

CRITICAL CARE NURSES' ATTITUDES TOWARDS THE CARE OF THE DYING:
AN EDUCATIONAL INTERVENTION

A thesis presented to the faculty of the Graduate School of
Western Carolina University in partial fulfillment of the
requirements for the degree of Master of Science in Nursing.

By

Andrea Watson Alvaro

Director: Dr. Judy Mallory
Associate Professor of Nursing
Nursing Department

Committee Members: Dr. Linda Comer, Nursing
Dr. Vincent Hall, Nursing

March 2009

ACKNOWLEDGEMENTS

I would like to thank my committee members for all their devotion and assistance from beginning to end. In particular, I would like to thank Dr. Judy Mallory for her continued support and encouragement as my mentor throughout this process.

I also offer my sincere thanks to my husband, Nicholas Anthony Alvaro, without whom this would not have been possible. His continued patience and loving support throughout graduate school have been phenomenal.

TABLE OF CONTENTS

Title	Page
List of Tables	4
Abstract	5
Chapter I: Background and Rationale for Study	7
Introduction	7
Purpose Statement	8
Justification of Study	8
Theoretical Framework	9
Assumptions	10
Hypotheses	11
Definition of Terms	12
Chapter II: Review of Literature	13
The Critical Care Environment	13
Nurses' Attitudes Towards Care of the Dying	14
Education on End-of-Life Care	17
Chapter III: Methodology	21
Research Design	21
Setting	21
Sample	22
Protection of Human Subjects	22
Instrument	23
Data Collection	24
Data Analysis	25
Limitations	26
Chapter IV: Results	28
Sample Characteristics	28
Results of Hypotheses	31
Chapter V: Discussion	39
Conclusions	39
Implications	42
Recommendations	44
References	47
Appendix A: Frommelt Attitudes Towards Care of the Dying Scale	52
Appendix B: Outline of Educational Intervention	58
Appendix C: Consent Form	62

LIST OF TABLES

Table	Title	Page
1	Descriptive Statistics: Number of Participants	28
2	Gender of Participants (%).....	29
3	Type of Nursing Preparation (%).....	29
4	Feelings About Previous Education (%).....	30
5	Years of Nursing Experience Compared to Feelings on Education (%)	30
6	Comparison of Pre-Test Scores by ANOVA	31
7	Comparison of Post-Test Scores by ANOVA	32
8	Comparison of Change in Pre- and Post-Test Scores Between the Intervention and Comparison Groups	33
9	Analysis of Nurses' Previous Education and Attitudes by ANOVA.....	34
10	Analysis of Nurses' Experiences with Family Deaths and Attitudes by ANOVA	35
11	Analysis of Nurses' Experiences with Friend Deaths and Attitudes by ANOVA	36
12	Analysis of Nurses' Experiences with Pet Deaths and Attitudes by ANOVA	36
13	Analysis of Relationship Between Years of Nursing Experience and Attitudes Towards Care of the Dying	37
14	Analysis of Relationship Between Years of Nursing Experience and Attitude Change (Pre-Test versus Post-Test).....	38

ABSTRACT

CRITICAL CARE NURSES' ATTITUDES TOWARDS THE CARE OF THE DYING:
AN EDUCATIONAL INTERVENTION

Andrea Watson Alvaro, M.S.

Western Carolina University (March 2009)

Director: Dr. Judy Mallory

Nurses play a key role in providing care at the end of life. Historically, though, nursing education has not been effective in providing education on end-of-life care. While society expects nurses to provide the best care possible for all patients, nurses may not be educationally prepared to fulfill this expectation. Studies have been done in the past to examine nurses' attitudes towards care of the dying, but little research has been done focusing specifically on critical care nurses. This research does a thorough literature review to analyze the critical care environment, nurses' attitudes towards care of the dying, and education on end-of-life care.

Critical care nurses' attitudes towards care of the dying were examined in this study using the FATCOD (Frommelt Attitudes Toward Care of the Dying) scale and a demographics questionnaire. The study evaluated the impact of an educational intervention on the attitudes of critical care nurses, using an intervention group and a comparison group. Relationships between demographic components and attitudes towards care of the dying were also assessed.

Results of this study indicate that educating critical care nurses on end-of-life care positively and significantly affects their attitudes towards care of the dying. Most nurses

do not feel like they are adequately prepared in nursing school to care for the dying patient. In order to prepare nurses to effectively care for the dying patient, education must be incorporated into both undergraduate studies and staff development in healthcare institutions.

CHAPTER I: BACKGROUND AND RATIONALE FOR STUDY

Introduction

Death is an inevitable phenomenon that affects every human being. Nurses are present at both the beginning and the end of life, and play a key role in caring for dying patients. That role is seen as one of the most stressful facets of nursing (Hopkinson, Hallett, and Luker, 2005). Compared to other associates of the health care team, nurses spend more time with dying patients (Thacker, 2008). Caring for the dying patient might evoke attitudes and emotions in nurses such as stress, anxiety, sadness, and fear. Nurses' attitudes toward death and dying could affect the nursing care they provide.

In 1997, the International Council of Nurses mandated that nurses have a primary responsibility for ensuring that dying patients have a peaceful death experience (International Council of Nurses, 1997). In the critical care environment, one fifth of the patients die during their hospitalization (Beckstrand and Kirchhoff, 2005). Because the nurse has the greatest amount of contact with the dying patient, society expects that nurses are prepared to provide the best care possible (Frommelt, 1991). Despite this social expectation, it has been suggested that contemporary nursing education may not prepare nurses for this important role (Brajtman, Fothergill-Bourbonnais, Casey, Alain, and Fiset, 2007).

According to Mallory (2003), nursing education has historically lacked an effective approach to providing education on end-of-life care. Education on care of the dying, either at the academic level or as continuing education, should be provided if nurses are expected to effectively care for dying patients. In a study by Frommelt (1991),

76.5% of nurses surveyed felt inadequately prepared to care for the terminally ill. The same study concluded that nurses who were educated to deal with the terminally ill had more positive attitudes toward care of the dying than those who were not educated. Providing end-of-life care to patients and their families may evoke stress if the nurse has not been sufficiently trained in the process (Beckstrand and Kirchhoff, 2005). Therefore, education on end-of-life care is a necessity for nurses.

Purpose Statement

The purpose of this research was to evaluate the impact of an educational intervention on the attitudes of critical care nurses toward care of the dying as well as assess the relationship between demographic components and attitudes toward care of the dying.

Justification of Study

According to Beckstrand and Kirchhoff, "Serious deficiencies in end-of-life care in intensive care units continue to exist" (2005, p. 401). This is a world-wide problem due in part to a lack of nursing education on end-of-life care (Easom, Galatas, and Warda, 2006). Although much research has been done on nurses' attitudes in general, little has been done focusing particularly on critical care nurses. This study will yield information on the effects of an educational intervention on critical care nurses' attitudes toward the care of the dying. It will also assess the relationship between certain demographics and nurses' attitudes on care of the dying. The conclusions drawn from this study will be beneficial to nurses and nurse educators regarding care of the dying patient. The study

will provide information on nurses' educational needs, both in the undergraduate curriculum and in continuing education within the healthcare institution. Additionally, nurses will be made aware of their own attitudes toward caring for a dying patient. Through this self-reflection, nursing care may be improved. The researcher's hope is to use the study's findings to improve overall nursing care towards the dying patient, particularly in the critical care environment.

Theoretical Framework

Theory in nursing provides structure to explain, support, and guide professional nursing practice (Ryan, 2005). Jean Watson's Theory of Human Care describes the nurse's caring process by which a patient attains health or dies a peaceful death (Tomey and Alligood, 2006). A caring attitude is a dynamic phenomenon in the culture of nursing. Caring in nursing can be described as an art, and demonstrates a commitment to serve the patient (Samarel, 1991). Watson believes that nurse-patient relationships which have a therapeutic outcome are the core of nursing practice (Tomey and Alligood, 2006).

Watson's theory describes ten carative factors of a nurse, including the development and growth of a helping-trust relationship and assistance with meeting human needs (Tomey and Alligood, 2006). All ten carative factors require the nurse to make a conscious decision and commitment to truly care for the patient (Watson, 1988). In the case of the dying patient, the nurse must respect the patient's decision to die and help the patient achieve fulfillment and peace with him/herself. Caring is a moral ideal of nursing that encompasses a respect for human dignity and patient decisions.

