and training to be able to do so. Hospitals indicate that there is a strong interest in developing and implementing education programs that introduce palliative care concepts earlier in the admission process. National averages note that fewer than 37% of persons have advanced directives in place, and families are faced with decisions they are ill prepared to make (Crist, 2017). Patients are often resuscitated and transferred to the ICU when the level of care offered there will not change the outcome.

At the core of nursing theory and process, patient advocacy remains one of the primary roles for nurses. Nurses are always on the front line with patients and families having to make life and death decisions in times of great emotional distress (Hebert, Moore, & Rooney, 2011). However, lack of education and specific training means nurses are not adequately

prepared to provide such information. Nurses are greatly impacted by the stressful and emotionally draining work of caring for dying patients (Cui, J., Shen, F., Ma, X., & Zhao, J., 2011). It is important to note that the American Nurses Association (ANA) expectations for nursing advocacy are clear in the ANA position statement:

"Nurses are obliged to provide comprehensive and compassionate end-of-life care. This includes recognizing when death is near and conveying that information to families. Nurses should collaborate with other members of the health care team to ensure optimal symptom management and to provide support for the patient and family. Nurses and other health care providers have a responsibility to establish decision-making processes that reflect physiologic realities, patient preferences, and the recognition of what, clinically, may or may not be accomplished. Establishing goals of care for this patient at this time may provide a framework for discussion about what care should be provided. This process often involves collaboration with experts in decision-making, such as ethics committees or palliative care teams" (American Nurses Association Center for Ethics and Human Rights [ANA Center for Ethics and Human Rights], 2016)

Problem Statement

The need for education and training for nurses and nursing students in end-of-life issues has never been greater. According to the World Health Organization, the dying process today may take place over many months or even years as most of us will die of long-term chronic diseases instead of the infectious processes that shortened lives decades ago ("Top 10 Causes of Death," 2018). Many of those potential killers have been eradicated by vaccine discoveries and

successful treatments, leaving the greatest challenges coming from diseases evolving from poor lifestyle choices.

The United States is known for not providing best care for patients who are dying, and healthcare providers are rarely able to provide best support. Nurses may be unprepared to provide care to this population and experience increased anxiety (Peterson, Johnson, Scherr, & Halverson, 2013). In their paper on person-centered care, Goode, Black and Lynch suggest that when working with nursing students it is important to "be aware that the student learning experience impacts on both professional practice and personal life and requires appropriate consideration during the planning of teaching and provision of support if needed (Goode, Black, & Lynch, 2019).

Nursing students experiencing death and dying when they are in practice often experience sadness (Cerit, 2019). For example, one student's personal experience in the last year of her program noted that it was difficult to accept the death of her patient when the focus of nursing education had been on treatment, provision or care and dedication to healing (Registered Nurses Association of Ontario [RNAO], 2011). New coursework from social sciences has assigned students to complete their own version of a living will to better familiarize themselves with their own feelings (Wallace, Cohen, & Jenkins, 2019).

Progress has been made in the academic arena with a partnership between the American Association of Colleges of Nursing (AACN) and the City of Hope, entitled "End of Life Nursing Education Consortium," (ELNEC). ELNEC offers several education modules as well as trainthe-trainer coursework through national and regional trainings along with online modules (aacn.org/ELNEC, 2018). These modules focus primarily on hospice and palliative

care. Extensive literature searches reveal few references that continuing education for nurses is available in the acute care setting.

One major issue at a societal level is the economic burden from the need for extended care, as people now live far longer than ever before. Recent data published in the Atlanta Journal-Constitution state that "Georgia has the eleventh fastest-growing 60-plus population and the tenth fastest-growing 85-plus population (Cooper, 2020)." According to the Pew Research Center, a quarter of adults have given little or no thought to how they would like their treatment needs addressed at the end of their lives (Pew Research Center, 2013). There is considerable controversy over whether or not Americans spend the greatest amount of Medicare dollars during the last year of live when there may be no anticipated change in the eventual outcome or quality of life (Scitovsky, 2005). Informed decision-making that would ideally take place long before the need for such decisions is left in the hands of grieving family members (Josephs, M., Bayard, D., Gabler, N. B., Cooney, E., & Halpern, S. D., 2017, December 8). Patients and families are rarely prepared to act on emergency needs.

The latest Gallup poll released January 6, 2020, notes that "Americans rate the honesty and ethics of nurses highest among a list of professions that Gallup asks U. S. adults to assess annually (Reinhart, 2020)." Now, for the 18th year in a row, as the most trusted health care providers (Reinhart, 2020), nurses are best qualified to provide education and decision-making tools to this population, but necessary training and additional education to become proficient in end-of-life care would be required (Shariff, A., Olson, J., Salas, A. S., & Cranley, L., 2017).

PICO(T) Question

To guide and conduct a search of the evidence, the PICO(T) question was developed to clearly define the clinical question: Will education and training in end-of-life issues improve nursing students' knowledge and confidence so that they will be better prepared to provide care for patients and families facing end-of-life decision-making when they enter the workforce?

Purpose of Project

This quality improvement project developed and implemented education and training for nursing students with a goal of helping them become better prepared to work closely with patients and families faced with end-of-life decisions.

Organizational Analysis of Project Implementation Site

Meetings with nurse educators and directors from the hospital perspective indicate that there are no formal policies or protocols in place to specifically address the needs of patients and families who arrive in the ED or other hospital admission points with potentially futile outcomes expected. To date, this author has not been able to identify trainings that have been developed to educate nurses already in the clinical setting to better serve this population. At this writing, further assessment of hospital-based nurses has not yet occurred, however it is anticipated that few nurses will report prior education and training specific to dying patients and families. The implementation of this project took place at a major university in the southeastern United States. The school of nursing was established over 50 years ago, and currently has over 500 students enrolled in programs from associate degrees through baccalaureate, master's, Ph.D. and Doctor of Nursing Practice programs. Both traditional and accelerated programs are

offered. Professors of nursing at this urban university note that the concepts of hospice and palliative care are beginning to be integrated into undergraduate coursework. New graduate nurses provided with additional education and exposure to the issues facing patients and families faced with end-of-life decision-making may have increased confidence and comfort at the start of their careers, which in turn, may benefit hospitals in providing better care their patients and families seek and deserve.

