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Attitudes Towards End-of-life Care: An Educational Intervention in Long-term Care

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Attitudes Towards End-of-life Care: An Educational Intervention in Long-term Care

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Abstract

Background: Nursing assistants provide the most consistent care to dying patients in long-term care facilities; however, they receive little training to do so. Nursing assistants are significant, yet under recognized members of the health care team. **Purpose:** To provide a brief educational intervention to nursing assistants in long-term care facilities with a goal of increasing comfort and improving attitudes towards caring for palliative care patients. **Review of Evidence:** Symptom management, stress related to the role as a provider, goals of care, time limitations, and fear, are the most significant challenges nursing assistants experience. Few studies have examined education, age, and years of experience as contributing factors that may influence a nursing assistant's attitudes towards end-of-life care. **Project Design:** A pre- and post-test design was used to evaluate the impact of an educational session on the attitudes of nursing assistants towards end-of-life care. **Methods:** A paper survey and brief educational session was provided to a convenience sample of nursing assistants in four long-term care facilities in the Southeastern United States ($N=42$). **Results:** Nursing assistants had more positive attitudes after the educational intervention ($p < .001$, $d = 0.5678$). There was a potential relationship between age and attitudes ($p = .105$, $\eta^2 = .124$), however, years of experience was not a statistically significant variable ($p = .642$, $\eta^2 = .050$). **Conclusion:** Additional education is warranted to improve attitudes and knowledge for nursing assistants to influence overall quality of care provided to residents at end-of-life.

Attitudes Towards End-of-life Care: An Educational Intervention in Long-term Care

Introduction

End-of-life care can be stressful and arduous which can lead to distress and possible burn-out of health care professionals (Wang et al., 2018). More than 600,000 nursing assistants provide personal care, assistance with daily activities, and support for 1.4 million nursing home residents nationwide (PHI National, 2019). Nursing assistants or healthcare aides provide the majority of direct care and spend the most time with residents in long-term care facilities; however, they receive little training to do their specific jobs with regard to end-of-life care (Brazil & Vohra, 2005). Over four million Americans are admitted to or reside in nursing homes and skilled nursing facilities each year. According to the U.S. Census Bureau, older adults are the fastest growing sector of the population (Roberts, Ogunwole, Blakeslee, & Rabe, 2018). The delivery of quality end-of-life care in nursing facilities is a challenging task. With over 20% of the population dying in a long-term care setting, this issue is very prevalent to millions of Americans (Anstey et al., 2016).

Nursing assistants are vital to palliative care and are often the most involved and consistent care providers to dying patients (Brazil & Vohra, 2005; Wholihan & Anderson, 2018). While long-term care facilities are providing end-of-life care to an increasing number of dying residents, staff are providing care to residents with little training or guidance (Brazil & Vohra, 2005). The literature shows staff in long-term care facilities are negatively affected by patient death. Lack of training and education for nursing assistants and aids on end-of-life care can greatly impact health care outcomes and job satisfaction. Continued education on end-of-life care can be impactful in increasing comfort and establishing advantageous end-of-life care (Wang et al., 2018).

Problem Statement

Many patients and families suffer unnecessarily at the end of life because dying is not recognized, providers do not communicate about prognosis, and symptom management is not adequate (Walling & Sydney, 2014). Nursing assistants spend more time than any other nursing staff assisting residents and families, and their interactions with residents enable them to observe changes in resident condition and report these changes to licensed nursing staff (PHI National, 2019). End-of-life care is a sensitive subject that many do not want to discuss. Nursing assistants do not feel comfortable caring for this patient population, and they do not have formal training on how to care for patients with end-of-life care needs (Brazil & Vohra, 2005 & Wang et al., 2018). Stress and lack of preparation to care for difficult patients can lead to burn-out and job dissatisfaction (Wang et al., 2018). The attitudes of nursing assistants with regard to end-of-life care is an area of research that has not been extensively explored.

Purpose

The purpose of this scholarly project was to provide a brief educational intervention for nursing assistants in long-term care facilities on end-of-life care with a goal of increasing comfort and improving attitudes towards caring for palliative care patients. Previously, nursing assistants have not been the singular focus of prior and current research. Nursing assistants are certified health care professionals who assist with carrying out activities of daily living and meeting the health care needs of those living in long-term care facilities. The training they receive does not address end-of-life care needs. There is a need to explore the attitudes of nursing assistants with regard to care they are expected to provide to dying patients.

Research Questions

While considering the goal of assessing attitudes on end-of-life care, the scholarly project was designed to answer three fundamental questions:

1. What are nursing assistant's baseline attitudes towards caring for patients at end-of-life?
2. What effect does an educational intervention have on the attitudes of nursing assistants about end-of-life-care?
3. Does age or years of experience influence attitudes towards end-of-life care?

Hypotheses

In congruence with the research questions stated above, the investigators hypothesize that nursing assistants will have negative baseline attitudes towards end-of-life care. Additionally, an educational session on end-of-life care will be attributed to more positive attitudes towards caring for this patient population. With regard to age and years of experience, increased years of nursing assistant experience and increased age will have more positive attitudes towards caring for palliative patients compared to less experienced younger nursing assistants.

Review of Evidence

Importance of End-of-life Care

The prevention and relief of physical, emotional, social, or spiritual suffering associated with any chronic or life-threatening illness is essential to the right of health and is vital to health care. Alleviation of pain and suffering is an ethical duty of all health professionals (The Lancet, 2015). End-of-life care helps to relieve suffering by assessing physical, psychosocial, and spiritual needs of patients (Rome, Luminais, Bourgeois, & Blais, 2011). The goal of end-of-life care is to improve quality of life. End-of-life and palliative care is based on patient needs, and not the diagnosis. Effective end-of-life care enables people with advanced, progressive,

incurable diseases to remain comfortable. By addressing distressing symptoms (e.g., dyspnea, pain, fatigue, and anxiety), they can be better controlled and individuals will be able to die with dignity, with their wishes valued, and families will be more likely to report contentment with their loved ones' care (Anstey et al., 2016).

Attitudes

Although there is limited literature on nursing assistants' attitudes towards end-of-life care, there is ample literature that revealed nurses' attitudes towards end-of-life care are negative. Nurses have more education and training than nursing assistants and the literature shows even they are burdened by the lack of education they receive on end-of-life care. Because there is such a limited amount of literature on nursing assistants, the attitudes of nurses were also included in this review of evidence.

Nurses. Due to their own perceptions of death, nurses reported difficulties caring for patients with end-of-life care needs. (Ying-Chun & Hsien-Hsien, 2017; Karlsson et al., 2015). If the patient suffers, the nurse also suffers. Most nurses lack knowledge and skills to provide effective end-of-life care; this is related to their struggle with negative personal thoughts and anxiety concerning death and dying (Detering, Hancock, Reade, & Silvester, 2010). Nurses reported experiencing moral distress when they identified patients with palliative care needs that were not being met (Howes, 2015). Fear is a commonly expressed reaction of those caring for the dying in a nursing home setting. A study revealed that staff felt unable to cope with the extra work demands that a patient's death placed on staff. Furthermore, nursing staff disclosed that they did not like to work night shifts because they were afraid of death occurring at night, and being alone with a dying patient (Wowchuk, McClement, & Bond, 2007).

Nurses need support while caring for end-of-life patients due to the taxing emotional distress the nurse experiences. Ethical dilemmas and lack of support for nursing staff while caring for end-of-life patients can lead to job dissatisfaction and overall nurse burn-out (Pavlish et al., 2015; Ying-Chun & Hsien-Hsien, 2017).