A nurses' self-actualization plays a major role in caring for patients. Watson proposes that "caring for the self is a prerequisite to caring for others" (Tomey and Alligood, 2006, p. 98). By being aware of one's own attitudes and feelings, a nurse can provide more holistic care to the patient. In order for the nurse to help a patient face and deal with death, he or she must first come to terms with death within him/herself. Many times, nurses caring for patients at the end-of-life develop a calloused exterior and detach themselves from the death to avoid emotional arousal (Samarel, 1991).

In this research study, nurses' attitudes towards care of the dying patient are examined. This directly relates to Watson's theory on human caring. A nurse must examine his/her own attitudes toward death before being able to truly care for the dying patient. Because the United States has established a philosophy of curing, nurses are taught more about helping a patient restore health than about the nurses' role in providing a good death (Watson, 1988). Technological advancements and time constraints have undermined nursing's basis of caring (Tomey and Alligood, 2006). Despite nursing's barriers to caring, caring acts are essential for a peaceful death and result in human need fulfillment (Samarel, 1991).

Assumptions

1. Nurses experience anxiety when providing care for the dying patient (Cooper and Barnett, 2005).
2. Nurses attempt to detach themselves from patient death experiences (Samarel, 1991).
3. Nurses receive limited education on care for the dying patient (Matzo, Sherman, Penn, and Ferrel, 2003).

4. Nurses' provision of end-of-life care varies according to work experience, culture, religion, and personal experiences (Dunn, Otten, and Stephens, 2005; Salahuddin et al., 2008).

Hypotheses

1. Null: There will be no significant difference in attitudes toward care of the dying between critical care nurses who receive an educational intervention and those who do not receive the education. Alternate: There will be a significant difference in attitudes toward care of the dying between critical care nurses who receive an educational intervention and those who do not receive the education.
2. Null: There will be no significant change in critical care nurses' attitudes toward the care of the dying after an educational intervention when compared to those without the education. Alternate: There will be a significant change in critical care nurses' attitudes toward the care of the dying after an educational intervention when compared to those without the education.
3. Null: There will be no significant relationship between prior education on care of the dying and critical care nurses' attitudes toward care of the dying. Alternate: There will be a significant relationship between prior education on care of the dying and critical care nurses' attitudes toward care of the dying.
4. Null: There will be no significant relationship between prior personal experiences with death and critical care nurses' attitudes toward care of the dying. Alternate: There will be a significant relationship between prior personal experiences with death and critical care nurses' attitudes toward care of the dying.

5. Null: There will be no significant relationship between years of nursing experience and critical care nurses' attitudes toward care of the dying. Alternate: There will be a significant relationship between years of nursing experience and critical care nurses' attitudes toward care of the dying.

Definition of Terms

Attitudes Toward Care of the Dying- views on various aspects of the dying process and palliative care that cause a person to react in a certain way when caring for the dying patient; may be comprised of cognitive, affective, and psychomotor elements.

End-of-life- a time frame in which death may take place; may be hours to months (Easom et al., 2006).

Educational Intervention- the implementation of a teaching and learning experience for nurses about end-of-life care and the dying patient.

Critical Care Nurse- "a licensed professional nurse who is responsible for ensuring that acutely and critically ill patients and their families receive optimal care," ("About Critical Care Nursing," 2009, ¶ 1).

Palliative Care- medical care that focuses on improving quality of life for patients and families dealing with life-threatening illness; it involves prevention and relief of symptoms through assessment and treatment of pain along with physical, spiritual, and psychosocial needs ("WHO Definition," 2008).

CHAPTER II: REVIEW OF LITERATURE

The Critical Care Environment

Critical care nurses are expertly trained to care for critically ill patients; however, many critical care nurses feel inadequately prepared to provide end-of-life care to patients in the intensive care unit (Ciccarello, 2003). The nurses attribute this to lack of support and training on end-of-life care. A 2008 study identified gaps in the knowledge and attitudes of critical care nurses in Pakistan (Salahuddin et al., 2008). For instance, there were discrepancies on knowledge of terms such as brain death, comfort measures, and life support. Such lack of knowledge is often reflected in the care these nurses provide to their dying patients.

Death in the intensive care environment can seem unnatural and difficult to deal with for the nurses. It is thought to be a very painful and stressful process for the nurses who provide continuous care to the patients (Beckstrand and Kirchhoff, 2005). Unlike other healthcare providers, nurses stay with the patient and family on a constant basis. According to Watson's Theory of Human Care, nurses are the caring agents in healthcare; nurses have a commitment to care for the patient in both life and death (Watson, 1988).

Our society has become a death-denying society in which Americans avoid speaking of death at all (Frommelt, 1991). Rather than discuss how to make a family member comfortable and allow him to die a good death, Americans focus on the medical treatments that give hope, although this hope is often unrealistic. In many cases, technology has become a barrier to dying with dignity. According to Beckstrand,

Callister, and Kirchhoff, “Technological advancements in aggressive medical management at the end of life have led more Americans to fear how they die rather than death itself” (2006, p. 38). Technology has also become a barrier to nurses’ caring ideals, such as meeting the mental and spiritual needs of the patient in addition to any physical needs. Many times, nurses find themselves caring for a piece of technology rather than the patient himself. Nurses must find a way to care for the dying patient, to make the death a satisfying and peaceful one (Tomey and Alligood, 2006).

Nurses’ Attitudes Towards Care of the Dying

According to Frommelt (1991), research has demonstrated that nurses often exhibit negative attitudes and behaviors toward caring for the dying patient. Nurses’ attitudes can be attributed to many factors, including personal death experiences. Societal attitudes and expectations of death and nurses’ roles are often disproportionate to the reality of the death and dying experience (Mallory, 2003).

Caring for the dying patient and his/her family is often described by nurses as the most painful and stressful element of the nurse’s role (Beckstrand and Kirchhoff, 2005). In fact, stress levels are statistically higher in hospital-based nurses who have frequent exposure to dying patients than in those who are not exposed (Mitchell, Sakraida, Dysart-Gale, and Gadmer, 2006). This stress may be due in part to a nurse’s lack of confidence in providing appropriate care to the dying (Brajtman et al., 2007). There is little research available on the coping mechanisms nurses use to cope with this particular stressor. Some nurses simply focus on other tasks to distract them from the emotional toll of the

dying patient (Hopkinson, et. al, 2005). If this stress is not appropriately dealt with, it will continue to cause anxiety when caring for the dying patient.

Nurses who care for the dying experience a variety of emotions and attitudes, including anxiety, apprehension, fear, and sadness (Weigel, Parker, Fanning, Reyna, and Gasbarra, 2007). Nurses can change the way end-of-life care is delivered by becoming aware of these attitudes and striving to recognize death as a natural part of life (Ciccarello, 2003).

Anxiety, on many different levels, is associated with care of the dying. While nurses may be anxious because they are uncomfortable with their skills, they are also anxious to have the training to expertly care for patients at their ends-of-life (Ciccarello, 2003). Nurses' anxiety is due in part to a lack of sufficient support, both emotionally and physically, from their nursing education programs (Dinsdale, 2004). Nurses are often reluctant to discuss advance directives with patients and/or their families because of their anxieties and discomforts (Duke and Thompson, 2007). Advance directives are a major element of palliative and end-of-life care, and nurses play a huge role in their existence or lack of at end of life. A phenomenon known as 'conspiracy of silence' exists in healthcare, where providers fail to discuss how patients affect them and the emotional battles they experience (Cooper and Barnett, 2005). In order to provide appropriate end-of-life care, nurses must overcome their anxiety and create a caring environment in which the therapeutic process of nursing can occur (Mitchell et al., 2006).

In addition to anxiety, fear plays a major role in end-of-life care. First and foremost, many nurses are afraid of death itself (Wessel and Rutledge, 2005). Fear of death is comprised of several components, including fear of oneself or a significant other

dying and fear of the dying process. Nurses often attempt to avoid thoughts about death until they are faced with a dying patient. Taking care of the dying patient forces the nurse to face his or her fears, although appropriate coping mechanisms are not always utilized. Furthermore, fear has been identified as one of the barriers to patient advocacy in the nurses' end-of-life role (Thacker, 2008). Nurses often fear that sharing personal opinions on making informed decisions and being an advocate for the patient may create conflict within the healthcare team. Even when a patient is suffering, a nurse may not speak up for fear of retribution. Historically, nurses are taught not to impose their opinions on patients and families, but to remain objective at all times. However, there are times when families and patients need the nurse to be a friend as well as a nurse.