Review of the Literature

The literature search was conducted using the following databases: CINAHL (EBSCO), PubMed, Ovid, Google Scholar, and Cochrane Library. Beginning with the initial search term, emergency nursing returned over 22,753 results in PubMed. End-of-life (EOL) care returned 76,663. Narrowing the search by combining emergency nursing and EOL returned 264 articles. Reviewing abstracts to eliminate disease-specific articles, such as those focused exclusively on cancer and heart disease, 50 articles were selected for additional review. By limiting to studies conducted in the United States, the yield was too small. Additionally, the search was limited to adult practice, eliminating any articles specific to pediatrics. Using the same databases, but expanding upon the original search to identify publications with a focus more directed to nursing students and death, and nursing students and EOL, an additional 706 results were returned. Limitations then imposed including publications within five years, and geographic limitations to the United States, decreased relevant articles to 63. After further review, only 13 additional articles were sufficiently focused for inclusion for a total of 24. Table 1 references key search terms along with Medical Subject Headings (MeSH).

Table 1 Search Strategy

Search Criteria	Key Words
Key Search Terms	Medical Subject Headings (MeSH) terms were obtained from the
Used	PubMed resulting in the following key words: Emergency Nursing
	(EN); End-of-Life (EOL); Emergency Department (ED) The following
	key words were added during the search process: Palliative Care (PC);
	Hospice (H); Nursing Students (NS); Intensive Care Units (ICU);
	Emergency Nursing + End-of-life (EN+EOL); Emergency Nursing and
	Palliative Care (EN+PC); Emergency Nursing and Death (EN+D);
	Nursing Students and Death (NS+D)
	Note: Bolded abbreviations are used in Table 2.

Years/Language	20 years/English
Age of Subjects	Adults
Search Engines	Google Chrome, Google Scholar, EndNote
Databases	CINAHL (EBSCO), PubMed, Ovid, Google Scholar, Cochrane Library
Professional	American Association of Colleges of Nursing (AACN) American
Organizations	Nurses Association (ANA)
	End-Of-Life Nursing Education Consortium (ELNEC)

Government &	Centers for Disease Control and Prevention World Health Organization
Regulatory	
Agencies	
Other	Bibliographies

Search Results

Initial searches revealed thousands of articles, requiring further limitations and combinations of search terms. Attempts to refine the search to include only U.S. based studies resulted in too few articles for review. Multiple studies are from foreign countries, including China, Spain, Canada, Brazil and others. Adding exclusions for articles that were over ten years old did not diminish the available literature significantly. Further narrowing to articles within five years resulted in 66 studies. Of those, 56 studies were examined in more detail, and 23 studies were discarded for not meeting selection criteria. Twenty-three studies were identified for quality appraisal. Overall, there were few articles identified that sufficiently met the needs for this project. Information specific to education of nursing students in end-of-life issues tends to focus on confirming the need for education, and much of the information is repetitive. Available studies contain small sample sizes and are not truly consistent with the focus of this DNP project. These findings to date support the need to examine the impact of education and training for nurses both in the acute care setting and for nursing students. Few articles were chosen as relevant to this stage of project development, further supporting the need for additional training in this topic.

The Johns Hopkins Evidence Level and Quality Guide was used to appraise those selected. This reference includes five levels of evidence, with quality descriptions for high, good, and low measures by which to evaluate publications. All studies chosen for in depth review were qualitative studies. The Hopkins guide notes that grading of qualitative studies is a subjective process. Levels III, IV and V studies considered by this author to be "high quality (A)" or "good quality (B)" served as useful resources. One "low quality (C)" study was accepted and reviewed as it contained unique information relevant to this project. One study quantitative study was included.

Table 2 - Search Results

Database	Search Terms	Results (Number &	Dates
		Type of Studies	Searched
		Located)	
CINAHL/EBSCO	EN = 13,973 EN + D = 5	7 articles accepted 3 –	9/1/2018- 1/10/2020
	EN + PC = 1 EN + EOL =	III-B	
	EN + PC = 1 EN + EOL = 41 EN + Hospice = 25 EN		
	+ NS = 186	1 – III-C 1 – IV-B 1 -	
	NS + EOL = 436 NS + PC	V-A 1 – V-B	
	= 374NS + Hospice = 234		
PubMed	EN = 22,753 EN + EOL = 1954	14 articles accepted 3 – III-A	9/1/2018- 1/10/2020
	EN + PC = 289 EN + H =	4 – III-B 1- III-C 1 -	
	147 EN + D = 1221 NS + EOL = 354		

Google Scholar	NS + Death = 46,900	2 articles accepted 2 -	11/1/2019 -
_		V-B	1/10/2020
Ovid	EN + EOL = 0 EN + D =	No relevant articles	9/1/2018 -
	24		11/10/2019
Cochrane Library	EN + EOL = 0	No relevant articles	9/1/2018 -
-			11/10/2018
Professional	EN + EOL = 0	Policy statements; no	9/1/2018 -
Organizations		relevant studies	11/10/2018
Government &	EN + EOL = 0	Policy statements; no	9/1/2018 -
Regulatory Agencies		relevant studies	11/10/2020
Bibliographies	Duplicates	No articles -	9/1/2018 -
	•	duplicates only	1/10/2020

Synthesis of the Evidence

Studies available for review were primarily conducted in ED and ICU settings and all noted that nurses lack EOL related education prior to practice and in current settings. Most nurses expressed continued discomfort with dying patients and their families, supporting the need for education along the continuum from nursing school into acute care practice.

In a 2014 study specific to critical care nurses, 19 nurses were interviewed to identify differences in their activities when patients are transitioning from aggressive, life-saving interventions to palliative and EOL care. These nurses identified the need to educate families and advocate for patients as well as the importance of mentoring new nurses, however they felt unprepared for their roles (Arbour & Wiegand, 2014). Seven hospitals in China sampled 617 nurses, all confirming that they have not received sufficient education and training to work with dying patients, including information specific to cultural needs of patients and families (Cui, Shen, Ma, & Zhao, 2011).