Nursing Assistants. While there is limited research available about the attitudes of nursing assistants, one particular study showed that nursing assistants have major concerns surrounding end-of-life care. Symptom management, stress related to their role as a caregiver, discrepancies between goals of care, time limitations, attachment to residents, and self-care needs are the most significant challenges nursing assistants expressed to providing care to dying residents (Nochomovitz et. al., 2010).

Communication

There has been an increase in awareness in the literature of the inadequacy of end-of-life care. Providers and nurses delay end-of-life conversations with patients and families. Ultimately, this results in patients being cared for in a way the patient would not have indicated (Detering, Hancock, Reade, & Silvester, 2010). Research shows, patients welcome advance care planning and expect health professionals to initiate discussions about end-of-life care. However, members of the health care team are not comfortable initiating these conversations (Detering, Hancock, Reade, & Silvester, 2010).

Nurses. In general, nurses expressed how difficult it is to communicate a terminal prognosis to patients and families (Boyd et al., 2011; Reinke et al., 2011). Despite the fact that early advanced care planning discussions are associated with better patient and caregiver outcomes, studies suggest that these discussions are often delayed (Walling & Sydney, 2014). Healthcare providers delay conversations about poor prognoses, leaving nurses with feelings of

ethical distress with regard to patient outcomes and goals of care (Pavlish et al., 2015). Nurses were found to be unsure of how to properly communicate with patients and family members. They experienced anxiety related to initiating these conversations, which is known to be a contributing factor to nurses becoming burnt-out quickly (Boyd et al., 2011).

Nursing Assistants. Communication is also a barrier that nursing assistants face with regard to end-of-life care. One study reported that poor communication between nursing assistants and other nursing staff might be a barrier for nursing homes to provide good quality care, including end-of-life care. Unfortunately, nursing assistants are usually at the bottom of the command chain in their facilities, often do not receive enough respect from their nurse colleagues, and sometimes do not receive pertinent patient information (Nochomovitz et. al., 2010). Nursing assistants must be informed about the decision-making processes for patients in their care so they can support and reinforce the patient's plan of care. Furthermore, better communication with co-workers might help nursing assistants to better understand the residents' current conditions and special care needs (Hospice and Palliative Nurses Association, 2019; Nochomovitz et. al., 2010; Zheng & Temkin-Greener, 2011).

Education

Nurses. End-of-life care is a vital subject that should be integrated into nursing education (Bloomer et al., 2013; Croxon et al., 2018; Howes, 2015; Hussin et al., 2018; Kruse et al., 2008; Reinke et al., 2010; Schlariet, 2009; Udo et al., 2014; Weigel et al., 2007; Yim Wah et al., 2013; Ying-Chun & Hsien-Hsien, 2017; Zheng et al., 2016). A systematic review found that lack of education on assessment of dying patients interfered with proper management of patient symptoms. (Reinke et al., 2010). Nurses reported a sense of helplessness in regard to their lack of preparedness in end-of-life care (Udo et al., 2014; Yim Wah et al., 2013). It was found that

nurses felt uncomfortable caring for end-of-life patients, and even felt guilty due to their lack of education and readiness to care for terminally-ill patients (Udo et al., 2014; Yim Wah et al., 2013).

Educational interventions for staff nurses caring for nursing home patients vary in purpose and presentation (Anstey et al., 2016). Many of the interventions appear to be supplemental, and not supporting continuation of professional development. Furthermore, educational interventions were brief, which meant that many of the complex issues surrounding end-of-life care could only have been addressed superficially or not discussed at all and would be unlikely to change staff attitudes (Antsey et al., 2016).

Nursing Assistants. While certified nursing assistant (CNA) education and training varies by state, end-of-life care is not the focus of CNA training. The majority of programs focus on vital signs, cleanliness, basic needs, cardiopulmonary resuscitation (CPR), and fluids and feeding (American Red Cross, 2019). Nursing homes are identified as general settings in which all staff are required to know how to apply the basic principles of palliative and end-of-life care for residents and families. However, staff are not required to have the skills needed to recognize a change in patient condition, or symptoms present in a dying patient (Anstey et al., 2016).

Long-term care setting. In some situations, nursing assistants in long-term care facilities have on-the-job training from co-workers, who themselves may not have had any formal training (Herber & Johnson, 2013). Most direct care is delivered by unqualified nursing assistants with a high rate of staff turnover, supervised by small numbers of qualified nurses (Anstey et al., 2016). A systematic review of the role that nursing assistants play in end-of life care concluded that a substantial number of nursing assistants had no nationally recognized qualification. They did not have sufficient training and felt inadequately prepared for their job (Herber & Johnson, 2013).

Nursing assistants were found to have a low level of qualifications relevant to their role; however, they may have had personal life experiences through which they could acquire valuable knowledge and skills (Devlin & McIlpatrick, 2010). Certified nursing assistants reported that they could influence quality of care for dying nursing home residents if they had better training to provide this type of care (Wholihan & Anderson, 2018).

Acute care setting. Nursing assistants in long-term care facilities have access to fewer educational resources than nursing assistants in the acute care setting (Wowchuk, McClement, & Bond, 2007). In an observational study, nursing assistants at a teaching hospital were given a pre-test, day-long educational intervention, and post-test. The educational intervention revealed an improvement in knowledge, attitudes, and ethical awareness among the nursing assistants participating in the program (Wholihan & Anderson, 2018).

Impact of Education on Attitudes

Educational interventions have been influential for nursing assistants in inpatient hospital settings. In the hospital setting, education improved levels of knowledge and attitudes about caring for the dying, and attentiveness of ethical issues (Wholihan & Anderson, 2018; Wowchuk, McClement, & Bond, 2007). Nursing assistants also identified the need for support from nurses and other staff members to feel part of the palliative care team (Wholihan & Anderson, 2018).

Two studies incorporated an educational intervention, resulting in nurses reporting increased self-confidence in caring for end-of-life patients (Udo et al., 2014; Weigel et al., 2007). Nurses also reported less powerlessness with communication in regard to end-of-life with more education provided on this type of care. A study of 104 nurses found that a six-week palliative care education component using a curriculum from The End-of-Life Nursing Education Consortium (ELNEC) made a significant difference in the attitudes of nursing students toward

care of the dying (Mallory, 2003). Following the educational intervention, nursing students reported an increased feeling of value when caring for dying patients (Mallory, 2003).

The literature shows that nurses and nursing assistants in other health care environments benefit from education about end-of-life care. There is research to support the need for continuing education for nursing assistants. With more and more patients entering long-term care facilities, it is important to place patients in the caring hands of competent and confident nursing assistants.

Influence of Age and Years of Experience

A literature review reporting death anxiety for nurses revealed that the age of nurses (higher age) and length of work experience (longer time) were positively related to less anxiety about death (Peters et al., 2013). It has also been found that older nurses feel more comfortable talking about end-of-life concerns than younger, more inexperienced nurses (Deffner & Bell, 2005). Furthermore, a number of the studies suggested there was a need for further education about end-of-life and dying for younger nurses with less experience to decrease their anxieties about death (Peters et al., 2013; Deffner & Bell, 2005; Dunn, Otten & Stephens, 2005).

Theoretical Model

One of the primary purposes of theory is to help guide practice and research. Theories are used in defining standards of practice and interventions for the ultimate goal of providing efficient nursing care. The Peaceful End-of-Life Theory and Transformative Learning Theory were used as the theoretical model for this DNP project.

The Peaceful End-of-Life Theory was developed by expert nurses who identified a need to improve the standard of nursing practice with regard to the lack clinical guidelines or instructions on how they were supposed to care for terminally-ill patients (Ruland & Moore,

1998). Nurses identified the absence of defined directions as an obstacle for quality nursing care, which resulted in the initiative to develop the standard of care for the peaceful end-of-life (Ruland & Moore, 1998).