Personal bias can interfere with appropriate end-of-life care. Developing a self-awareness of bias and one's ability to deal with death is essential for an effective nurse-patient relationship at end-of-life (Ciccarello, 2003). Although nurses may have a different set of values and beliefs from their patients and families, they can still be respectful and sensitive in preparing the patient for a good death experience. Providing end-of-life care requires a nurse's complete attention. However, it is not until the nurse becomes aware of his or her attitudes towards death that complete attention can be devoted. Patients have identified nurse presence as the most important intervention at end-of-life; presence in this case is defined as making one's whole being available to the patient. Part of the awareness process includes appropriately grieving on a personal level (Brosche, 2003). The grieving process may involve someone in the nurse's own family, the loss of a friend or pet, or grieving for the patient at hand. Regardless, the grieving process is a fundamental aspect of providing quality nursing care.

Another major component of bias and self-awareness is culture (Easom et al., 2006). Nurses and caregivers must be in tune to cultural values and practices regarding patient death and dying. Research has shown that nurses often fail to recognize that grieving and mourning are influenced by different cultures. Cultural views of death vary according to rituals, emotions, communication, and ethics. Being culturally aware and knowledgeable can ease the end-of-life process for both the nurse and the patient.

Past research has investigated the relationship between nurses' attitudes toward end-of-life care and certain demographic factors. For instance, Dunn et al. (2005) found that positive attitudes and care are associated with more experience taking care of dying patients. Thus, nurses who have more years of experience and more personal experiences with dying patients will be better suited to care for the dying patient. Other factors such as age, gender, religion, and degrees of schooling have also been studied. According to Barrere, Durkin, and LaCoursiere (2008), younger age was more conducive to attitude change after an educational intervention with student nurses. However, in their study, gender was not a significant factor. Demographic factors may play an important role in nurses' attitudes toward care of the dying.

Education on End-of-Life Care

Death is the greatest certainty of life; therefore, it is intriguing that nurses fail to receive adequate education on death and dying in their undergraduate curriculums. According to the American Association of Colleges of Nursing, preparation on end-of-life care for nurses has been inconsistent, even neglected at times, in the nursing curricula ("Peaceful Death," 2004). A 1999 study found that a mere 2% of content in nursing texts

touched on end-of-life care (Duke and Thompson, 2007). However, education and preparation on end-of-life care have been identified as important means of enhancing the quality of care given to the dying patient (Hopkinson et al., 2005). As the American population ages and diseases increase in prevalence, education on end-of-life care will become more and more necessary (Durkin, 2003). One key barrier to teaching end-of-life care may be that some educators lack the comfort and competence needed to effectively teach the content (Brajtman et al., 2007).

Fifteen end-of-life competencies have been established by the American Association of Colleges of Nursing for guiding nursing education; although there may not be a particular course devoted to care of the dying, the information can be dispersed throughout courses such as health assessment, psychiatric nursing, and pharmacology (“Peaceful Death,” 2004). For instance, teaching end-of-life care in a psychiatric nursing course along with therapeutic communication content may be an effective way to teach nurses how to communicate with dying patients and their families (Durkin, 2003).

According to Matzo et al. (2003), national educational efforts were initiated in 1999 to address educational inadequacies in end-of-life nursing care. Among those efforts is a well-known curriculum known as ELNEC, the End-of-Life Nursing Education Consortium. The curriculum is a series of eight learning modules designed to teach knowledge, attitudes, and skills for effective end-of-life care. This course teaches nursing faculty, staff development nurse educators, and practicing specialty nurses about end-of-life care, and how to teach that care to students and practicing nurses (“End of Life,” 2009). The first course was taught in the United States in 2001, and has since expanded internationally. Currently, 750 undergraduate nursing faculty and 800 staff

development educators have been trained in the program. One study done in 2002 evaluated the effects of the ELNEC program on nurses' attitudes, anxiety, and knowledge, and found that the ELNEC program was effective in increasing nurses' knowledge on end-of-life care as well as decreasing death anxiety (Kurz and Hayes, 2006). In addition to ELNEC, the University of Washington School of Nursing created a program entitled the Toolkit for Nursing Excellence at End of Life Transition, TNEEL (Brown and Timms, 2003). Both of these programs have seen tremendous interest and usage; they are revised when necessary to reflect the most current thinking on end-of-life care.

Research suggests that end-of-life education should include both clinical and didactic elements. According to one research study, nursing students desire to have clinical experiences caring for a dying patient; they feel they have a lot to gain by working with seasoned nurses who can support them in their end-of-life experience (Brajtman et al., 2007). The students, who did receive some education on end-of-life care in their undergraduate curriculums, were not content with their learning. They felt that more subject matter on death and dying should have been covered to adequately prepare them for their role post-graduation.

Many recommendations have been made for end-of-life educational content; according to Ciccarello, content should include "needs assessment, therapeutic communication, grief and loss, managing prognostic uncertainty, spiritual dimensions of life and illness, and complementary therapies" (2003, p. 220). In addition to the above named, Wessel and Rutledge (2005), suggest including goals of care and an overview of hospice ideals. According to Frommelt (2003), end-of-life education can be

accomplished via videos, lectures, readings, discussions, and clinical exposure to dying patients. Although the content of this thesis focuses on nurses, many feel that education on end-of-life care should be taught to all members on the healthcare team (Beckstrand et al., 2006), including physicians, respiratory therapists, and dieticians.

According to a research study by Mallory (2003) on attitudes toward care of the dying, nursing students' attitudes improved after education on palliative care. Research has demonstrated that education on end-of-life care positively affects attitudes. A study by Frommelt (1991) also found significant improvements in practicing nurses' attitudes toward care of the dying after implementation of a hospice-based educational program. As these studies explain, educating nursing students as well as practicing nurses on end-of-life and palliative care positively affects attitudes toward care of the dying, thus ultimately improving patient care. Nurse educators, both academic and clinical, have a crucial role in the future of end-of-life care.

CHAPTER III: METHODOLOGY

Research Design

A quasiexperimental, longitudinal design was chosen for this study; it was composed of a pre-test, intervention, and post-test. There was one comparison group and one intervention group. Each group was asked to complete the FATCOD (Frommelt Attitude Toward Care of the Dying) Scale and a demographics questionnaire (see Appendix A). The intervention group then participated in an educational intervention on care of the dying patient; an outline of this educational intervention can be found in Appendix B. The comparison group did not receive any educational intervention. Two weeks after the education, each group was asked to complete the FATCOD and demographics questionnaire again. A self-chosen identification number was requested on each scale and survey in order to compare pre- and post-intervention data for each participant.

Setting

The research study was conducted in an 800+ bed medical facility in the Southeastern United States over a two-month period in the fall of 2008. The comparison group was comprised of registered nurses from one intensive care unit while the intervention group was comprised of registered nurses from another intensive care unit in the same hospital. Both units had a similar number of staff nurses on payroll, and each unit had 14 patient beds. The units were located on separate corridors and floors of the hospital.

Sample

The population studied in this research was composed of intensive care nurses. The nonrandom, convenience sample consisted of licensed and practicing registered nurses in two intensive care units within a hospital system. Nurses were chosen by self-selection after an explanation of the study was given to all staff via email and flyers in the units. Because of self-selection into the study, some bias may have been introduced. The sample sizes for each group were approximately equal. The researcher's goal was to have a 60% response rate from each group of nurses.

Protection of Human Subjects

Because the study involves human subjects, project approval by the Institutional Review Board was obtained from both the hospital system and Western Carolina University. Informed consent was obtained from each participant via a form attached to each tool and questionnaire (see Appendix C). As described in the form, completion of the tool and questionnaire implied consent for participation in the study. The form explained to the participant the following: the purpose of the study, participant requirements, benefits, risks, and contact information for questions. Participation in the study was completely voluntary. Because the study could evoke emotions related to death and dying, hospital chaplains were made available to the participants should they need assistance. The use of the self-selected identification number allowed for anonymity in the study.

Instrument

The instrument used in this study was the Frommelt Attitudes Toward Care of the Dying Scale (FATCOD). The FATCOD, designed and copyrighted by Katherine Frommelt in 1988, was used with permission granted to the researcher. FATCOD consists of 30 statements in which the participant is asked to indicate his or her level of agreement, ranging from strongly disagree to strongly agree. While two-thirds of the statements address nurses' attitudes toward the dying patient, the other third address nurses' attitudes toward the patient's family (Frommelt, 1991).