Seven studies were more specific to the ED. Using a 70-item questionnaire, Beckstrand et al examined the barriers to providing supportive EOL care in ED settings. This study identified that family members are uninformed and unaware which life-saving measures may or may not be appropriate. These nurses reinforced the importance of better education for dealing with families that are experiencing grief, noting the importance of understanding cultural differences. Emphasis was placed on the challenging workload for ED nurses being a barrier to providing supportive care for dying patients and their families (Beckstrand, Smith, Heaston, & Bond, 2008). Implementation of an interdisciplinary team in development of a best practice initiative entitled "Life Sustaining Management and Alternatives" was the focus of a study by Rojas. The purpose of this practice implementation was to introduce the concept of palliative care for patients presenting to the ED when family members are agreeable to not using extreme measures when quality of life is seriously impaired (Rojas et al., 2016). A qualitative study from Spain focused on preservation of dignity for patients at EOL, noting that nurses sometimes do not agree with physician orders that may include testing and futile treatment when outcomes are not likely to change. This study also notes that EDs are not suitable environments for dying, which has significant impact on maintaining patient dignity (Diaz-Cortes et al., 2017). A study by Ho details the challenges associated with implementation of an "end-of-life care pathway (ECP)." Based on the Liverpool Care Pathway (LCP) which was initially developed for use in a hospice setting with a goal of standardizing care for dying patients, the ECP focuses on comfort measures and family support. Again, ED nurses note that lack of nursing education for dealing with families is a problem. It is also noted that the nurses surveyed confirm that "family members [are] not understanding what life-saving measures really mean" (Ho, 2015). Another study tested a tool (P-Cares) to screen ED patients for early referral to palliative care. Using a

survey for ED providers, respondents admitted to referring less than 10% of their patients to palliative care. Most felt the tool would be useful and reliable for their practice. The authors noted a low response rate (39.4%), and posed that respondents may have participated due to a prior interest in the topic (Bowman et al., 2016). Two studies examined perspectives and perceptions of ED nurses. These studies concur that both families and nurses need additional education and support. Wolf notes the conflicting goals between EDs and EOL-type care, with EDs focused on saving lives at all costs (Wolf et al., 2015). ED nurses in Hogan's study believe the ED to be "not a nice place to die" (Hogan, Fotherfill-Bourbonnais, Brajtman, Phillips, & Wilson, 2016).

All studies specific to nursing students reflect that additional education and training for EOL issues are needed in undergraduate nursing school curriculum. Nursing students feel unprepared and unsupported. In a mixed methods study, Ferguson used a 12-item Likert scale survey to learn students' attitudes for taking care of dying patients, after they completed simulations and debriefings (Ferguson & Cosby, 2017). Communication was a recurring theme, with nursing students not knowing what to say. In a quantitative study, a questionnaire using open and closed questions was given to senior nursing students over three consecutive years. The students all felt they did benefit from the ongoing education in EOL issues. Although the study was from one university in England, authors suggest the information can be applicable internationally (Goode et al., 2019). A qualitative study using focus groups with both nursing and medical students focused on development of communications skills. Participants reported need for additional opportunities to discuss feelings, and identified their challenges with coping with their own emotions (Gillett, O'Neill, & Bloomfield, 2015). Using a pre- and post-test questionnaire for 471 nursing students at two large and one

small university, Bennett measured effectiveness of a one-hour teaching intervention for teaching EOL care. The authors concluded that even a very brief educational intervention was effective and therefore worthwhile (Bennett, Lovan, Hager, Canonica, & Taylor, 2018). Although limited by a small sample size of seven, a Brazilian study conducted interviews which revealed that students thought of themselves as failing when they were unable to save patients from death. The students also noted they were not prepared for dealing with death and dying. (Sampaio, Comassetto, e Faro, Dos Santos, & Monteiro, 2015). A very limited study by the Registered Nurses Association of Ontario featured an experiential study with a single student. The information gathered contributed to the group's conclusion that education for palliative care be included in undergraduate nursing curriculum (RNAO, 2011). A baccalaureate nursing program in Canada introduced a four-month EOL education program as an elective. The program was taught by professors who had taken the three-day train-the-trainer program offered by ELNEC, and incorporated those concepts into the coursework. Using a Likert scale to measure comfort level pre- and post-coursework, the students reported an increase in comfort from 4.8 to 7.5, resulting in a conclusion that the work should be included in the school curriculum (Thompson, 2005). In contrast, a study from a university in the southern United States featured 92 senior nursing students who participated in the ELNEC core course over a two-day period. The students reported that the course was too long and included too much duplication of information they had already studied, such as pain management. The authors did conclude that increased education in EOL care is needed (Glover, Garvan, Nealis, Citty, & Derrico, 2017). Another group conducted a systematic review to learn how simulation-based learning could be used to improve communication skills for nursing students and nurses already in practice. After reviewing 30 studies, they found that the information gathered was

inconsistent and incomplete. Tools used were at times not validated and objectives were not clear (Smith et al., 2018). A mixed methods study by Heise et al surveyed 33 nursing students who had the experience of a patient dying in their clinical setting. The students revealed they had little support from clinical faculty and no debriefings, leaving the students to feel unprepared and emotionally distraught (Heise & Gilpin, 2016). A descriptive study from Spain focused on the emotional responses of twelve nursing students. The authors concluded that training in EOL care should include training in managing the students' own emotions and training in how to break bad news to patients and families. They also noted that additional training in management of palliative care, withdrawal of life support and postmortem care (Edo-Gual, Tomas-Sabado, Bardallo-Porras, & Montforte-Royo, 2014). Finally, a study from a southern United States university surveyed 166 nursing students in their junior and senior years, with a goal of assessing their knowledge of advance directives. There was a statistically significant progression of knowledge as the students reached completion of their program. The authors conclude that nursing students should be exposed to advance directives throughout their curriculum (George, DeCristofaro, Murphy, & Remle, 2018).

Evidence Based Practice: Verification of Chosen Option

In conclusion, the consistent themes across all articles for hospital-based nurses and nursing students include the need for additional education and training in all aspects of death and dying. The ELNEC coursework designed for undergraduate nursing programs does have education modules specific to palliative care, but does not completely meet the needs of this project. However, those modules served as a resource and reference for the modules developed specifically for this project. The toll on nurses working with patients and families at end-of-life

is known to be extensive. This DNP project was designed to offer new perspectives and new approaches to fill a consistently identified void that has been in place for decades.

Theoretical Framework or Evidence Based Practice Model

The purpose of this Doctor of Nursing Practice (DNP) project was to develop and implement education and training programs for nurses to provide improved care and support for patients and families who are dealing with EOL decision-making.

In "The Essentials of Doctoral Education for Advanced Nursing Practice," this project addresses Essential V, "Health Care Policy for Advocacy in Health Care" and Essential VI, "Interprofessional Collaboration for Improving Patient and Population Health Outcomes" (American Association of Colleges of Nursing [AACN], 2006).

This project was a quality improvement project, applicable in any acute care setting and focused on the unique needs of nurses. A review of applicable conceptual frameworks that would support and guide this initiative led to the conclusion that the Iowa Model-Revised: Evidence-Based Practice to Promote Excellence in Health Care would be an excellent choice. Using Everett M. Roger's theory, Diffusion of Innovations, the Iowa Model was formulated to operationalize research findings in the clinical setting. Roger's 1962 social science theory seeks to explain how people change behavior, particularly when it involves new ideas, as presented in this paper (LaMorte, 2019).