The Peaceful End-of-Life Theory emphasizes quality of life and a peaceful end-of-life in terminally-ill patients, influenced by nursing interventions and specific results (Zaccara et al., 2018). The theoretical concepts of the theory are not being in pain, comfort, dignity and respect, being in peace, and closeness to significant others or caring people (Zaccara et al., 2018). The concepts of this theory closely identify the responsibilities expected of nursing assistants in long-term care facilities, and the content of the educational session that was taught during the implementation phase of the DNP project. The End-of-Life Nursing Education Consortium (ELNEC) education utilizes the concepts outlined by the Peaceful End-of-Life Theory. The Peaceful End-of-Life Theory can demonstrate how providing education on these concepts and can greatly influence a patient's experience during their dying days (See Figure 1).

The Transformative Learning Theory offers a theory of learning that is abstract and based off human communication (Taylor, 2007). Learning is understood as the process of using a prior interpretation to construe a new or revised interpretation of the meaning of one's experience in order to guide future action (Mezirow, 1997). The Transformative Learning Theory addresses the shift of consciousness experienced when confronted with a disorienting dilemma (Mezirow, 1998). In the case of this DNP project, the disorienting dilemma is caring for dying patients.

The method utilized by this DNP project was a lecture presentation that incorporated the Transformative Learning Theory to impact a perspective transformation that went beyond knowledge acquisition. Concepts central to the Transformative Learning Theory are shared learning experiences, critical reflection on the experience, and engaging in dialogue with others

(Taylor, 2008). These methods were incorporated into the ELNEC curriculum as a part of the project.

During the educational session, nursing assistants were given opportunities to share their stories and reflect on their experiences of caring for dying patients. The nursing assistants had many shared experiences, but do not often have the opportunity to critically reflect on them in practice. There is didactic content in ELNEC, but also time for discussion and engaging in dialogue with others. ELNEC and Transformative Learning Theory both support the concept that learning occurs when an individual engages with the information they are learning in an active, collaborative process. The learner also examines their own assumptions of end-of-life care and engage in self-reflection by taking the Frommelt Attitudes toward Care of the Dying (FATCOD) survey, or the pre-test of portion of the project. By collaboration and reflecting on caring for dying patients, nursing assistants have the opportunity to increase knowledge and improve their attitudes towards end-of-life care (See Figure 2).

Project Design

Overview

A pre-test/post-test design was used to evaluate the impact of an educational session on attitudes of nursing assistants towards end-of-life care in long-term care facilities. The educational session was a curriculum from The End-of-Life Nursing Education Consortium (ELNEC). The pre-test, Frommelt Attitude toward Care of the Dying, Form B (FATCOD) scale was administered by the project leader, to assess nursing assistants' attitudes. At the end of the educational session, a post-test, the same FATCOD scale was administered again to evaluate if the nursing assistants' attitudes changed after receiving education on end-of-life care (See

Appendix A). The project was verified as exempt by the Belmont University Institutional Review Board.

Clinical Setting

This project took place at four long-term care facilities (LTCF) in the Southeastern United States. All locations were located in suburban residential communities. Each of the LTCF has anywhere from 15 to 25 nursing assistants employed at a time. All of these long-term care facilities have over 100 beds for residents. The facilities all offer beds allocated for independent, assisted, and skilled nursing residents.

The long-term care facilities are part of a national long-term care corporation with multiple locations throughout the United States. The corporation is a nationwide innovator in the delivery of quality long-term care dedicated to meeting the needs of patients through an interdisciplinary approach combining compassionate care with efficient health care services. The corporation manages 76 skilled nursing facilities with 9,597 beds throughout the United States (National HealthCare Corporation, 2019).

Project Population

There were 42 nursing assistants that participated in this study. Certified nursing assistants, nursing aids, nursing support staff, and technologists were all included. The only exclusion criteria for participation was being under the age of 18. A non-probability sample was obtained. The sampling method was similar to a convenience sample, and participants were employed nursing assistants at the long-term care facility where the research was conducted. The participation in the study relied on the nursing manager's discretion at the specific long-term care facility site. Participation in the education session could be mandatory for staff to attend based on

the nursing manager's preference either before, during, or after their shift. However, the completion of the survey was voluntary.

Methods

Sources of Data/Data Collection

A pre-test/post-test method was used to determine the effectiveness of an educational session on attitudes towards end-of-life care. The project leader presented an educational session from the End-of-Life Nursing Education Consortium (ELNEC). Approval was granted by the program director of ELNEC to use the curriculum (See Appendix B). ELNEC is a national education initiative to improve palliative care. "The ELNEC project gives nurses the knowledge and skills required to provide this specialized care and to positively impact the lives of patients and families facing serious illness and/or the end-of-life" (End-of-Life Nursing Education Consortium Fact Sheet, 2019). The curriculum was developed through the work of highly recognized palliative care experts. The experts have extensive input from an advisory board and reviewers. The ELNEC curriculum is revised annually to include new advances in the field (End-of-Life Nursing Education Consortium Fact Sheet, 2019). Due to time constraints of the long-term care facilities, the educational session was limited to 1 hour. Relevant content from the ELNEC curriculum was identified by the director of nursing of the organization and content experts. The project leader used G* Power with .8 power, .5 effect size, and .05 alpha, which showed that a sample size of 34 was needed.

The tool used to assess attitudes toward end-of-life care before and after a standardized educational session was the Frommelt Attitudes toward Care of the Dying, Form B (FATCOD) scale. It is a 30-item tool using a five-point Likert scale to indicate respondent's attitudes toward caring for dying patients. The FATCOD consists of 30 Likert-type items, which are scored on a

5-point scale. The instrument is made up of an equal number of positively and negatively worded items. The statements describe beliefs and feelings about end-of-life care, such as the patient's decision-making autonomy, the doctor's emotional involvement with the patient's experience, care of the patient's family, and pain management. Possible responses to each item include SD=Strongly Disagree, D= Disagree, U = Uncertain, A= Agree and SA= Strongly Agree. Individual scores were summed using Microsoft Excel. Participants could score anywhere between 30-150, and higher scores reflect more positive attitudes (See Appendix C).

The tool has been proven valid and reliable and has been used in other studies assessing nurse's and nursing student's attitudes towards end-of-life care (Frommelt, 2003). In a study of 465 nursing students, Cronbach's alpha was used to determine reliability. The whole scale showed a satisfactory Cronbach's alpha coefficient of 0.75. The 0.75 demonstrated internal consistency and scale reliability (Mastroianni et al., 2015).

For this project, one modification was made to the FATCOD scale. The word "nonfamily caregiver" was changed to "nursing assistant" to make it more personalized to the participants. The tool is copyright protected and the project leader was granted permission to use the tool (See Appendix D). After collaboration with the corporation's leadership, demographics were selected to evaluate age and years of nursing assistant experience on attitudes towards end-of-life care.

Data Collection Process/Procedures

Prior to the initiation of the project, multiple meetings were held with the corporation's nursing leadership to discuss the project's purpose and the recruitment of the participants. Participants were recruited by the nursing managers at each of the long-term care facilities, and completion of the surveys was voluntary. Participants were reassured that they did not have to answer any questions that they did not want to. Informed consent was not required because

completion of the survey indicated implied consent. The nursing assistants received an invitation to participate in research stating that their participation was voluntary (See Appendix E). Data were collected via paper surveys and then transferred electronically using Excel between October 2019 and November 2019. Data was transcribed a second time to ensure scores were entered correctly. The pre- and post-surveys were completed on the same day as the educational session to aid in response rate. Survey responses were confidential and anonymous.