The 30 statements are Likert-type items scored on a 5-point scale: 1 (strongly disagree), 2 (disagree), 3 (uncertain), 4 (agree), and 5 (strongly agree). Half of the statements are negatively worded and half are positively worded. Thus, scoring for the negative items is reversed. Scores range from 30-150, with higher scores indicating more positive attitudes.

The FATCOD has been deemed both valid and reliable as a tool to measure nurses' attitudes toward care of the dying. At the time of her original study, Frommelt (1991) computed a content validity index of 1.00. An interrater agreement of 0.98 was also obtained at that time using a panel of expert judges in the field (Mallory, 2003). Reliability was established by Frommelt via a test-retest procedure completed twice. The Pearson product-moment correlation coefficients obtained were $r = 0.94$ and $r = 0.90$ respectively. These statistics confirm that FATCOD is both valid and reliable for use. According to Barrere et al. (2008), FATCOD has been used in 16 other countries, in 9 different languages, in addition to its use in 79 colleges/universities and healthcare systems in the United States.

Data Collection

Prior to administering the FATCOD and demographics questionnaires, the researcher obtained IRB approval from both the hospital system and Western Carolina University. Via email and flyers, the researcher advertised the research study in both intensive care units two weeks prior to the first surveys (pre-test). The researcher delivered the packets, which included an informed consent, FATCOD, and demographics questionnaire, to each participating unit. The packets were kept in a central location for the nurses to retrieve and complete them. Manila envelopes were provided for submission of the completed packets. For a two week period, reminder emails were sent out to the nurses in each unit to encourage their participation, although participation was completely voluntary. At the completion of the two week period, all packets were collected and stored for later analysis.

The researcher, a Masters candidate as a Nurse Educator, then implemented an educational intervention to nurses in the intervention unit, beginning with the provision of a series of hour-long mandatory staff meetings; participants in the study were required to attend one of the staff meetings. These staff meetings served as discussion forums for the nurses to share their thoughts on death and dying in their particular unit as well as educational opportunities for the researcher to share valuable information on end-of-life care. The nurses were able to provide suggestions for change regarding end-of-life care as well as point out processes done well. Barriers to effective end-of-life care were also identified during these forums. The researcher provided the participants with packets of information to study on their own, including readings and case studies on end-of-life

care. An outline of the information taught in the meetings and the packets can be found in Appendix B. The outline was formed with assistance from the Palliative Care Department at the participating hospital system, and used the ELNEC teaching materials as a reference.

Two weeks after completion of the educational intervention, the researcher again delivered packets to each unit containing the informed consent, FATCOD, and demographics questionnaire. Procedures were conducted in the same way as the first data collection. A two-week period was originally given for participants to complete the surveys (post-test). However, during this two week period, the hospital was undergoing a very intense accreditation survey by the Centers for Medicaid and Medicare Services. Because of the stressful working environment and lack of time to complete the survey, all participants were given a one-week extension for post-test completion. Thus, three weeks in all were taken for completion of the second round of data collection. All packets were then collected, matched by the self-selected identification number, and analyzed.

Data Analysis

Major variables in this study were analyzed using descriptive statistics. Individual scores on the FATCOD were averaged to calculate a mean score for each group of nurses. A frequency table was developed to display frequencies of responses to each of the 30 statements. Ranges and standard deviations were calculated for each group as well, to describe the groups in more detail.

An Analysis of Variance (ANOVA) statistic was calculated to compare the two groups' post-test scores; the results were used to accept or reject the first null hypothesis which states that there is no difference in the two groups' scores. The remaining null hypotheses were also tested using ANOVA procedures. The ANOVA statistic determined whether there was a significant change in attitudes after the educational intervention, when compared to those without the education, as well as whether previous education, prior death experiences, and years of nursing experience had any effect on nurses' attitudes. Tables were constructed to present the data for each hypothesis in a pictorial method. This study used a 0.05 p-level of significance.

Limitations

Both external and internal validity could have been compromised in this research study. To be able to draw conclusions from the data, internal validity must be sound; thus, there should not be competing explanations for the data collected. In this study, there could have been preexisting differences between the two groups of critical care nurses prior to the educational intervention. The researcher was unaware of any preexisting differences; the demographics for each group will be discussed in detail in chapter 4. Additionally, completing the pre-test tool could have had an effect on the post-test performance. This is a common finding with pre-test and post-test research. Attrition could have been a limitation as well. There were two nurses in the intervention group and seven nurses in the comparison group who did not complete the entire project.

External validity could have been compromised by independent events within the intensive care units that occurred during the research period, such as any patient deaths

and the stressful survey for accreditation. These events would have been unavoidable, but could have affected the outcomes. The sample chosen could have also affected external validity, because critical care nurses may be more experienced in death and dying in general than other groups of nurses. Because the purpose of this research was to specifically examine critical care nurses' attitudes toward care of the dying, their experiences must be considered in the analysis of the data.

CHAPTER IV: RESULTS

Sample Characteristics

Descriptive statistics were performed on the data in this study. The intervention group had thirty five nurses (n=35) complete the pre-test while the comparison group had twenty one nurses (n=21) complete the pre-test (Table 1). Two nurses in the intervention group and seven nurses in the comparison group did not complete the post-test for reasons largely unknown to the researcher; one nurse did resign his nursing position during the study. The total number of pre-test participants was 56 (n=56); the total number of post-test participants was 47 (n=47).

Table 1. *Descriptive Statistics: Number of Participants.*

	Intervention (n)	Comparison (n)	Total (n)
Pre-test	35	21	56
Post-test	33	14	47

Both the intervention group and the comparison group were comprised of male and female nurses. Table 2 displays the percentages of males and females in each group. A Fisher's Exact Test found the two groups to be similar, and comparable, with a p-value of 1.000.

Table 2. *Gender of Participants (%)*.

	Intervention	Comparison	p-value
Male	22.86	19.05	
Female	77.14	80.95	
			1.000

The nurses in each group had a variety of levels of nursing preparation, including Diploma, Associate Degree (ADN), and Baccalaureate Degree (BSN) preparation. Table 3 shows the percentage of nurses in the individual groups with each type of preparation. The two groups were not significantly different in regards to this demographic factor.

Table 3. *Type of Nursing Preparation (%)*.

	Intervention	Comparison	p-value
Diploma	5.71	14.29	
ADN	48.57	52.38	
BSN	45.71	33.33	
			0.4622

Nurses in both the intervention and comparison groups were asked if they felt that their previous nursing education on death and dying was adequate. The two groups were significantly different ($p < 0.05$) in their feelings about that adequacy. Table 4 displays the percentages of nurses in each group who felt their education was either adequate or inadequate. The difference between the groups was significant at a p-value of 0.0001. When both groups were combined, 25% of the nurses felt their education on death and dying was adequate while 75% of the nurses felt their education was not adequate.

Table 4. *Feelings About Previous Education (%)*.

	Intervention	Comparison	p-value
Adequate	5.71	57.14	
Not Adequate	94.29	42.86	
			0.0001

A comparison was done between years of nursing experience and feelings on adequacy of nursing education for preparing the nurses for death and dying. The results are displayed in Table 5. Nurses who had between 0 and 5 years of nursing experience did not feel prepared as a whole for death and dying; 27.3% of the nurses felt prepared while 72.7% did not feel prepared. Likewise, nurses with 6 to 10 years of nursing experience did not feel prepared either; 20% of the nurses felt prepared while 80% did not feel prepared. 100% of the nurses with 16-20 years of experience did not feel prepared.

Table 5. *Years of Nursing Experience Compared to Feelings on Education (%)*.

Years of Experience	Prepared	Not Prepared
0-5	27.3	72.7
6-10	20.0	80.0
11-15	33.3	66.7
16-20	0.0	100.0
21-25	40.0	60.0
>25	14.3	85.7

The pre-test scores for the two groups of critical care nurses were similar. The mean pre-test score for the intervention group was 129.97 while the mean pre-test score for the comparison group was 129.76 (Table 6). The comparison value (p-value) for these two mean scores was 0.9429 according to ANOVA testing procedures. The two groups were comparable based on their pre-test scores.