This model specifically supports the development of an interdisciplinary team. A distinct advantage of this model is that it presents three decision points throughout the process which forces ongoing validation of the project throughout leading to the implementation and evaluation

of results. Specifically, these are Decision Point 1: Is This Topic a Priority?; Decision Point 2: Is There Sufficient Evidence?; and Decision Point 3: Is the Change Appropriate for Adoption? (Iowa Model Collaborative, University of Iowa Hospitals and Clinics, 2017). A copy of this model is available in Appendix B.

Implementation - Participants

This quality improvement project used a quasi-experimental design tailored to increase knowledge and capacity of senior undergraduate nursing students to work more confidently and compassionately with patients and families facing end-of-life decision-making when they first enter the workforce. The nursing students were recruited through a convenience sample, comprised of baccalaureate students in their final semester of undergraduate study, registered for a class entitled "Complex Cases." All participants were anticipating graduation in May of 2020. In accordance with Institutional Review Board requirements, although the students were required to take the assigned class, they were not required to participate in this study, and were not mandated to sign informed consent forms, complete questionnaires, or take pre-tests and post-tests.

Implementation - Setting/Budget

The setting for the implementation of this project was a large, urban university in a major southeastern city in the United States. The school of nursing has been in existence more than 50 years, offering associate degrees, bachelor and master's programs as well as Ph.D. and DNP programs. Both traditional and accelerated programs are available.

Expenses for this project included folders and photocopies for handouts which totaled \$281, and lunch for students, totaling \$350, for a total budget of \$631.

Implementation - Instruments

Participants were provided with the informed consent document, and the pre-test along with an answer sheet via email one week in advance of the scheduled class. The pre-test was based on the End-of-Life Nursing Education Consortium (ELNEC) ELKAT pre- and post-test which the author was granted permission to use. The original version of the ELKAT was modified to be shorter and to redirect the focus from hospice and palliative care content back to the acute care setting where nursing students are more likely to begin their careers. The post-test featured the same content as the pre-test. Sixteen of the test questions were designed to measure attitudes of the participants and 14 were designed to measure knowledge. A copy of the pre- and post-test is attached in Appendix C.

A questionnaire was developed by this student principle investigator to collect basic demographic information to include gender, age ranges, area of interest, and to identify any prior education or training in end-of-life issues. The questionnaire also contained four questions, using a Likert scale for self-rating. The first two questions were to identify comfort levels in working with patients and families facing end-of-life decision-making and any experience with seriously ill patients during their clinical experiences. The last two questions were to identify awareness of advance directives and familiarity with hospice and palliative care. A copy of the questionnaire is attached in Appendix D.

Finally, the Participant Evaluation - Instructor-Led Training, was developed (Appendix E). This post-course evaluation was designed to better understand the participants' perception of the value of the classes. This form was completely anonymous, and contained 12 Likert scale questions and four opportunities for open-ended contributions. Likert-rated questions evaluated the instructor, course content, learning effectiveness, potential job impact, supporting materials, and return on investment meaning was the training worthwhile. The open-ended questions asked specifically for feedback regarding what was most useful, least useful, how training could be improved to be more relevant to their work, and finally providing an area to include any additional comments or suggestions.

Implementation - Intervention

The project implementation consisted of a classroom presentation focused on six core issues designed to improve nursing students' level of knowledge, awareness of challenges and skills necessary to fulfill the need to serve as patient advocates as described by the American Nurses' Association (ANA) position statement, which is referenced earlier.

The intervention consisted of six educational modules developed by this student principle investigator. This author's credentials include both bachelor's and master's degrees in nursing, over 20 years' experience in EDs in both bedside and leadership roles, and over 12 years in public health. Additionally, the author is a Certified Professional Coach, with over 5 years' experience working with clients with health-related concerns. The author has extensive experience in development and presentation of educational materials for nursing and scientific audiences. The author is has earned certifications for coursework in distance education and

learning through the Region IV Public Health District, and has been certified as a Yellow Belt in Lean Six Sigma, which addresses process improvement.

The modules developed were new materials designed specifically for this DNP project. They are listed here in order of presentation, along with brief explanatory statements for each.

- I. Overview & You this module is intended to set the framework for nurses' roles in death and dying, while engaging students in examining their own thoughts and feelings about these issues.
- II. Cultures & Sensitivities this segment is brief, and supported by a handout that details belief systems held by religious and cultural norms. Nurses must be aware of the influences that contribute to decisions in order to better support families in the ways that are most needed.
- III. Families & Feelings this topic addresses the often-difficult family dynamics that present during death and dying decisions.
- IV. Communications & Ethics literature for this topic frequently references that nurses struggle with how to effectively communicate with patients and families that are facing death and decision-making.
- V. Policies & Practice this segment addresses that specific policies to address dying patients and family dynamics are rarely in place in hospital settings, and encourages nurses to advocate for implementing such policies when they are in practice.
- VI. Final Words this module serves as a summary and provides takeaway information for students to assist them with coming to terms with their thoughts and feelings, to better prepare them to assist patients and families with end-of-life decision-making.

Case studies were included within these modules intended to facilitate understanding of practical application of core concepts. It is important to note that these educational modules incorporate the storytelling approach known to be well received by adult learners today. The popularity of TED-style talks has fueled interest in this presentation style, which has been shown to be effective in featuring important topics presented in brief segments. Participants were compensated with lunch, available throughout the presentation. Total length of time for participation was 2.5 hours.

Data Collection

Participants were consented by the student investigator prior to the beginning of the class. Following presentation of educational modules, participants were asked to complete the posttest, the questionnaire, and the Participant Evaluation - Instructor-Led Training.

Data were collected by and stored with the student principle investigator. Consent forms were in a paper format and kept separate from other documents. The data may be used for further study and potential publication. All data collection documents were developed by the student principle investigator.

The participants included 46 females, 7 males and one unspecified. Fifty-seven percent stated they had no prior experience or training for working with patients and families facing EOL issues and decisions. Thirty-nine were ages 24 and under, and nine were between 25 and 30 years old. Fifty-six percent (n=30) noted they had received no prior training in EOL issues, while 44% (n=24) stated they had received some training. Twenty-nine of the students indicated they were intending to work in EDs and ICUs or the pediatric equivalents.

Four questions were posed with the opportunity to self-rate responses on Likert scales. These questions were designed to determine participants' comfort levels with talking with patients and families about end-of-life issues, levels of experience working with seriously ill patients, familiarity with advance directives, and knowledge of hospice and palliative care. This questionnaire is attached as Appendix D. The figures below detail the responses.