The data was cataloged by the project leader by logging the paper surveys into Excel and then exporting data to SPSS for analysis. The statistical analysis was performed using IBM Statistical Packages for Social Sciences (SPSS) software, version 25. Survey results were later shared with the long-term care facilities nursing leaders in aggregate form only.

Data Analysis

Two variables were being explored in this project. The independent variable was the ELNEC educational session provided to the nursing assistants. This variable type was classified as nominal. The dependent variable was the nursing assistant's attitudes towards end-of-life care. The dependent variable was considered continuous variable type because it had many possible outcomes. There are ten or more possible outcomes associated with the FATCOD scale given that the results range from 30-150 making it a continuous variable.

A paired-t test was used to compare the pre-and post-test scores. The paired-t test was most influential for this study because it is used to compare differences between the variables of the same subject. The project leader was looking to assess the difference between pre-test and post-test scores, and measure whether scores were higher or lower after the educational session. A One-Way Analysis of Variance (ANOVA) was used to assess whether age and years of experience influenced baseline attitudes towards end-of-life care. The grouping variables for age

were categorized as: 18-28, 29-39, and more than 40. The grouping variables for years of experience were: less than 1 year, 1-5 years, 6-10 years, and more than 10 years.

Missing data. 78% of participants completed the entire survey. Some participants decided not to fill out the demographics section at the end of the survey. 17% of the data was missing for the demographics section. This was greater than 5% and the project leader chose to use listwise deletion to remove the attitude scores of those respondent's surveys prior to performing the one-way ANOVA.

Results

A total of 42 ($n=42$) nursing assistants participated in the educational intervention and pre-test/post-test. All of the participants were certified nursing assistants. The number of years of nursing assistant experience ranged from 0.333 years (4 months) to 30 years ($M = 9.7060$, $SD = 10.58878$). The ages of the nursing assistants ranged from 18 years old to 58 years old ($M = 31.59$, $SD = 12.312$). Refer to Table 1.

Attitude Scores

A one-way ANOVA was conducted to compare the effect of years of experience on attitudes. The ANOVA showed that the effect of years of nursing assistant experience on attitudes was not statistically significant, ($F(3,32) = .565$, $p = .642$, $\eta^2 = .050$). An additional one-way ANOVA was conducted to compare the effect of age on attitudes. The results showed that there was a potential relationship between age and attitudes towards end-of-life care ($F(2, 34) = 2.412$, $p = .105$, $\eta^2 = .124$). Refer to Table 2.

Pre-test/Post-test Comparison

A paired-samples t-test was run to determine whether or not an educational intervention influenced nursing assistant's attitudes towards end-of-life care. The overall post-test scores

($M=127.48$, $SD= 11.228$) were higher than the overall pre-test scores ($M=124.07$, $SD=10.739$). Statistical analysis using the paired t-test indicated that the scores on the post-test were significantly greater than the scores on the pre-test, ($t(41) = 3.680$, $p <.001$, $d= 0.5678$). Refer to Table 3.

Individual FATCOD Scores

Mean baseline scores for individual FATCOD items are presented in Table 4. Overall scores were high. Mean individual scores ranged from 3.261 to 4.587. Question 11 ($M=3.261$, $SD=1.20064$) had the lowest average individual score. Question 11 addresses changing the subject when a patient asks, “Am I dying?”. Question 16 ($M=4.587$, $SD=0.71728$) had the highest average score. Question 16 addresses attitudes towards the families needs of emotional support with regard to the dying patient. Refer to Table 4.

Discussion

The findings of this study support the hypothesis that an educational intervention would be attributed to more positive attitudes towards end-of-life care for nursing assistants, ($p <.001$, $d= 0.5678$), and that an increase in age may be correlated with more positive attitudes ($p = .105$, $\eta^2 = .124$). However, the third hypothesis with regard to nursing assistant’s years of experience ($p = .642$, $\eta^2 = .050$) was not supported by the findings of this study.

Attitudes Toward End-of-Life Care

Most of the respondents in the study reported positive baseline attitudes toward end-of-life care. Mean attitude scores from this study ranged from 102-143 with lower scores indicating more negative attitudes toward end-of-life care. A majority of the respondents reported feeling comfortable caring for dying patients. Similarly, Nochomovitz et al. (2010) reported nursing assistants were comfortable with providing assistance pertaining to activities of daily living,

observing symptoms that occur near the end-of-life, and providing pre- and post-mortem care. The FATCOD survey results of this study revealed that nursing assistants were most uncomfortable when a patient asked, “Am I dying?” ($M = 3.261$, $SD = 1.20064$). Likewise, Nochomovitz et al. (2010) reported that out of 108 nursing assistants, only 14% felt comfortable talking about death. Nochomovitz et al. (2010) also discovered that hesitancy toward having death-related discussions hindered nursing home provider’s abilities to communicate openly and honestly about death. Furthermore, the researchers found that efforts to improve nursing assistant’s comfort with end-of-life care may be successful if they understand the goals of hospice care (Nochomovitz, et al., 2010).

Effect of Education and Age on Attitudes

The results of the current study revealed the nursing assistants reported more positive attitudes toward end-of-life care after being provided with education. A study of 25 nursing assistants done by Wholihan and Anderson (2018) found that an educational conference for acute care nursing assistants on end-of-life care was associated with improved levels of knowledge, more positive attitudes, and increased ethical understanding. The study also revealed that most nursing assistants begin their career with little or no formal training and are often marginalized with regard to continuing education opportunities. The response to the education was positive and nursing assistants reported interest in formal education opportunities with an end-of-life care focus (Wholihan & Anderson, 2018).

During the educational session of this project, nursing assistants were able to share their experiences towards caring for dying patients by reflecting on their attitudes towards end-of-life. Similarly, a study that utilized an educational intervention with surgical nurses found the

education made them more aware of their personal feelings that might influence their interactions with patients (Udo, et al., 2014).

The present investigators found a potential relationship between age and nursing assistant's attitudes towards end-of-life care ($p = .105$, $\eta^2 = .124$). The body of literature regarding nursing assistant's age and attitudes is limited. However, the age of nurses with regard to end-of-life care is present throughout the literature. Hasheesh, AboZeid, El-said, and Alhujaili (2013), reported a correlation between a nurses age and attitudes toward end-of-life care with younger registered nurses reporting higher levels of fear than older registered nurses. The study also suggested that increased fear is present if the younger nurse had not experienced the death of a patient before becoming a nurse (Hasheesh, AboZeid, El-said & Alhujaili, 2013). A literature review reported findings about how anxiety associated with death impacts nurses (Peters et. al., 2013). The study reported that nurses less than 30 years old are more likely to experience stress, frustration, and anxiety compared to nurses aged 30 years and older; making younger nurses more at risk of developing negative attitudes toward end-of-life care (Peters et al., 2013). Ultimately, the study recommended further education about death and dying for younger nurses to lessen their anxieties toward end-of-life care (Peters et al., 2013). The results of the current study align with past research, explaining the correlation between age and attitudes toward end-of-life care making the results more generalizable to nursing assistants.

Years of Experience

The relationship between years of nursing assistant experience and attitudes towards end-of-life care was not found to be significant in this study ($p = .642$, $\eta^2 = .050$). Lange, Thom, and Kline (2008) published a similar study that utilized data from a larger sample of registered nurses ($n=355$). They revealed that registered nurses with 11 years of nursing experience or more scored

significantly higher on the FATCOD survey compared to nurses with only 0-1 year of experience ($p=0.012$) (Lange et al., 2008). Overall, the study found that older or more experienced nurses had more positive attitudes towards caring for dying patients than younger inexperienced nurses (Lange et al., 2008).