Table 6. *Comparison of Pre-Test Scores by ANOVA.*

Group	Pre-Test Mean	Standard Deviation	p-value
Intervention	129.97	10.22	
Comparison	129.76	11.07	
			0.9429

An analysis of each research hypothesis follows to describe in detail the findings of this study.

Results of Hypotheses

Hypothesis 1

Hypothesis 1: There will be no significant difference in attitudes toward care of the dying between critical care nurses who receive an educational intervention and those who do not receive the education.

There was a significant difference ($p < 0.05$) between post-test scores on attitudes towards care of the dying between the intervention and comparison groups of critical care nurses. Using an ANOVA procedure, the p-level for this hypothesis was 0.0187. The

mean post-test score for the intervention group was 134.97; the mean post-test score for the comparison group was 127 (Table 7). The null hypothesis was rejected by the researcher.

Table 7. *Comparison of Post-Test Scores by ANOVA.*

Group	Post-Test Mean	Standard Deviation	p-value
Intervention Comparison	134.97 (n 33)	8.84	0.0187
	127.00 (n 14)	13.06	

Hypothesis 2

Hypothesis 2: There will be no significant change in critical care nurses' attitudes toward the care of the dying after an educational intervention when compared to those without the education.

There was a significant difference ($p < 0.05$) between pre-test scores and post-test scores on attitudes towards care of the dying in the intervention group after the education when compared to the comparison group without the education. The difference between pre-test and post-test scores in the intervention group was 4.70. The difference between pre-test and post-test scores in the comparison group was -1.43. According to ANOVA testing, these results are significant at a p-value of 0.0016. The researcher rejected the null hypothesis. Table 8 displays these results. The pre-test scores for the intervention group ranged from 107 to 150; the post-test scores for the intervention group ranged from 113-150. The pre-test scores for the comparison group ranged from 109-145; the post-test scores for the comparison group ranged from 103-148.

Table 8. *Comparison of Change in Pre- and Post-Test Scores Between the Intervention and Comparison Groups.*

Group	Pre-Test Mean	Post-Test Mean	Net Change	p-value
Intervention Comparison	129.97 (n 35)	134.97 (n 33)	4.70	0.0016
	129.76 (n 21)	127.00 (n 14)	-1.43	

Hypothesis 3

Hypothesis 3: There will be no significant relationship between prior education on care of the dying and critical care nurses' attitudes toward care of the dying.

An ANOVA test was conducted on the pre-test scores for all participants to determine if previous education on care of the dying had any effect on their attitudes towards care of the dying. There was no significant relationship ($p < 0.05$) between previous education and their attitudes on care of the dying. The p-level obtained by the ANOVA procedure was 0.9170 (Table 9). Therefore, the researcher accepted this hypothesis. A non-parametric test, Kruskal-Wallis, was also conducted for this hypothesis to look at the data in a different way. The p-value obtained by this procedure was 0.7897, also not significant.

The mean pre-test score for nurses who had taken a specific course on death and dying was 130.92. The mean pre-test score for nurses who had material on death and dying included in their nursing courses was 129.50. The mean pre-test score for nurses who had no education on death and dying was 130.33. While this particular data is not statistically significant, it is of some importance to note that the majority of the nurses had some material on death and dying covered in their nursing courses; thirty eight of the

fifty six total participants fell into this category. Twelve nurses had a specific course on death and dying, while six nurses had no education.

Table 9. *Analysis of Nurses' Previous Education and Attitudes by ANOVA.*

Education	n	Pre-Test Mean	Standard Deviation	p-value
Specific Course	12	130.92	9.90	
Material Included	38	129.50	9.45	
No Education	6	130.33	17.88	
				0.9170

Hypothesis 4

Hypothesis 4: There will be no significant relationship between prior personal experiences with death and critical care nurses' attitudes toward care of the dying.

An ANOVA test was performed on the pre-test scores for all participants to determine if various personal experiences with death had any effect on the critical care nurses' attitudes towards care of the dying. There was no significant relationship ($p < 0.05$) between personal experiences with death, including family, friend, and pet deaths as well as no death experience, and attitudes towards care of the dying. The p-value obtained by the ANOVA procedure for family death was 0.6264 (Table 10). The p-value obtained by ANOVA for friend death was 0.4881 (Table 11). The p-value obtained by ANOVA for pet death was 0.3181 (Table 12). There were zero nurses who had no experience with death at all. The researcher accepted this hypothesis.

Although this data is not statistically significant, it does hold some valuable information. The mean pre-test scores were higher in all categories when the nurses had experienced that particular type of death as opposed to not having that experience. When they had experienced a family death, the mean pre-test score for the nurses was 130.06; when they had not experienced a family death, the mean score was 127.0. When they had experienced the death of a close friend, the mean pre-test score was 130.59; when they had not experienced the death of a friend, the mean pre-test score was 128.53. When they had experienced a pet death, the mean pre-test score was 130.33; when they had not experienced a pet death, the mean pre-score was 125.40.

Table 10. *Analysis of Nurses' Experiences with Family Deaths and Attitudes by ANOVA.*

Experience	n	Pre-Test Mean	Standard Deviation	p-value
Family Death	53	130.06	10.58	
No Family Death	3	127.0	8.89	
				0.6264

Table 11. *Analysis of Nurses' Experiences with Friend Deaths and Attitudes by ANOVA.*

Experience	n	Pre-Test Mean	Standard Deviation	p-value
Friend Death	37	130.59	11.09	
No Friend Death	19	128.53	9.19	
				0.4881

Table 12. *Analysis of Nurses' Experiences with Pet Deaths and Attitudes by ANOVA.*

Experience	n	Pre-Test Mean	Standard Deviation	p-value
Pet Death	51	130.33	10.04	
No Pet Death	5	125.40	14.62	
				0.3181

Hypothesis 5

Hypothesis 5: There will be no significant relationship between years of nursing experience and critical care nurses' attitudes toward care of the dying.

Analyses were conducted to determine if nurses' attitudes towards care of the dying were related to years of nursing experience. According to ANOVA procedures, there was no significant relationship ($p < 0.05$) between years of nursing experience and attitudes toward care of the dying. The p-level was found to be 0.1185 (Table 13). The

researcher accepted this hypothesis. A Spearman correlation coefficient was also calculated on this data, with r , or the correlation, being 0.32.

The mean pre-test scores by years of nursing experience ranged from 125.91 to 137.33. Those with 0-5 years of nursing experience had the lowest mean scores on the pre-test, while the highest mean scores were found in those with 16-20 years of experience. There were only three nurses in the 16-20 years of experience group. Twenty two, or 39%, of the nurses had 0-5 years of experience.

Table 13. *Analysis of Relationship Between Years of Nursing Experience and Attitudes Towards Care of the Dying.*

Years of Experience	n	Pre-Test Mean	p-value
0-5	22	125.91	
6-10	10	128.20	
11-15	9	134.22	
16-20	3	137.33	
21-25	5	136.40	
>25	7	131.43	
			0.1185

Analyses were also completed to determine if years of nursing experience had any effect on the difference, or change, in pre-test and post-test scores. According to ANOVA procedures, there was no significant ($p < 0.05$) relationship between years of

nursing experience and the change in attitude scores. The p-level was found to be 0.4485 (Table 14).

Table 14. *Analysis of Relationship Between Years of Nursing Experience and Attitude Change (Pre-Test versus Post-Test).*

Years of Experience	n	Pre-Test Mean	Post-Test Mean	Mean Change	p-level
0-5	22	125.91	129.16	3.11	
6-10	10	128.20	130.44	4.11	
11-15	9	134.22	137.57	4.00	
16-20	3	137.33	143.33	6.00	
21-25	5	136.40	136.75	-2.50	
>25	7	131.43	132.80	0.60	
					0.4485

Although the data presented in Table 14 is not statistically significant, it is of interest to note that those nurses with 21+ years of nursing experience showed very little improvement in their scores from the pre-test to the post-test. The greatest positive change in scores came in the group with 16-20 years of experience, the same group who had the highest pre-test mean.

In conclusion, based on the results of this study, the researcher was able to accept hypotheses 3, 4, and 5. Hypotheses 1 and 2 were rejected by the researcher. The results of this study will be discussed in greater detail in Chapter V of this thesis.