Components of Analysis

Names were removed from all data collection instruments. Pre- and post-test responses and participant questionnaires were batched, assigned a study number and entered into an Excel spreadsheet. Demographic information from the questionnaire was also entered into an Excel spreadsheet. Data was then transferred into IBM SPSS version 25 for analysis.

Changes in attitudes and knowledge were analyzed to determine the effectiveness, if any, of the class modules. It is important to note that the reliability of these tools is unknown to date. A lack of evidence about use of these tools in the population of interest warrants a reliability analysis upon data completion.

Statistical Tests

The null hypothesis was that participants would not increase knowledge, change attitudes, or increase comfort with or confidence in their ability to support patients and families facing end-of-life decision-making. The alternative hypothesis was that participants will increase knowledge, change attitudes or increase comfort with or confidence in their ability to support patients and families facing end-of-life decision-making. A paired samples t-test was used to analyze pre-and post-tests comparisons for the group of 54 participants. The level of significance or *p* value used was 0.05.

Age Range

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18-24	38	70.4	70.4	70.4
	25-30	10	18.5	18.5	88.9
	31-35	4	7.4	7.4	96.3
	36-40	1	1.9	1.9	98.1
	41-45	1	1.9	1.9	100.0
	Total	54	100.0	100.0	

Figure 1. Age Range of Participants

Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Unspecified	1	1.9	1.9	1.9
	Male	7	13.0	13.0	14.8
	Female	46	85.2	85.2	100.0
	Total	54	100.0	100.0	

Figure 2. Gender of Participants

Prior Training

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	30	55.6	55.6	55.6
	Yes	24	44.4	44.4	100.0
	Total	54	100.0	100.0	

Figure 3. Prior Training of Participants

Statistics

		Comfort discussing EOL with patients	Experience with seriously ill	Familiarity with Advance Directives	Knowledge of hospice or palliative care
N	Valid	54	54	54	54
	Missing	0	0	0	0
Mean		2.85	2.69	3.19	3.65
Std. D	eviation	.920	.948	1.100	.649

Figure 4. Questionnaire Statistics

Comfort discussing EOL with patients

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 - Not at all	3	5.6	5.6	5.6
	2	16	29.6	29.6	35.2
	3	23	42.6	42.6	77.8
	4	10	18.5	18.5	96.3
	5 - Very comfortable	2	3.7	3.7	100.0
	Total	54	100.0	100.0	

Figure 5. Question 1 - Comfort discussing with patients

Experience with seriously ill

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 - Not at all	6	11.1	11.1	11.1
	2	15	27.8	27.8	38.9
	3	25	46.3	46.3	85.2
	4	6	11.1	11.1	96.3
	5 - All the time	2	3.7	3.7	100.0
	Total	54	100.0	100.0	

Figure 6. Question 2 - Experience with severely ill patients

Familiarity with Advance Directives

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 - Not at all	7	13.0	13.0	13.0
	2	6	11.1	11.1	24.1
	3 - A little bit	12	22.2	22.2	46.3
	4	28	51.9	51.9	98.1
	5 - Expert	1	1.9	1.9	100.0
	Total	54	100.0	100.0	

Figure 7. Question 3 - Familiarity with Advance Directives

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 - Not at all	1	1.9	1.9	1.9
	3 - A little bit	18	33.3	33.3	35.2
	4	33	61.1	61.1	96.3
	5 - Expert	2	3.7	3.7	100.0
	Total	54	100.0	100.0	

Knowledge of hospice or palliative care

Figure 8. Question 4 - Knowledge about hospice or palliative care

Results

Fifty-six students were registered for the class, and 54 students signed informed consents. All 56 students were eligible for inclusion, and none of them were excluded, with participation governed by their signing the informed consent.

Participants were asked to bring informed consent forms, however approximately 20 students did not do so. It was necessary to ensure consents were executed by those who wanted to participate prior to the presentation of the education modules. As referenced, 54 students signed consent forms. Additional delays at the start of class were due to approximately 15-20 student participants who did not complete their pre-test prior to class. Time was set aside for those students to do so.

The participants included 46 females, 7 males and one unspecified. Fifty-seven percent stated they had no prior experience or training for working with patients and families facing EOL issues and decisions. Thirty-nine were ages 24 and under, and nine were between 25 and 30 years old. Fifty-six percent (n=30) noted they had received no prior training in EOL

issues, while 44% (n=24) stated they had received some training. Twenty-nine of the students indicated they were intending to work in EDs and ICUs or the pediatric equivalents.

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	PreTest Attitude	64.93	54	21.044	2.864
	PostTest Attitude	75.35	54	15.038	2.046
Pair 2	PreTest Knowledge	71.83	54	22.045	3.000
	PostTest Knowledge	81.75	54	15.678	2.133

Figure 9. Paired Samples Statistics for Pre-Test and Post-Test Results

Paired Samples Correlations

		N	Correlation	Sig.
Pair 1	PreTest Attitude & PostTest Attitude	54	.458	.000
Pair 2	PreTest Knowledge & PostTest Knowledge	54	.556	.000

Figure 10. Paired Samples Correlations for Pre-Test and Post-Test Results

Paired Samples Test

Paired Differences									
		95% Confidence Interval of the Std. Error Difference							
		Mean	Std. Deviation	Mean	Lower	Upper	t	df	Sig. (2-tailed)
Pair 1	PreTest Attitude - PostTest Attitude	-10.417	19.464	2.649	-15.729	-5.104	-3.933	53	.000
Pair 2	PreTest Knowledge - PostTest Knowledge	-9.921	18.637	2.536	-15.008	-4.834	-3.912	53	.000

Figure 11. Paired Samples Test for Pre-Test and Post-Test Results

A paired samples t-test was conducted to evaluate the impact of the intervention on students' scores on the Preparing Nursing Students for Roles in End-of-Life Decision Making pre- and post-tests. The tests were identical and questions were divided into categories of "attitude" and "knowledge" in order to identify what may have changed after the intervention.

There was a statistically significant increase in attitude scores from the pre-test (M = 64.93, SD = 21.04) to post-test (M = 75.35, SD 15.09), t(53) = -3.9, p < .05 (two tailed). The mean increase in attitude scores was 10.42 with 95% confidence interval ranging from -15.73 to -5.10. The eta squared statistic (.22) indicated a moderate effect size.

There was a statistically significant increase in knowledge score from the pre-test (M = 71.83, SD = 22.04) to post-test (M = 81.75, SD = 15.68), t(53) = -3.9, p < .05 (two tailed). The mean increase in knowledge scores was 9.92 with 95% confidence interval ranging from - 15.00 to -4.83. The eta squared statistic (.22) indicated a moderate effect size.

As seen in figure 11, the results show a *p* value of .000. The null hypothesis was rejected.