Dunn, Otten, and Stephens (2005) also found similar results that demonstrated older nurses viewed death as an opportunity to escape from a painful experience allowing them to accept death easier than younger nurses. Nurses with higher levels of education and greater months of experience reported having more death education and training than nurses with lower levels of education and less experience (Dunn et al., 2005). The studies that found years of experience as an influence on attitudes towards end-of-life care had sample sizes greater than 50. However, the current project had a sample size less than 50 which could have influenced the overall effect of years of experience on attitudes toward end-of-life care.

Relationship with Theoretical Framework

The Transformative Learning Theory was the framework on which this project was based, and it was foundational for the planning and implementation of the educational intervention. To enable transformative learning, educators must help learners become aware and critical of their own and others' assumptions (Mezirow, 1997). Mezirow also believes that educators must facilitate autonomous thinking and recognize that this requires experiences designed to foster critical reflectivity and experience in discussion (Mezirow, 1997). The primary idea is that learners engage the concepts in context of their own lives and collectively assess the validation of the new knowledge (Mezirow, 1997).

With regard to this project, the FATCOD survey helped the learners reflect on their own attitudes towards end-of-life care by having them answer the 30 likert-type questions. The

learner gained new knowledge by participating in critical reflexivity and discussing their experiences. The participants discussed their own definitions of what a “good death” and “bad death” looked like and were encouraged to discuss times that they participated in end-of-life care. They gained insight and new knowledge after completion of the survey, educational session, and dialogue with one other. Overall, the results of this study showed an increase in knowledge demonstrated by the post-test scores. The increase in knowledge and attitudes supports the key themes central to this theory.

Strengths and Limitations

The study focuses its attention on a significant, yet under recognized member of the health care team: the nursing assistant. The study also provides a foundation for future research on end-of-life care in the long-term care facility with a focus on the advantage of education for the nursing assistant. Additionally, this study adds to the limited research regarding the association between education and attitudes towards end-of-life care, exclusively in this population.

Another strength of the study is the ELNEC educational intervention. ELNEC is a nationally accredited education initiative to improve palliative care, emphasizing education involving all members of the health care team. The project leader also consulted with two palliative care content experts to finalize the content used prior to the educational intervention to ensure applicable and meaningful information was presented. The nursing assistants were able to reflect on their experiences and talk amongst one another about their specific job, and this opportunity is rare among nursing assistants in long-term care facilities.

While the study authors acknowledge various strengths, limitations must also be recognized. First, the study utilized self-report surveys which could have contributed to social

desirability bias. This type of bias must be considered when participants are asked questions by the researcher, and there is a chance their employer may find out their answers. Even though participants were reassured their individual answers and results would be reported in aggregate only, this type of bias may still exist. The sample size of this study was small which could limit the generalizability of the results. The study also did not explore specific demographics like gender, race, or previous education or training to ensure confidentiality of the participants.

Lastly, the study was limited to a one-hour time limit. The pre-test, educational intervention, and post-test were to be completed in one hour. The interventions frequently took place before or during the nursing assistants shift. The time limit did not allow for a complete and full educational session. Some nursing assistants could not attend due to their duties to patients within the long-term care facilities.

Implications for Practice

This study represents a population in the medical field that is underrepresented in the literature. Exploring and assessing the attitudes of nursing assistants in long-term care facilities is important because they are the individuals who spend the most time with dying residents (Brazil & Vohra, 2005). While the findings from this study suggest that nursing assistant's have overall positive baseline attitudes towards end-of-life care; most studies do not aim to collect information about nursing assistants' experience providing care for dying nursing home residents (Nochomovitz et al., 2010). Nursing assistants were found to be most uncomfortable talking about dying with a patient in this study and previous studies (Nochomovitz et al., 2010). Long-term care facilities need to be made aware of the lack of preparation nursing assistants receive on end-of-life care. Further research between nursing assistants, and the role of the nursing assistant's education and training is needed.

Conclusion

Nursing assistants are essential in the care of dying patients in long-term care facilities. Inadequate attention has been focused on educating and empowering these individuals to improve quality of care. This study highlights the importance of nursing assistants and their role in end-of-life care. Education focused on nursing assistants and how they can effectively care for dying patients served as an influential intervention to improve attitudes towards care for long-term care residents. Continued educational opportunities for nursing assistants are necessary as they devoutly care for millions of nursing home residents nationwide.

References

- American Red Cross. (2019). *Certified nursing assistant training*. Retrieved from <https://www.redcross.org/take-a-class/cna>
- Anstey, S., Powell, T., Coles, B., Hale, R., & Gould, D. (2016). Education and training to enhance end-of-life care for nursing home staff: a systematic literature review. *BMJ Supportive & Palliative Care*. doi:10.1136/bmjspcare-2015-000956
- Bloomer, MJ., Endacott, R., O'Connor, M., & Cross, W. (2013). The 'dis-ease' of dying: Challenges in nursing care of the dying in the acute hospital setting. A qualitative observational study. *Palliative Medicine*, 27(8), 757–764. doi: 10.1177/0269216313477176
- Boyd, D., Merkh, K., Rutledge DN., & Randall, V. (2011). Nurses' perceptions and experiences with end-of-life communication and care. *Oncology Nursing Forum*, 38(3), E229-E239.
- Brazil, K., & Vohra, J. (2005). Identifying educational needs in end-of-life care for staff and families of residents in care facilities. *International Journal of Palliative Nursing*, 11(9), 475-480.
- Croxon, L., Deravin, L., & Anderson, J. (2018). Dealing with end of life—new graduated nurse experiences. *Journal of Clinical Nursing*, 27(1-2), 337-344. doi: 10.1111/jocn.13907
- Deffner, JM., & Bell, SK. (2005). Nurses' death anxiety, comfort level during communication with patients and families regarding death, and exposure to communication education: A quantitative study. *Journal of Nurses Staff Development*. 21(1), 19-23
- Detering, K., Hancock, A., Reade, M., & Silvester, W. (2010). The impact of advance care planning on end of life care in elderly patients: Randomized controlled trial, *British Medical Journal*, (340), 1345.

- Devlin, M., & McIlfatrick, S. (2010). Providing palliative and end-of-life care in the community: The role of the home-care worker. *International Journal of Palliative Nursing*, *16*(4), 195–203.
- Dunn, KS., Otten, C., & Stephens, E. (2005). Nursing experience and the care of dying patients. *Oncology Nursing Forum*, *32* (1): 97-104. doi: 10.1188/05.ONF.97-104
- End-of-Life Nursing Education Consortium (2019) Fact sheet. Retrieved from <https://www.aacnnursing.org/Portals/42/ELNEC/PDF/ELNEC-Fact-Sheet.pdf>
- Hasheesh, MA., AboZeid, SA., El-said, SG, & Alhujaili, AD. (2013). Nurses' characteristics and their attitudes toward death and caring for dying patients in a public hospital in Jordan. *Health Science Journal*, *7*(4): 384-394.
- Herber, OR., & Johnston, BM. (2013). The role of healthcare support workers in providing palliative and end-of-life care in the community: A systematic literature review. *Health & Social Care in the Community*, *21*(3), 225–235. doi: 10.1111/j.1365-2524.2012.01092.x
- Hospice and Palliative Nurses Association (2019). Value of the nursing assistant in palliative care. *Journal of Hospice and Palliative Nursing. The Official Journal of the Hospice and Palliative Nurses Association*, *21*(3), E13-E14.
- Howes, J. (2015) Nurses' perceptions of medication use at the end of life in an acute care setting. *Journal of Hospice & Palliative Nursing* *17*(6), 508–516. doi: 10.1097/NJH.0000000000000192
- Karlsson, M., Berggren, I., Kasén, A., Wärnå-Furu, C., & Söderlund, M. (2015). A qualitative metasynthesis from nurses' perspective when dealing with ethical dilemmas and ethical problems in end-of-life care. *International Journal for Human Caring*, *19*(1), 40-48.