CHAPTER V: DISCUSSION

Conclusions

While death and dying are commonplace in the intensive care setting, critical care nurses may not be equipped with the education necessary to care for the dying patient. Although some research has been done on nurses' attitudes towards care of the dying in the past, very little research has been done focusing particularly on critical care nurses. This study examined how an educational intervention on death and dying affected attitudes toward care of the dying in critical care nurses. It also analyzed possible relationships between years of nursing experience, previous death experiences, and previous death and dying education and attitudes towards care of the dying.

This quasi-experimental, longitudinal study compared two groups of critical care nurses within the same institution. Both groups completed a pre-test and a post-test, which was comprised of the FATCOD (Frommelt Attitude Toward Care of the Dying) scale as well as a demographic questionnaire. The intervention group received educational training between the pre-test and post-test. The education consisted of a series of staff meetings in which various aspects of death and dying were discussed, as well as a self-study packet created by the researcher on care of the dying patient. The comparison group did not receive any education. All other study procedures were the same for both groups.

This study found a significant difference between post-test scores on attitudes towards care of the dying between the intervention and comparison groups of critical care nurses. The two groups of nurses had nearly identical mean scores on the pre-test in the

study, making the two groups very comparable based on their scores. The groups were only significantly different regarding the adequacy of their previous education on death and dying. Although their pre-test scores were similar, their post-test scores were significantly different. Aside from the hospital's accreditation survey taking place during the post-test period, no other significant events were identified which might have affected either group's mean scores on the post-test. In the researcher's opinion, the difference in post-test scores can be attributed to the educational intervention provided to the intervention group, as further detailed below.

This study found that an educational intervention significantly improved attitudes towards care of the dying in the intervention group of critical care nurses when compared to the comparison group of nurses who did not receive the education. This is consistent with Frommelt's research (1991) in which nurses' attitudes towards care of the dying were significantly improved after educational interventions in a group of practicing nurses. There is no specific research on the effects of education on attitudes of critical care nurses to use for comparison. While the mean scores (attitudes) for the intervention group improved significantly between the pre-test and post-test, the mean scores (attitudes) for the comparison group actually dropped between the pre-test and post-test in this study. Based on these results, one can conclude that organized education on death and dying contributes to more positive attitudes towards care of the dying.

According to the data in this study, there was no significant relationship between attitudes towards care of the dying and previous education on death and dying. However, Frommelt's (1991) study found that taking a previous course about death and dying significantly affected nurses' attitudes towards care of the dying. Frommelt's study was

done on nurses in general while this study focused only on critical care nurses. Perhaps a nurse's specialty in and of itself affects his or her attitudes on care of the dying. Because of these discrepancies, future research could further investigate the relationship between attitudes and previous education as well as that between attitudes and nursing specialization.

There was no significant relationship identified between prior personal experiences with death and attitudes towards care of the dying in this study. However, of interest to note is that pre-test scores were higher in all categories when the nurses had experienced that particular type of death as opposed to not having that experience. For instance, nurses who had previously experienced the death of a family member had a higher mean pre-test score than those who had not had that experience. In general, it can be implied that experiences with death improve attitudes towards care of the dying among nurses, but not in significant amounts.

In this study, there was no significant relationship identified between years of nursing experience and attitudes towards care of the dying. The group of nurses with 0-5 years of experience did have the lowest mean pre-test score, which was anticipated by the researcher. Because there was no significant relationship between years of experience and attitudes, one can conclude that nurses of all experience levels can benefit from education on death and dying.

In addition to the above findings, this study also found that the majority of critical care nurses did not feel that their previous education on death and dying was adequate. This included nurses of all ages and experience levels. Over seventy percent of the nurses in this study with 0-5 years of experience felt their education was not adequate in

death and dying. Eighty percent of those with 6-10 years of experience felt likewise. However, when the data is broken down into the two individual groups of nurses, the nurses in the comparison group felt more adequately prepared by their previous education on death and dying than those nurses in the intervention group. Because the two groups were similar in regards to all other demographic variables, the researcher is uncertain why they were significantly different in regards to this single variable. The reasoning behind this significant phenomenon could be further investigated through the use of qualitative measures, perhaps by interviewing the participants about their previous educational experiences.

Implications

Research on end-of-life care, death, and dying shows that caring for dying patients is one of the most stressful facets of a nurse's career (Hopkinson, Hallett, and Luker, 2005). Coupled with the fact that nurses in general lack adequate education on death and dying (Brajtman, Fothergill-Bourbonnais, Casey, Alain, and Fiset, 2007), patient care suffers at one of the most crucial times in life.

Because of the historical lack of education on end-of-life care, many initiatives have been enacted over the past few years to address education in the classroom. These initiatives include programs such as ELNEC, as well as the fifteen competencies identified by the American Association of Colleges of Nursing for nursing education. This study shows that educational interventions can have a positive effect on nurses' attitudes towards care of the dying. Thus, the data from this study supports the need for the many initiatives in place to increase education and knowledge on end-of-life care.

Although this study yields significant data regarding the effect of education on attitudes towards care of the dying, there is still room for improvement. The maximum score on the FATCOD scale is 150. The average scores on the FATCOD for the intervention groups and control groups were 134.97 and 127.00 respectively on the post-test. The educational intervention used in this study could be greatly expanded upon to improve nurses' attitudes even further.

The data from this study has implications for nursing researchers. The research provides solid evidence that education on care of the dying improves nurses' attitudes towards that care. The data paves the road for future studies on similar topics, such as nursing specialization and attitudes towards end-of-life care and overall adequacy of nursing education in regards to end-of-life care. There has been little existing research up to this point on critical care nurses and their attitudes towards end-of-life care. There is a multitude of research opportunities available based on the results of this study.

The implications drawn from the results of this study are significant for educators of undergraduate students, practicing nurses, and ultimately the dying patient and his or her family. Education on care of the dying can improve nurses' attitudes towards care of the dying patient when provided in a meaningful manner. It is unreasonable to expect that nurses will be able to care for dying patients if they do not receive adequate education on all aspects of such events. According to Frommelt (1991), there is a societal expectation that nurses should be able to provide the best possible care to dying patients. Nurses should be educated in order to meet this very reasonable expectation. Practicing nurses should seek out opportunities for education on end-of-life care, in order to provide patients with a peaceful death experience.

To truly provide quality nursing, Watson's theory of caring should be attended to as well. Regarding dying patients, nurses must be adequately educated on such topics to care for patients in the best way possible. Caring must be provided to all patients, in life and in death. By educating nurses on death and dying, we can enhance the caring aspect of nursing which is a vital aspect of the nursing profession. The researcher's hope in this study was to use the findings to improve overall nursing care towards the dying patient, particularly in the critical care environment. Based on the significant improvements in attitudes seen in the intervention group of nurses, the researcher is confident that positive attitudes will lead to improved patient care at end-of-life.

Recommendations

Based on the results of this study and previous research, education on death, dying, and end-of-life care should be implemented into both academic arenas and hospital settings in order to prepare nurses for death experiences which they are guaranteed to face at some point in their careers. In this study, the researcher received direct feedback from the series of staff meetings/discussions regarding nurses' thoughts and ideas on end-of-life care. The researcher was also able to observe active learning, as the nurses asked quality questions, told stories to illustrate principles, and smiled throughout the discussions. Self-study packets on end-of-life care were also given to each participant. There was no way for the researcher to assess the benefits of the packets. Either the meetings or the self-study packets could have had a positive effect on attitudes, or the combination of the two could have had a synergistic effect. Future

research done in this manner should include follow-up to the self-study packet to truly assess the learning from this method of education.

Future research might also include a similar study comparing a group of critical care nurses to a group of med-surg nurses. Because there was little research available on critical care nurses' attitudes towards care of the dying, it is unknown whether the critical care nurses might have had more positive attitudes from the onset as opposed to other groups of nurses. Med-surg nurses often have much different roles in terms of patient care than do critical care nurses, and would likely exhibit different levels of attitudes and knowledge.

A more structured qualitative component to this research might yield further descriptive data regarding attitudes towards care of the dying. A quantitative survey can provide useful statistical information, but nurses' opinions, comments, and feelings are as equally important. Although there was some degree of qualitative research in the meetings/discussions, that data was not recorded for analysis. It would be intriguing to record nurses' accounts of their previous education on death and dying, how they have developed their current attitudes on care of the dying, and what they feel to be most important in terms of necessary education. Analyzing that qualitative data in addition to the scores on the FATCOD scale would yield more insightful results. It would also be of interest to see if the FATCOD scale in any way caused nurses to reflect on their attitudes and change them independently of the educational intervention. Bringing the dying attitudes to the nurses' attention may very well affect their attitudes on its own.