Participant Evaluation

At the end of the intervention, participants were asked to complete a course evaluation, which was submitted anonymously and kept separate from other instruments that were turned in. This form included 10 components to be evaluated on a Likert scale and two to measure their impressions of the impact of the training on their future area of practice. There were three openended questions and one opportunity for further comment. Forty-eight of the 54 participants completed the evaluation.

Average scores are shown in parentheses. Three questions related to the instructor, including clearly identified course objectives (4.0), knowledge of the subject (4.0), and effectiveness to keep participants actively engaged (3.5). Two questions related to course content, including stated objectives met (4.1) and appropriateness of course content (3.9). One question asked if new knowledge and skills were learned (3.8). Two questions were to evaluate potential impact of the training on their future jobs: the ability to apply knowledge (4.1), and would they expect the training to improve their job performance (4.0). Usefulness of support materials was slightly above average (3.6), as was return on investment intending to identify if they perceived the training to be worthwhile to their career development (3.7). Their impressions of how much of their work time would require this knowledge, averaging 46%, and whether or not the knowledge was critical to their success was widely distributed, averaging 76%.

Open ended questions received responses from 39 of the respondents. For the "most useful" component, 20 respondents noted they drew the most benefit from the communications components of the training. In the "least useful" area, eight respondents felt that the case studies should have been more interactive. Three respondents did not like the storytelling approach and would have preferred a traditional lecture.

The information gathered from these evaluations is very beneficial, and contributed greatly to the understanding of the impact of the study. A copy of the participant evaluation and the analysis is attached as Appendix E.

Limitations

Multiple limitations were revealed in this study. As referenced earlier, there were unanticipated time constraints given the time allotted for the class that prevented interaction with participants. This was especially impactful with case studies that were intended to stimulate thought and identify practical applications of educational components. Interactive time was eliminated in order to complete presentation of information that would ultimately influence responses to the post-test questions.

Another important limitation is that the instruments used were newly developed and not previously tested for reliability and validity.

Discussion and Implications for Practice

The clinical question posed is: Will education and training in end-of-life issues improve nursing students' knowledge and confidence so that they will be better prepared to provide care for patients and families facing end-of-life decision-making when they enter the workforce? The clinical question was answered in this study. Participants demonstrated an increase in knowledge and a change in attitudes after the educational intervention. The benefit to these participants was increased knowledge coupled with increased confidence in their ability to work with patients and families.

It is the goal of this study to provide and evaluate educational materials and trainings that may potentially contribute to the increase of knowledge for nursing students and for nurses already in their practice settings. By providing a broader exposure to challenges facing patients and their families facing end-of-life issues earlier in and throughout the nursing curriculum,

nursing students may enter the clinical setting with increased confidence and improved comfort levels in their own abilities which may in turn lead to better overall patient care.

The implications of the participant evaluations is important to the improvement of this work and its potential impact on the body of nursing knowledge.

Timeline

This DNP project was initiated in September of 2018. Institutional Review Board approval to proceed was received January 7, 2020, and the project was implemented January 24, 2020. Completion of the project inclusive of submission to Georgia State University repository is anticipated in April 2020. A detailed timeline is attached as Appendix F.

Summary

As revealed in the literature review, there is a long-identified need for both nursing students and currently practicing nurses to have access to more education in EOL issues. This would facilitate nurses providing better support for patients and families dealing with such issues and their corresponding decision-making needs. One challenge for schools of nursing is the already extensive curriculum, allowing little time to include more material. The ability to compress EOL content into smaller components may facilitate inclusion of this important education. Another important component is that nursing students enter the profession with an intent to provide care and healing to patients versus focusing on death and dying (Colley, 2016).

In conclusion, this author intends to refine and expand the educational components to better meet the needs of academic settings. Further expansion of the materials may facilitate adoption and use in acute care settings to better serve the growing populations where people are

living longer, and suffering from multiple chronic diseases as previously noted. Exploration of online or distance learning modules that would invite interaction may enable implementation and adoption of concepts on a larger scale. Self-paced, modular learning opportunities may better suit time constraints for nurses in acute care settings where more traditional learning experiences require hospitals to pay overtime rates for continuing education. Such modules would be designed to be accessed in brief time blocks. By increasing access to larger groups, there is potential to increase the knowledge base for both nurses and other members of interdisciplinary teams.

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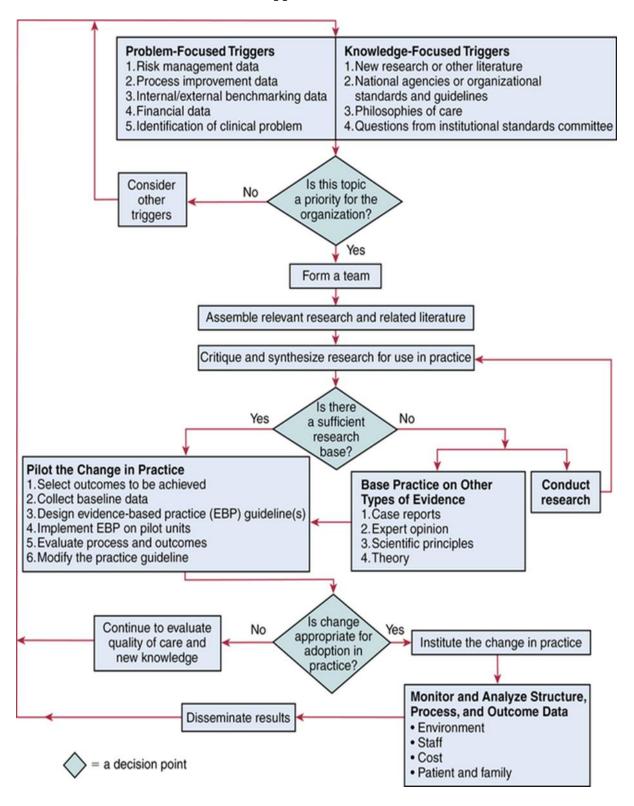
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Appendices

Appendix A – Iowa Model



Appendix B – Pre-Post Test

ED Nurses Role in End-of-Life Decision-Making 30 Question Version – 11/9/2019

Adapted from
End-of-Life Nursing Education Consortium (ELNEC)
Pre/Post Assessment
50-item Version
(9/29/06)

Directions: Each multiple-choice item has one correct answer. (**FOR REVIEW PURPOSES**, **CORRECT ANSWERS ARE NOTED IN BOLD TYPE.**)