- Kruse, B., Melhado, L., Convertine, L., & Stecher, J. (2008). Evaluating strategies for changing acute care nurses' perceptions on end-of-life care. *American Journal of Hospice & Palliative Medicine*, 25(5), 389-397. doi: 10.1177/1049909108322368
- Lange, M., Thom, B., & Kline, NE. (2008). Assessing nurses' attitudes toward death and caring for dying patients in a comprehensive cancer center. *Oncology Nursing Forum*, 35(6), 955-959.
- Mallory, J. (2003). The impact of a palliative care educational component on attitudes toward care of the dying in undergraduate nursing students. *Journal of Professional Nursing*, 19(5): 305-312. doi: 10.1016/S8755-7223(03)00094-2
- Mezirow, J. (1978). Perspective transformation. *Adult Education Quarterly*, 28(2), 100-110.
- Mezirow, J. (1997). Transformative learning: Theory to practice. *New Directions for Adult and Continuing Education*, 1997(74), 5-12.
- Nochomovitz, E. E., Prince-Paul, M. H., Dolansky, M., Singer, M., DeGolia, P., & Frank, S. (2010). State tested nursing aides' provision of end-of-life care in nursing homes: Implications for quality improvement. *Journal of Hospice & Palliative Nursing*, 12(4), 255-262. doi: 10.1097/NJH.0b013e3181dfd012
- Pavlish, C., Brown-Saltzman, K., Fine, A., & Jakel, P. (2015). A culture of avoidance: Voices from inside ethically difficult clinical situations. *Clinical Journal of Oncology Nursing*, 19(2), 159-165. doi: 10.1188/15.CJON.19-02AP
- PHI National. (2019). U.S. nursing assistants employed in nursing homes: key facts. Retrieved from <https://phinational.org/wp-content/uploads/legacy/phi-nursing-assistants-key-facts.pdf>.
- Peters, L., Cant, R., Payne, S., O'Connor, M., Mcdermott, F., Hood, K., Morphet, J., &

- Shimoinaba, K. (2013). How death anxiety impacts nurses' caring for patients at the end of life: A review of literature. *The Open Nursing Journal*, 7(1), 14-21. doi: 10.2174/1874434601307010014
- Reinke, LF., Shannon, SE., Engelberg, R., Dotolo, D., Silvertri, GA., & Curtis, JR. (2010). Identification of important yet underutilized end-of-life care skills for patients with life-limiting or terminal illnesses. *Journal of Palliative Medicine*, 13(6), 753-759. doi: 10.1089/jpm.2009.0423
- Roberts, AM., Ogunwole, S., Blakeslee, L., & Rabe, M. (2018). A snapshot of the fast-growing U.S. older population. Retrieved from <https://www.census.gov/library/stories/2018/10/snapshot-fast-growing-us-older-population.html>
- Rome, RB., Luminais, HH., Bourgeois DA., & Blais, CM. (2011). The role of palliative care at the end of life. *The Ochsner Journal*, 11(4), 348–352.
- Ruland, & Moore. (1998). Theory construction based on standards of care: A proposed theory of the peaceful end of life. *Nursing Outlook*, 46(4), 169-175
- Schlairet, M. (2009). End-of-life nursing care: Statewide survey of nurses' education needs and effects of education. *Journal of Professional Nursing*, 25(3), 170-177. doi: 10.1016/j.profnurs.2008.10.005
- The Lancet. (2015). Medicare opens up the end-of-life conversation. *The Lancet*, 386(9990), 220.
- Udo, et. al (2014). Surgical nurses' attitudes towards caring for patients dying of cancer -- a pilot study of an educational intervention on existential issues. *European Journal of Cancer Care*, 23(4), 426. doi: 10.1111/ecc.12142

U.S. Department of Health and Human Services: Agency for healthcare research and quality.

(2001). The characteristics of long-term care users. Retrieved from

<http://archive.ahrq.gov/professionals/systems/long-term-care/resources/facilities/ltcusers/index.html>.

Walling, A., & Sydney, S. (2014). The importance of a comprehensive, patient-centered approach to End-of-Life Care. *Journal of General Internal Medicine*, 29(6), 822-823. doi: 10.1007/s11606-013-2757-x

Wang, J.-Y., Zhuang, H.-L., Chiou, J.-Y., Wang, C.-W., Wang, C.-Y., & Liu, L.-F. (2018). Exploring factors influencing the work-related morale for certified nursing assistants in hospice care: A structural equation modeling study. *PLoS ONE*, 13(10), 1–18. doi: 10.1371/journal.pone.0206281

Weigel, C., Parker, GD., Fanning, L., Reyna, K., & Gasbarra, DB. (2007). Apprehension among hospital nurses providing end-of-life care. *Journal of Hospice & Palliative Nursing*, 9(2), 86–91. doi: 10.1097/01.NJH.0000263530.37671.b8

Wholihan, D., & Anderson, R. (2013). Empowering nursing assistants to improve end-of-life care. *Journal of Hospice & Palliative Nursing* (15)(1), 24-32. doi: 10.1097/NJH.0b013e31825f345b

Wowchuk, SM., McClement, S., & Bond, J. (2007). The challenge of providing palliative care in the nursing home part II: Internal factors. *International Journal of Palliative Nursing*, 13(7), 345-350.

Yim Wah, M., Vico Chung Lim, C., & Wai To, C. (2013). Experiences and perceptions of nurses

caring for dying patients and families in the acute medical admission setting.

International Journal of Palliative Nursing, 19(9), 423-43. doi:

10.12968/ijpn.2013.19.9.423

Ying-Chun, Hsien-Hsien. (2017). From vulnerability to passion in the end-of-life care: The lived experience of nurses. *European Journal of Oncology Nursing*, 31(30). 200-208. Doi:

10.1016/j.ejon.2017.09.002

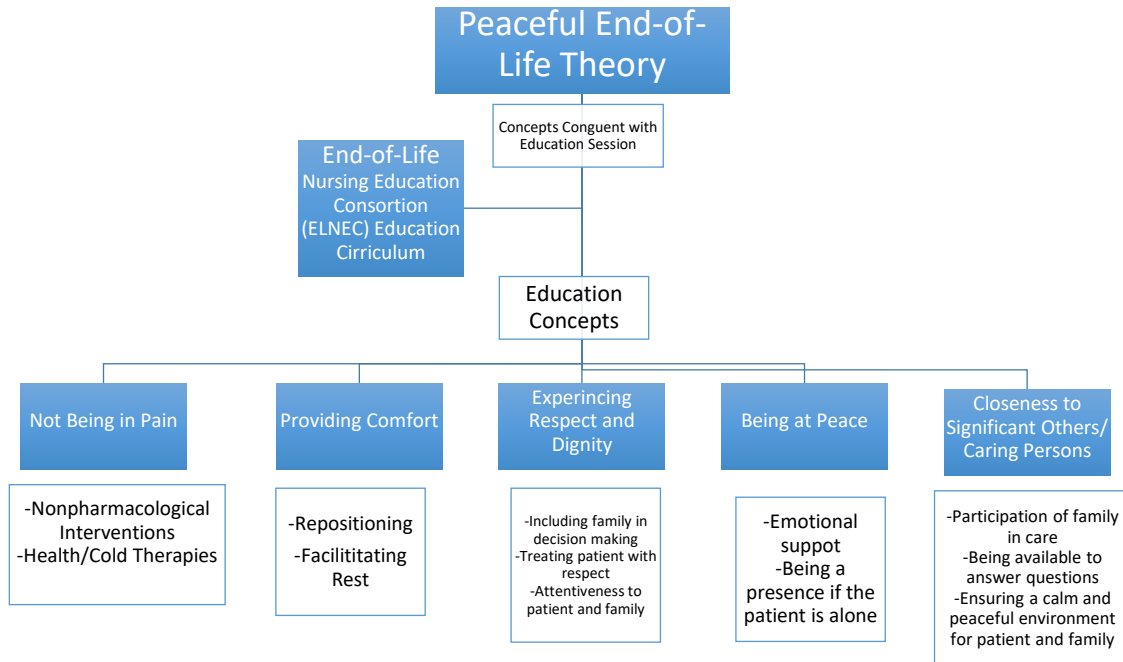
Zheng, NT., & Temkin-Greener, H. (2011). End-of-life care in nursing homes: the importance of CNA staff communication. *Journal of the American Medical Directors Association*, 11(7), 494-499.

Zheng, R., Lee, SF., & Bloomer, MJ. (2016). How new graduate nurses experience patient death:

A systematic review and qualitative meta-synthesis. *International Journal of Nursing*

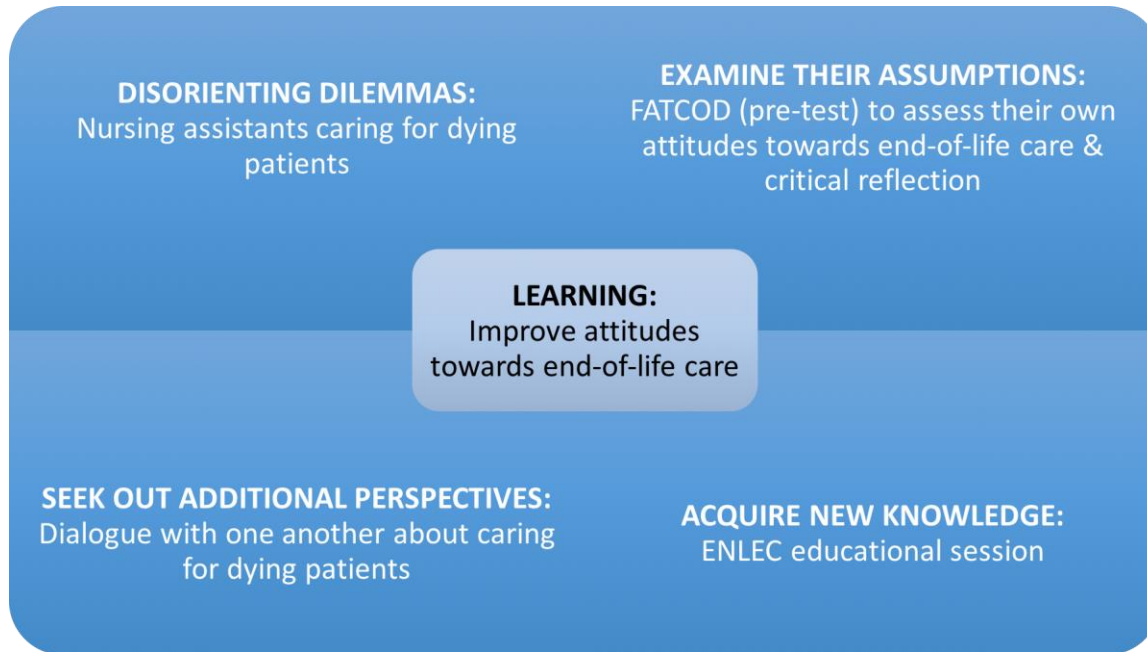
Studies, 53(C), 320-330. doi: 10.1016/j.ijnurstu.2015.09.013

Figure 1



Adapted from Ruland, & Moore. (1998). Theory construction based on standards of care: A proposed theory of the peaceful end of life. *Nursing Outlook*, 46(4), 169-175

Figure 2



Adapted from Mezirow, J. (1978). Perspective transformation. *Adult Education Quarterly*, 28(2), 100-110.

Table 1

Demographics

	<i>M</i>	<i>SD</i>
Age	31.59	12.312
Years of Experience	9.706	10.58878

Table 2

One-Way Analysis of Variance of Age and Years of Experience

Source	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>p</i>	η^2
Age						
Between groups	2	504.017	252.008	2.412	.105	.124
Within groups	34	3552.794	104.494			
Total	36	4056.811				
Years of Experience						
Between groups	3	202.989	67.66	.565	.642	.050
Within groups	32	3830.566	119.705			
Total	35	4033.556				

Note. *df* = degrees of freedom; *SS* = sum of squares; *MS* = mean square; *F* = test statistic; η^2 = effect size

Table 3

Paired Samples Test

	Paired Differences						<i>t</i>	<i>df</i>	<i>p</i>	<i>d</i>
	Pre-test	Post-test	<i>n</i>	95% Confidence Interval of the Difference						
	<i>M, SD</i>	<i>M, SD</i>		Lower	Upper					
Attitudes	124.07, 10.739	127.48, 11.228	42	1.536	5.273	3.680	41	.001	0.5678	

Note. *M* = average; *SD* = standard deviation; *n* = frequency; *t* = computed test statistic; *df* = degrees of freedom; *d* = Cohen's *d*

Table 4*Independent FATCOD scores*

	N	Minimum	Maximum	Mean	Std. Deviation
q1	46	2	5	4.609	0.77397
q2	46	1	5	4.065	1.06254
q3	46	1	5	3.761	1.03676
q4	46	1	5	4.391	1.02151
q5	46	2	5	4.761	0.56509
q6	46	1	5	3.783	1.09368
q7	46	1	5	4.391	0.85578
q8	46	1	5	3.63	1.23574
q9	46	2	5	4.391	0.77397
q10	46	1	5	4.435	0.77895
q11	46	1	5	3.261	1.20064
q12	46	1	5	3.413	1.27499
q13	46	1	5	3.826	0.92627
q14	46	3	5	4.544	0.54596
q15	46	2	5	4.544	0.62206
q16	46	2	5	4.587	0.71728
q17	46	1	5	4.5	0.75277
q18	46	1	5	4.196	1.00265
q19	46	1	5	4.044	1.22849
q20	46	2	5	4.217	0.78636
q21	46	1	5	4.522	0.78143
q22	46	2	5	4.283	0.88602
q23	46	1	5	3.63	1.52547
q24	46	2	5	4.174	0.76896
q25	46	1	5	3.63	1.3226
q26	46	1	5	4.239	0.794
q27	46	3	5	4.174	0.7395
q28	46	1	5	3.457	1.12953
q29	46	2	5	3.87	0.93354
q30	46	2	5	4.087	0.91472

Appendix A

FATCOD, Form B

In these items, the purpose is to learn how nursing assistants feel about certain situations in which they are involved with patients. All statements concern the giving of care to the dying person and/or his/her family. Where there is reference to a dying patient, assume it to refer to a person who is considered to be terminally ill and to have six months or less to live.

Please circle the statement that corresponds to your own personal feelings about the attitude or situation presented. Please respond to *all* 30 statements on the scale.