Further studies might also investigate the relationship between the ELNEC program and nurses' feelings of adequacy about education on death and dying. The data

in this study shows that the most recent cohorts of nurses, who should have seen the effects of the ELNEC initiatives in their classrooms, do not feel educationally prepared to deal with death and dying. Research needs to be done to assess the overall use and effects of the ELNEC program.

There are many aspects of this study that could be both replicated and altered in future studies. Overall, the educational intervention was successful in significantly improving critical care nurses' attitudes towards care of the dying. These results are important for educators to consider and demonstrate a need for improvements in end-of-life care, death, and dying education at various levels, including undergraduate studies. The art of caring for the dying patient is vitally important to success in nursing. Nurses should be confident in their educational preparedness to deal with death and dying. After all, death is the only thing we are truly certain of in life.

REFERENCES

- (2003). ELNEC: End-of-life nursing education consortium training program. Funded by *The Robert Wood Johnson Foundation*.
- (2004). Peaceful death: recommended competencies and curricular guidelines for end-of-life nursing care. Retrieved May 12, 2008, from www.aacn.nche.edu/Publications/deathfin.htm.
- (2008). WHO definition of palliative care. *World Health Organization*. Retrieved May 22, 2008, from www.who.int/cancer/palliative/definition/en/.
- (2009). About critical care nursing. Retrieved March 2, 2009, from www.aacn.org/WD/PressRoom/Content/aboutcriticalcarenursing.content.
- (2009). End-of-life nursing education consortium (ELNEC) fact sheet. Retrieved February 27, 2009, from www.aacn.nche.edu/ELNEC/factsheet.htm.
- Barrere, C.C., Durkin, A., and LaCoursiere, S. (2008). The influence of end-of-life education on attitudes of nursing students. *International Journal of Nursing Education, 5(1)*, 1-18.
- Beckstrand, R.L., Callister, L.C., and Kirchhoff, K.T. (2006). Providing a “good death”: critical care nurses’ suggestions for improving end-of-life care. *American Journal of Critical Care, 15(1)*, 38-45.
- Beckstrand, R.L. and Kirchhoff, K.T. (2005). Providing end-of-life care to patients: critical care nurses’ perceived obstacles and supportive behaviors. *American Journal of Critical Care, 14(5)*, 395-403.
- Benner, P., Kerchner, S., Corless, I.B., and Davies, B. (2003). Attending death as a

- human passage: core nursing principles for end-of-life care. *American Journal of Critical Care*, 12(6), 558-561.
- Brajtman, S., Fothergill-Bourbonnais, F., Casey, A., Alain, D., and Fiset, V. (2007). Providing direction for change: assessing Canadian nursing students' learning needs. *International Journal of Palliative Nursing*, 13(5), 213-221.
- Brosche, T.A. (2003). Death, dying, and the ICU nurse. *Dimensions in Critical Care Nursing*, 22(4), 173-179.
- Brown, K.M. and Timms, J. (2003). Palliative care: "one voice, one vision," the mission of professional nursing for quality of life care approaching the end of life-the South Carolina project. *The South Carolina Nurse*.
- Ciccarello, G.P. (2003). Strategies to improve end-of-life care in the intensive care unit. *Dimensions in Critical Care Nursing*, 22(5), 216-222.
- Cooper, J. and Barnett, M. (2005). Aspects of caring for dying patients which cause anxiety to first year student nurses. *International Journal of Palliative Nursing*, 11(8), 423-430).
- Dinsdale, P. (2004). Inadequate support for students in palliative care. *Nursing Standard*, 19(1), 4.
- Duke, G. and Thompson, S. (2007). Knowledge, attitudes and practices of nursing personnel regarding advance directives. *International Journal of Palliative Nursing*, 13(3), 109-115.
- Dunn, K.S., Otten, C., and Stephens, E. (2005). Nursing experience and the care of dying patients. *Oncology Nursing Forum*, 32(1), 97-104.
- Durkin, A. (2003). Incorporating concepts of end-of-life care into a psychiatric nursing

- course. *Nursing Education Perspectives*, 24(4), 184-185.
- Easom, L.R., Galatas, S., and Warda, M. (2006). End-of-life care: an educational intervention for rural nurses in southeastern USA. *International Journal of Palliative Nursing*, 12(11), 526-534.
- Frommelt, K.H.M. (1991). The effects of death education on nurses' attitudes toward caring for terminally ill persons and their families. *The American Journal of Hospice and Palliative Care*, 8(5), 37-43.
- Frommelt, K.H.M. (2003). Attitudes toward care of the terminally ill: an educational intervention. *The American Journal of Hospice and Palliative Care*, 20(1), 13-22.
- Hopkinson, J.B., Hallett, C.E., and Luker, K.A. (2005). Everyday death: how do nurses cope with caring for dying people in hospital? *International Journal of Nursing Studies*, 42, 125-133.
- International Council of Nurses. (1997). *Basic Principles of Nursing Care*. Washington, D.C.: American Nurses Publishing.
- Kubler-Ross, E. (1970). *On death and dying*. New York: Macmillan.
- Kurz, J.M. and Hayes, E.R. (2006). End of life issues action: impact of education. *International Journal of Nursing Education Scholarship*, 3(1).
- Mallory, J.L. (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.
- Matzo, M.L., Sherman, D.W., Penn, B., and Ferrell, B.R. (2003). The end-of-life

- nursing education consortium (ELNEC) experience. *Nurse Educator*, 28(6), 266-270.
- McCurdy, D. (2008). Ethical spiritual care at the end of life. *American Journal of Nursing*, 105(5), 11.
- Mitchell, A.M., Sakraida, T.J., Dysart-Gale, D., and Gadmer, N. (2006). Nurses' narratives of end-of-life care. *Journal of Hospice and Palliative Nursing*, 8(4), 210-221).
- Ryan, L.A. (2005). The journey to integrate Watson's caring theory with clinical practice. *International Journal of Human Caring*, 9(3), 26-30.
- Salahuddin, N., Shafqat, S., Mapara, S., Khan, S., Siddiqui, S., Manasia, R., and Ahmad, A. (2008). End of life in the intensive care unit: knowledge and practice of clinicians from Karachi, Pakistan. *Internal Medicine Journal*, 38, 307-313.
- Samarel, N. (1991). *Caring for life and death*. New York: Hemisphere Publishing Corporation.
- Shubha, R. (2007). Psychosocial issues in end-of-life care. *Journal of Psychosocial Nursing*, 45(8), 24-29.
- Thacker, K.S. (2008). Nurses' advocacy behaviors in end-of-life nursing care. *Nursing Ethics*, 15(2), 174-185.
- Tomey, A.M. and Alligood, M.R. (2006). *Nursing theorists and their work (6th ed.)*. St. Louis: Mosby.
- Watson, J. (1988). *Nursing: human science and human care. A theory of nursing*. New York: National League for Nursing.
- Weigel, C., Parker, G., Fanning, L., Reyna, K., and Gasbarra, D.B. (2007).

Apprehension among hospital nurses providing end-of-life care. *Journal of Hospice and Palliative Nursing*, 9(2), 86-91.

Wessel, E.M. and Rutledge, D.N. (2005). Home care and hospice nurses' attitudes toward death and caring for the dying. *Journal of Hospice and Palliative Nursing*, 7(4), 212-218.

APPENDIX A

FROMMELT ATTITUDES TOWARD CARE OF THE DYING SCALE

Instructions: Please circle the letter following each statement which corresponds to your own personal feelings about the attitude or situation presented. Please respond to all 30 statements on the scale. The meanings of the letters are:

SD = Strongly Disagree

D = Disagree

U = Uncertain

A = Agree

SA = Strongly Agree

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

SD D U A SA

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

SD D U A SA

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

SD D U A SA

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

SD D U A SA

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

SD D U A SA

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

SD D U A SA

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

SD D U A SA

SD = Strongly Disagree

D = Disagree

U = Uncertain

A = Agree

SA = Strongly Agree

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

SD D U A SA

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

SD D U A SA

10. There are times when death is welcomed by the dying person.

SD D U A SA

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

SD D U A SA

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

SD D U A SA

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

SD D U A SA

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

SD D U A SA

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

SD D U A SA

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

SD D U A SA

SD = Strongly Disagree

D = Disagree

U = Uncertain

A = Agree

SA = Strongly Agree

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

SD D U A SA

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

SD D U A SA

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

SD D U A SA

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

SD D U A SA

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

SD D U A SA

22. Nursing care should extend to the family of the dying person.

SD D U A SA

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

SD D U A SA

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

SD D U A SA

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

SD D U A SA

SD = Strongly Disagree

D = Disagree

U = Uncertain

A = Agree

SA = Strongly Agree

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

SD D U A SA

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

SD D U A SA

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

SD D U A SA

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

SD D U A SA

30. It is possible for nurses to help patients prepare for death.

SD D U A SA

DEMOGRAPHICS QUESTIONNAIRE

Instructions: Please complete the following items regarding your demographics information by placing a check in front of the appropriate response. Please provide an identification number, which only you will know, to guarantee anonymity in this study.