- 1. The nurse is rightfully concerned with the suffering that patients experience at the end of life. Which of the following statements is most accurate about suffering?
 - a. Suffering is a physical concept primarily concerned with pain and its prompt and continuous relief.
 - b. Suffering involves the whole person and transcends the bio-psycho-social-spiritual dimension.
 - c. Suffering is relatively easily recognized and interpreted by loved ones who know the patient well.
 - d. Suffering can be diminished for the patient if the staff continues to focus on curing the disease.
- 2. The nurse is talking with the parents of a 2-year-old boy diagnosed with leukemia about pain management. Which of the following statements by the nurse indicates understanding about pain management in children?
 - a. "He needs to be assessed carefully so that he gets enough pain medication."
 - b. "He may require less analgesia since he has limited memory of the pain."
 - c. "He is at risk for addiction due to his early exposure to pain medications."
 - d. "He doesn't have full pain sensitivity due to an underdeveloped nervous system."
- 3. The nurse has attended a staff development conference on end-of-life pain management for clients who are substance abusers. Which of the following statements by the nurse indicates a correct understanding of pain management for these clients with a history of substance abuse?
 - a. "They should not be given opioids for pain because of the high addiction risk."
 - b. "They will need smaller doses of analgesia to prevent cumulative overdose."
 - c. "They may require higher doses of opioids to relieve their pain."
 - d. "They need to withdraw from the substance prior to receiving analgesia."

- 4. 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.
- 5. Ethical issues abound in palliative care. Which of the following statements most accurately describes the nurse's role in role in addressing ethical issues in palliative care?
 - a. Consider patient decisions according to the nurse's own values and beliefs.
 - b. Help the patient/family understand all options and their consequences.
 - c. Refer patient care ethical issues to ethics experts within the health care system.
 - d. Determine when patients are no longer competent to make their own decisions.
- 6. 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 selfdetermination.
 - 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.
- 7. The nurse is orienting a new staff member to the unit. Which of the following comments by the nurse correctly reflects a principle of palliative care?
 - a. "We're busy because most people prefer to die in a hospital rather than at home where they would be a burden."
 - b. "Death and dying are not discussed much here in order to maintain hope for patients and families."
 - c. "Because our patients often are uncomfortable, they need physical care more than psychological or spiritual care."

- d. "Patients are eligible for palliative care even though they are also receiving curative treatment."
- 8. Mr. F has advanced prostate cancer with bone metastasis. He has been cared for at home by his daughter. He is now unresponsive and was transported to the ED. The daughter is concerned about her father's pain. Which of the following statements by the nurse helps the daughter understand her father's pain status?
 - a. "If he is not moaning, he's probably not experiencing pain."
 - b. "I'll have to guess when he is in pain since he can't tell me."
 - c. "Now that he's unable to communicate, we can stop his pain medication."
 - d. "Since he was in pain when he was conscious, we will assume he's still in pain."
- 9. The nurse's 68-year-old patient is in the last hours of life after a lengthy illness. The patient has been receiving opioids for pain management. In assessing the patient as death approaches, the nurse knows that the opioid dose may need to be:
 - a. increased or decreased to maintain pain control
 - b. given only if requested by the patient
 - c. monitored as neuropathic pain increases as death approaches
 - d. discontinued due to diminished consciousness and altered mental state
- 10. An 84-year-old widow with diabetes and end-stage renal disease has been sent to the ED 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 patient 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.
- 11. The nurse is caring for a dying patient whose family disagrees with the patient's decisions about end-of-life care. Which of the following actions should the nurse take **first**?
 - a. Present the case to the agency's ethics committee for a resolution.
 - b. Ask the healthcare team to make decisions regarding end-of-life care.
 - c. Initiate a referral to social services and request a home visit.
 - d. Encourage the patient and family to discuss the conflict.

- 12. Ethical issues abound in end-of-life care. Which of the following statements most accurately describes the nurse's role in addressing ethical issues in palliative care?
 - a. Consider patient decisions according to the nurse's own values and beliefs.
 - b. Help the patient/family understand all options and their consequences.
 - c. Refer patient care ethical issues to ethics experts within the health care system.
 - d. Determine when patients are no longer competent to make their own decisions.
- 13. The nurse can contribute to ethical practice in end-of-life care by doing all of the following **except:**
 - a. Working closely with physicians to meet the needs of patients and their families.
 - b. Ensuring that patients/families are aware of treatment options and consequences of those options.
 - c. Participate in creating systems of care that specifically meet end-of-life needs for patients and families.
 - d. Using personal values and morals to determine best courses of actions for patients and families.
- 14. 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 selfdetermination.
 - 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.
- 15. The nurse is caring for a patient from Cambodia who has terminal lung cancer. The patient is reluctant to discuss the illness. Which of the following actions should the nurse take?
 - a. Remind the client that it is important to talk about the illness.
 - b. Allow the client to remain in denial by not discussing the cancer.
 - c. Ask the family about their beliefs regarding full disclosure.
 - d. Refer the client to a mental health professional for evaluation.

- 16. The nurse is orienting to the concept of palliative care, and is identifying necessary learning activities. In order to provide culturally sensitive care to those at the end of life, one of the nurse's earliest orientation tasks should be to:
 - a. evaluate the cultural beliefs of co-workers
 - b. identify one's own cultural background and values
 - c. learn to predict how various races deal with end-of-life issues
 - d. become informed about state laws concerning end-of-life care
- 17. In end-of-life 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
- 18. 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."
- 19. Nurses are concerned with religion and spirituality of patients in end-of-life care. Which of the following questions is the LEAST appropriate during a spiritual assessment?
 - a. "What church do vou 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?"
- 20. The nurse is being oriented to the concept of palliative care. Which of the following factors should the nurse identify as a crucial requirement to quality end-of-life care?
 - a. maintaining cost-effective analgesic regimens
 - b. restricting care to symptom management algorithms
 - c. communicating effectively with patients and families
 - d. employing volunteers to ensure patients are not alone
- 21. 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."
- 22. The nurse is facilitating a staff discussion about myths and realities of communication in end-of-life care. Which of the following 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.
- 23. Patients and families facing life-threatening illness expect that communication between themselves and a health care professional will include all of the following **except**:
 - a. the professional will be honest/truthful in all communications
 - b. the professional will discuss the patient's care with the health care team
 - c. the professional will decide what patient issues need to be addressed first
 - d. the professional will be available to listen to a patient's concerns
- 24. The new nurse is caring for a number of patients and family members who are facing loss or death. In speaking with them about grief, the nurse correctly conveys that grief:
 - a. is an orderly process with predictable stages of work to be done
 - b. begins before a loss or death, as people consider a pending loss
 - c. lasts a year or less, at which time survivors should be able to move on
 - d. includes personal feelings that are universal and understood by everyone
- 25. The nurse is talking with colleagues about the emotional challenges of working with dying patients and their families. The nurse identifies all of the following as appropriate responses to staff grief **except**:
 - a. helping plan a unit ceremony to honor all patients who have died recently.
 - b. seeking the support of a trusted colleague who has had similar experiences.
 - c. recognizing that personal grief should not be expressed by the nurse.
 - d. consulting with a pastoral care worker or spiritual advisor for assistance.
- 26. The nurse is orienting new staff to the unit. A new employee asks what "grief" is exactly. The nurse correctly defines grief as:
 - a. the emotional response to a loss
 - b. the outward, social expression of a loss
 - c. the depression felt after a loss
 - d. the loss of a possession or loved one