1. Giving care to the dying person is a worthwhile experience.

Strongly disagree Disagree Uncertain Agree Strongly agree

2. Death is not the worst thing that can happen to a person.

Strongly disagree Disagree Uncertain Agree Strongly agree

3. I would be uncomfortable talking about impending death with the dying person.

Strongly disagree Disagree Uncertain Agree Strongly agree

4. Caring for the patient's family should continue throughout the period of grief and bereavement.

Strongly disagree Disagree Uncertain Agree Strongly agree

5. I would not want to care for a dying person.

Strongly disagree Disagree Uncertain Agree Strongly agree

6. The nursing assistants should not be the one to talk about death with the dying person.

Strongly disagree Disagree Uncertain Agree Strongly agree

7. The length of time required giving care to a dying person would frustrate me.

Strongly disagree Disagree Uncertain Agree Strongly agree

8. I would be upset when the dying person I was caring for gave up hope of getting better.

Strongly disagree Disagree Uncertain Agree Strongly agree

9. It is difficult to form a close relationship with the dying person.

Strongly disagree Disagree Uncertain Agree Strongly agree

10. There are times when the dying person welcomes death.

Strongly disagree Disagree Uncertain Agree Strongly agree

11. When a patient asks, "Am I dying?" I think it is best to change the subject to something cheerful.

Strongly disagree Disagree Uncertain Agree Strongly agree

12. The family should be involved in the physical care of the dying person

Strongly disagree Disagree Uncertain Agree Strongly agree

13. I would hope the person I'm caring for dies when I am not present.

Strongly disagree Disagree Uncertain Agree Strongly agree

14. I am afraid to become friends with a dying person.

Strongly disagree Disagree Uncertain Agree Strongly agree

15. I would feel like running away when the person actually died.

Strongly disagree Disagree Uncertain Agree Strongly agree

16. Families need emotional support to accept the behavior changes of the dying person.

Strongly disagree Disagree Uncertain Agree Strongly agree

17. As a patient nears death, the nursing assistants should withdraw from his/her involvement with the patient.

Strongly disagree Disagree Uncertain Agree Strongly agree

18. Families should be concerned about helping their dying member make the best of his/her remaining life.

Strongly disagree Disagree Uncertain Agree Strongly agree

19. The dying person should not be allowed to make decisions about his/her physical care.

Strongly disagree Disagree Uncertain Agree Strongly agree

20. Families should maintain as normal an environment as possible for their dying member.

Strongly disagree Disagree Uncertain Agree Strongly agree

21. It is beneficial for the dying person to verbalize his/her feelings.

Strongly disagree Disagree Uncertain Agree Strongly agree

22. Care should extend to the family of the dying person.

Strongly disagree Disagree Uncertain Agree Strongly agree

23. Caregivers should permit dying persons to have flexible visiting schedules.

Strongly disagree Disagree Uncertain Agree Strongly agree

24. The dying person and his/her family should be the in-charge decision-makers.

Strongly disagree Disagree Uncertain Agree Strongly agree

25. Addiction to pain relieving medication should not be a concern when dealing with a dying person.

Strongly disagree Disagree Uncertain Agree Strongly agree

26. I would be uncomfortable if I entered the room of a terminally ill person and found him/her crying.

Strongly disagree Disagree Uncertain Agree Strongly agree

27. Dying persons should be given honest answers about their condition.

Strongly disagree Disagree Uncertain Agree Strongly agree

28. Educating families about death and dying is not a nursing assistant's responsibility.

Strongly disagree Disagree Uncertain Agree Strongly agree

29. Family members who stay close to a dying person often interfere with the professional's job with the patient.

Strongly disagree Disagree Uncertain Agree Strongly agree

30. It is possible for nursing assistants to help patients prepare for death.

Strongly disagree Disagree Uncertain Agree Strongly agree

Completion and return of this questionnaire will be construed as your consent to be a research subject in this study.
Your anonymity is guaranteed.

Appendix B**Permission to use ELNEC Curriculum**

Mrs. Malloy,

I am meeting with my DNP advisor now and she has the curriculum for 2016. I am wondering if anything has changed.

I also am verifying that I have permission to use this curriculum for my DNP project.

Thank you so much

Pamela Malloy <pmalloy@aacnnursing.org>

Tue, Feb 19, 10:44 AM

to me

Nicole, since your faculty member has the 2016 curriculum, go ahead and use it. Just be sure to use the ELNEC attribution statement on any materials you use.

<https://www.aacnnursing.org/ELNEC/Tools-for-Trainers>

Best wishes, Nicole.

Appendix C**SCORING INSTRUCTIONS FOR THE FATCOD**

The FATCOD consists of 30 Likert-type items, which are scored on a 5-point scale. The instrument is made up of an equal number of positively and negatively worded items.

Possible responses to each item include SD=Strongly Disagree, D= Disagree, U = Uncertain, A= Agree and SA= Strongly Agree.

Positive items are scored from 1 for Strongly Disagree to 5 for Strongly Agree. For Negative items the scoring is reversed.

Items 1, 2, 4, 10, 12, 16, 18, 20, 21, 22, 23, 24, 25, 27, and 30 are all positively worded statements. (scored from 1 for Strongly Disagree to 5 for Strongly Agree.)

All others are negative. (scored from 1 for Strongly Agree to 5 for Strongly Disagree.)

Higher scores, therefore, reflect more positive attitudes.

Katherine H. Murray Frommelt, RN, BSN, MSN, PDE, CGC, FT

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Appendix D**FATCOD-B Permission**

Nicole Daley <nicole.daley@pop.belmont.edu>

Mar 4, 2019, 3:13 PM

to kay.frommelt

Mrs. Frommelt,

My name is Nicole Daley and I am a DNP student at Belmont University in Nashville, TN. As part of my doctoral program research I am completing my DNP project on end-of-life care. I would love you use your tool (FATCOD-form B) as it relates to your article, "Attitudes Toward Care of Terminally Ill: An Educational Intervention. I am looking to use it similarly in your article to assess nursing staff's attitudes towards end-of-life care.

Thank you so much for helping me with the completion of this project. I look forward to hearing from you.

Warm Regards,
Nicole Daley

Katherine Frommelt

Mar 4, 2019, 5:09 PM

To: Nicole.daley@pop.belmont.edu

I am assuming that you have a copy of the tool and the scoring instructions. i am therefore giving you permission to use the FATCOD, Form B. Best of luck with your studies.

Katherine H a Murray Frommelt, PhD, RN, PDE, CGC, FT

Appendix E**Letter of Invitation to Participate in Research****Attitudes Towards End-of-life care: An Educational Intervention in Long-term Care**

Dear NHC Staff,

I invite you to participate in a research study conducted by Nicole Mullen, student in the Belmont University Doctor of Nursing Practice Program. My faculty advisor is Dr. Jeannie Giese, Assistant Professor, School of Nursing.

The purpose of this project is to help improve end-of-life care in long-term care facilities, while enhancing confidence and job satisfaction of nursing assistants. You are eligible to participate in this study if you are a nursing assistant over the age of 18. I will ask you to attend an educational session and complete a survey. The educational session and survey should take around 45 minutes. The educational session and survey contain information and questions about attitudes toward end-of-life care. Your responses will be anonymous and confidential. Please do not write any identifying information (your name, address, etc.) on your survey.

Your participation in this study is completely voluntary. If you choose to participate you may choose to discontinue participation at any time, and you may choose any of the survey questions that you do not wish to answer. Your completion of the survey and returning it to the investigators indicates your consent to participate in this study. Feel free to contact me at nicole.daley@pop.belmont.edu or (412) 926-4219 if you have any questions.

Sincerely,

Nicole Mullen, DNP Student