Self-selected identification # _____

1. Age

- 20-25 years
 26-30 years
 31-40 years
 41-50 years
 51-60 years
 61 years and over

2. Years of Nursing Experience

- 0-5 years
 6-10 years
 11-15 years
 16-20 years
 21-25 years
 over 25 years

3. Type of Basic Nursing Preparation

- Diploma
 ADN
 BSN

4. Gender

- Male
 Female

5. Religion

- Protestant
 Catholic
 Jewish
 Atheist
 Other

6. Previous Education on Death and Dying

- I took a course on death and dying as part of my basic nursing education.
 I did not take a specific course, but material on death and dying was included in my nursing courses.
 No information on death and dying was included in my nursing education.

7. Feelings about previous education on the subject of death and dying.

- I feel that my nursing education prepared me adequately to deal with death and dying.
 I feel that my nursing education did not prepare me adequately to deal with death and dying.

8. Have you had any personal experiences with death? Check all that are applicable.

Yes, I have had a family member die.

Yes, I have had a close friend die.

Yes, I have had a pet die.

No, I have not had any personal experiences with death.

APPENDIX B

Outline of Educational Intervention**I. Introduction to Palliative and End-of-Life Care**

A. What is palliative care?

1. Definition
2. Patient and family as a unit
3. Attention to four groups of needs
 - a. Physical
 - b. Psychosocial
 - c. Spiritual
 - d. Social
4. Power of a realistic perspective
5. Quality of life and death

B. End-of-life care

1. Nurses' basic roles
2. Grieving
3. Debriefing
4. Mentors and preceptors
5. Quality assurance

II. Physical Needs

- A. Pain
- B. Nausea and vomiting
- C. Others

III. Pain and Suffering

A. Pain relief

1. Pharmacologic means
2. Nonpharmacologic means
 - a. Massage
 - b. Imagery
 - c. Distraction

- d. Relaxation
- 3. Groups of patients that prove difficult in pain control
 - a. Nonverbal patients
 - b. Elderly
 - c. Cognitively impaired
 - d. Different cultures
- 4. Trusting that pain is what the patient says it is
- 5. Anticipation of pain
- 6. Balancing comfort and alertness

B. Suffering

- 1. Attend to all four groups of needs
- 2. Limit diagnostic tests at end-of-life
- 3. Patient advocacy
- 4. Strive to improve quality of life and death

IV. Psychosocial Needs

A. Provide holistic care

B. Kubler-Ross' Stages of Death and Dying

- 1. Denial
- 2. Anger
- 3. Bargaining
- 4. Depression
- 5. Acceptance

C. Cognitive components

- 1. Fear
- 2. Anxiety

D. Possible roles of the nurse

- 1. Counselor
- 2. Mediator
- 3. Educator

V. Spiritual Needs

- A. Acknowledgment, sensitivity, and respect for patients' beliefs

- B. Meaning in life
- C. Belief in a higher power
- D. Life after death

VI. Social Needs

- A. Relationships
- B. Support groups
- C. Communication

VII. Patient Advocacy

- A. Placing a palliative care consult
- B. Preventing patients from being “victims of technology”
- C. Addressing quality of life issues
- D. Nurses’ ethical obligations to patients and families
 - a. Care before and after death
 - b. Doing what is right for the patient
 - c. Honesty
 - d. Confidentiality
 - e. Assisting with advance directives

VIII. Communication

- A. Verbal and nonverbal
- B. The power of silence
- C. Barriers to effective communication
- D. Listening skills

IX. Cultural Issues

- A. Cultural sensitivity and awareness
- B. Various patient needs
 - 1. Personal space
 - 2. Eye contact
 - 3. Touch
 - 4. Desired awareness of impending death
- C. Educating oneself on various cultures

X. Nurses’ Grieving and Debriefing

- A. Anticipatory grieving
- B. Normal grieving
 1. Taking time to grieve for each patient occurrence
 2. Ask for help!
 3. Assignment changes
 4. Grief for varying experience levels
 5. Finding your own way to grieve
- C. Debriefing sessions
 1. Talk about it
 2. Confront fears of death and dying

XI. Barriers to End-of-Life Care

- A. System
- B. Unit
- C. Personal
- D. Societal

APPENDIX C

Consent to Participate in a Research Study (Intervention Group)**Protocol Title: Critical Care Nurses' Attitudes Toward the Care of the Dying****Researcher: Andrea Alvaro, RN (828) 213-1160****What is the research about and why are you doing it?**

This research is being conducted to obtain information on critical care nurses' attitudes toward care of the dying. The information will be used to provide recommendations on ways to educate nurses on care of the dying patient.

What are you asking me to do if I agree to be in the study?

If you agree to participate in the study, you will complete two surveys. The surveys will be conducted four to six weeks apart. On each survey, you will answer a series of questions, beginning with some demographic information. Each survey consists of 30 questions; you will rate each question from strongly disagree to strongly agree, depending on your opinions. Between administrations of the two surveys, you will participate in an educational activity on care of the dying.

How will this study help me?

The information obtained from this study may not help you. However, it may help others by making recommendations for education on care of the dying patient.

Are there any risks involved with being in the study?

There are no anticipated risks or harms to you as a result of your participation in the study. Although, answering questions on care of the dying patient may bring on feelings of sadness or anxiety. Participation in the study will be anonymous, voluntary, and will not affect employment status in any way.

What steps have been taken to minimize participant risk?

Your identity will be anonymous. A self-selected ID number will be used for documentation of all study results. The same ID number will be used on both surveys to compare scores.

What else do I need to know?

Your decision to participate is completely voluntary.

Whom can I contact with any questions or concerns?

If you have any questions, you may contact Andrea Alvaro at (828) 213-1160. If you have concerns about this study, please contact the Institutional Review Board at Mission Hospitals at (828) 213-1105 or at Western Carolina University at (828) 227-3711.

Results of the study will be available after April, 2009.

*****By completing this survey, you are giving your consent for participation in the research study.**

Consent to Participate in a Research Study (Control Group)

Protocol Title: Critical Care Nurses' Attitudes Toward the Care of the Dying
Researcher: Andrea Alvaro, RN (828) 213-1160

What is the research about and why are you doing it?

This research is being conducted to obtain information on critical care nurses' attitudes toward care of the dying. The information will be used to provide recommendations on ways to educate nurses on care of the dying patient.

What are you asking me to do if I agree to be in the study?

If you agree to participate in the study, you will complete two surveys. The surveys will be conducted four to six weeks apart. On each survey, you will answer a series of questions, beginning with some demographic information. Each survey consists of 30 questions; you will rate each question from strongly disagree to strongly agree, depending on your opinions.

How will this study help me?

The information obtained from this study may not help you. However, it may help others by making recommendations for education on care of the dying patient.

Are there any risks involved with being in the study?

There are no anticipated risks or harms to you as a result of your participation in the study. Although, answering questions on care of the dying patient may bring on feelings of sadness or anxiety. Participation in the study will be anonymous, voluntary, and will not affect employment status in any way.

What steps have been taken to minimize participant risk?

Your identity will be anonymous. A self-selected ID number will be used for documentation of all study results. The same ID number will be used on both surveys to compare scores.

What else do I need to know?

Your decision to participate is completely voluntary.

Whom can I contact with any questions or concerns?

If you have any questions, you may contact Andrea Alvaro at (828) 213-1160. If you have concerns about this study, please contact the Institutional Review Board at Mission Hospitals at (828) 213-1105 or at Western Carolina University at (828) 227-3177.

Results of the study will be available after April, 2009.

*****By completing this survey, you are giving your consent for participation in the research study.**