- 27. The nurse is caring for a man who is imminently dying. 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!"
- 28. The nurse has been caring for a Latino patient with advanced obstructive lung disease. The patient's family has been at the bedside daily. In assessing cultural beliefs and practices related to death and dying for the patient and family, it is necessary that the nurse take into consideration all of the following factors **except**:
 - a. how long the client has been in this country
 - b. the age of the client and family members
 - c. aspects of spirituality, traditions, rites and rituals
 - d. specific beliefs about pain, suffering and death
- 29. The nurse may experience feelings of anxiety and grief when caring for patients and families facing death and the dying process. In order for the nurse to be able to continue to provide quality care, it is important to obtain personal support by:
 - a. seeking out the assistance of team members whenever necessary
 - b. periodic transfer to another unit to avoid caring for dying patients
 - c. maintaining an emotional distance from patients and families
 - d. scheduling counseling at regular intervals to deal with loss issues
- 30. In order to improve the quality of end-of-life care in the clinical environment, the nurse should do all of the following **except**:
 - a. strive to make transfers of patients less frequent and less disruptive
 - b. create standardized protocols and measures for this population
 - c. ensure continuity of care across time and provider settings
 - d. delay referral to hospice to maintain the patient's primary care

End of Assessment. Thank you for participating in this DNP quality improvement project!

Appendix C – Questionnaire for Study Participants

Name				Study #							
Age range: 18-24		31-3536	-4041-45	46-50	51-55	56-					
Gender: Male	Female	Prefer not to	disclose								
When do you ex	pect to gradu	ate?									
What area of pra	ctice are you	most interested i	n?								
Any prior educat	tion or trainin	ng in end-of-life is	ssues?								
Can you be spec	ific?										
On a scale of 1 tend-of-life decis		mfortable are yo ? Circle one:	u with talking v	with patien	ts and fam	ilies about					
Not comfortable	at all	Very comfortable									
1	2	3	4	5							
On a scale of 1 t	,	ou had experience	e of working w	th seriousl	y ill patien	ts in your					
Not at all		Sometimes	Often	All the	All the time						
1	2	3	4	5	5						
Are you familia	r with Adva	nced Directives?	•								
Not at all		A little bit	Sure	I'm an	I'm an expert						
1	2	3	4	5	5						
Do you have an	y knowledge	e about hospice o	r palliative car	e?							
Not at all		A little bit	Sure	I'm an	I'm an expert						
1	2	3	4	5							

Appendix D – Participant Evaluation

Participant Evaluation - Instructor-Led Training

Course Title: Preparing Nursing Students for Roles in End-of-Life Decision-Making

Date: January 24, 2020 Instructor: Susan K. Laird, MSN, RN - DNP student

Please help us improve our training programs by responding to this brief evaluation.	
Instructor	
1) The instructor clearly identified the course objectives.	
Strongly Disagree 1 \square Disagree 2 \square Neutral 3 \square Agree 4 \square Strongly Agree 5 \square	N/A □
2) The instructor was knowledgeable about the subject.	
Strongly Disagree 1 □ Disagree 2 □ Neutral 3 □ Agree 4 □ Strongly Agree 5 □	N/A □
3) The instructor's energy and enthusiasm kept the participants actively engaged.	
	N/A □
Course Content	
4) The objectives of this course, as stated, were met.	NT/A ==
Strongly Disagree 1 \square Disagree 2 \square Neutral 3 \square Agree 4 \square Strongly Agree 5 \square	N/A □
5) The content of this course was appropriate to my needs.	
, , , , , , , , , , , , , , , , , , , ,	N/A □
Learning Effectiveness	
6) I learned new knowledge and skills from this training.	
	N/A □
Tab Tours and	
Job Impact 7) I will be able to apply the brought as and shills begind in this close to may ich	
7) I will be able to apply the knowledge and skills learned in this class to my job. Strongly Disagree 1 Disagree 2 Neutral 3 Agree 4 Strongly Agree 5	N/A □
Strongly Disagree 1 Disagree 2 Neutral 3 Agree 4 Strongly Agree 3	14/71
8) How much of your total work time requires the knowledge and skills learned in this tra	ining?
$\square 0\%$ $\square 10\%$ $\square 20\%$ $\square 30\%$ $\square 40\%$ $\square 50\%$ $\square 60\%$ $\square 70\%$ $\square 80\%$	
$\square 90\% \qquad \square 100\%$	
9) How critical are the knowledge and skills you learned in this training to your success o	n tha
•	11 the
□50% □60% □70% □80% □90% □100%	_ 1070
10) This training will improve my job performance.	
Strongly Disagree 1 \square Disagree 2 \square Neutral 3 \square Agree 4 \square Strongly Agree 5 \square	N/A □

Support Tools
13) The participant materials (manual, presentation handouts, job aids, etc.) will be useful on the job.
Strongly Disagree 1 \square Disagree 2 \square Neutral 3 \square Agree 4 \square Strongly Agree 5 \square N/A \square
Return on Investment
15) This training was a worthwhile investment in my career development.
Strongly Disagree 1 \square Disagree 2 \square Neutral 3 \square Agree 4 \square Strongly Agree 5 \square N/A \square
What about this class was most useful to you?
What about this class was least useful to you?
How can we improve the training to make it more relevant to your job?
Please add any additional comments/suggestions that you would like to share.

${\bf Appendix}\; {\bf E} - {\bf Project}\; {\bf Timeline}$

Project Timeline

TASK	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr
Project proposal	Х														
IRB submitted / approved						Х				Х	Х	х			
Recruitment												Х			
Education modules developed for online and in-person trainings				Х	Х	х	х			Х	Х				
Participants signed up												Х			
Pre-testing												Х			
Trainings begin / continue												Х			
Post-test and analysis of outcomes												х			
Preliminary results shared with clinical site													Х	Х	
Project final														Х	
Final results shared with clinical site														Х	Х
Defense/Completion														Х	Х