

MALLORY, JUDY LYNN. The Impact of a Palliative Care Educational Component on Attitudes Toward Care of the Dying in Undergraduate Nursing Students. (Under the direction of J. Conrad Glass, Jr.)

#### ABSTRACT

Nurse educators have identified that historically nurses have not been prepared to care for dying patients. Research also has identified that nursing students have anxieties about death, dying, and caring for dying patients. Several factors have been identified as affecting nurses', nursing students', and medical students' attitudes toward care of the dying. Factors addressed in this research will be death education, and death experience.

As part of a national movement to improve end-of-life (EOL) care, schools of nursing are starting to implement EOL education in their curricula. This research looked at one component of EOL education, which incorporates experiential learning using Quint's (1967) model of death education and transformative learning theory. The educational experiences were geared to help students understand the skills needed to competently and compassionately care for the dying; those behaviors include: (1) responding during the death scene, (2) providing comfort, (3) responding to anger, (4) enhancing personal growth, (5) responding to colleagues, (6) enhancing the quality of life during dying, and (7) responding to the family (Degner, Gow, & Thompson, 1991). The study examined the long-term effects of an educational experience to determine if a one-time educational experience provides sufficient, lasting effects in a 6-week format.

Results of this study indicate that education can have a positive effect on nursing students' attitudes toward care of the dying. Nursing students in the treatment

group had a significant positive increase in their attitudes toward care of the dying after the treatment. It was also noted on the pretest that those students who had previous experience in caring for dying patients had a statistically significant higher positive attitude toward care of the dying than those who did not have previous experience in care of the dying. The attitude change increased slightly after a 4-week period. The use of the End of Life Nursing Education Consortium (ELNEC) education package along with experiences at hospice, the funeral home, the anatomy lab and role play help facilitate transformative learning in nursing students.

The Impact of a Palliative Care Educational Component on Attitudes Toward  
Care of the Dying in Undergraduate Nursing Students

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## DEDICATION

I dedicate this work to the one true God, “For in Him we live, and move, and have our being” Acts 17:28a. I can do nothing without Him. I also dedicate this work to my husband, Lee. Without his support I could not have completed this program and dissertation.

## BIOGRAPHY

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## CHAPTER ONE

### Introduction

It is critical that nursing faculty address the care and needs of dying patients when educating nursing students. Although all of nursing encompasses caring, care of the dying and issues surrounding end-of-life (EOL) care require special education and a need to address the learner's previous and current experiences with death and death education. This research study adds to the body of that knowledge.

### Statement of the Problem

Advances in technology over the last century have changed health care consumers' attitudes and expectations about death (Callahan, 1993). Modern health care technology allows patients who have serious illnesses to live longer. Therefore patients live longer and expect medical science to manage their illnesses and keep them comfortable. When illness cannot be cured, patients expect quality health care at the EOL. Today patients are much better educated about health care issues. The media and the Internet provide a wealth of information on disease processes and treatments. Patients are demanding appropriate and aggressive treatment when disease is curable and palliative care when comfort and quality of life are the goals. Patients are making choices not only about how they treat their diseases, but also when to stop treatment and how they will die.

Historically nurses have cared for the dying. Florence Nightingale, widely recognized as the founder of modern nursing, enlisted women to train and serve as

nurses to sick and dying soldiers during the Crimean War. Nurses have formally cared for the dying and their families since that time. Nightingale saw her work with the dying as a commission from God. She provided both physical and spiritual care to her patients. Nurses today, however, do not always see their work with the dying as a commission from God. Research shows that many nurses and nursing students have difficulty dealing with death (Payne, Dean, & Kalus, 1998; Servaty, Krejci, & Hayslip, 1996; Waltman & Zimmerman, 1992; Thompson, 1985; Brockopp, King, & Hamilton, 1991).

Although nursing education is constantly evolving, it has not kept pace with patient needs for quality EOL care. The International Council of Nurses (1997) stated that nurses have a unique and primary responsibility for ensuring that individuals at the EOL experience a peaceful death. The nursing role in EOL care has expanded in recent years to include advanced directives, do-not-resuscitate (DNR) decisions, and palliative care discussions (Haisfield-Wolfe, 1996).

Nurses' attitudes toward care of the dying have not kept pace with consumer's attitudes and expectations. Often new nursing graduates provide EOL care that lacks meaning or purpose and usually leaves both nurses and their patients feeling frustrated and unsuccessful in achieving positive, therapeutic outcomes. Many nurses struggle with negative personal issues concerning death and dying and are therefore uncomfortable providing care at the EOL. Frommelt (1991) found that 76% of nurse participants in her study felt they were inadequately prepared to deal with the terminally ill client.

Nursing education has lacked an effective, efficient approach to educating students about EOL care. Much of current nursing education is aimed at curative care. Some schools of nursing may have informal discussions on death and dying, or even a class on death and dying, but the topic is only addressed superficially. Undergraduate nursing education provides the foundation for EOL nursing care. A recent analysis of nursing textbooks found that of the 45,683 pages of text reviewed only 902 pages were related to EOL, which equates to 2% of the content (Ferrell, Virani & Grant, 1999). Given the amount of time nurses spend caring for patients in numerous clinical settings that require EOL care, the amount of space devoted in textbooks to EOL care is not adequate to prepare students to care for dying patients. Adding to this dilemma is the fact that there are very few affective components in nursing education curricula for EOL care. The lack of time spent on death and dying can be attributed to the following: already crowded curricula owing to a rapid increase in knowledge and technology, a lack of effective teachers qualified to teach death and dying, and an existential fear of death (Sheldon, 1998).

Research on attitudes toward death and care of the dying has found several factors that affect attitudes: education on death, dying, EOL issues, and death experiences. A less researched factor is the longitudinal effectiveness of an educational EOL component. This study looked at specific factors to find significant differences, relationships and correlations with death attitudes.

### Purpose of Study

The purpose of this research was to assess the short-term and long-term impact of a palliative care educational component on the attitudes toward care of the dying in undergraduate nursing students and the relationship of previous education and death experience on attitudes toward care of the dying.

The findings from this study will be used to help educators determine the affects of EOL education on attitudes toward care of the dying in nursing students. It also explored the effects of death education and death experience on attitudes toward care of the dying, as well as looking at time as a factor affecting attitudes. The following hypotheses were addressed by the research study.

### Hypotheses

1. There will be no significant difference on measures of attitudes toward care of the dying between undergraduate nursing students after didactic and experiential education in palliative care and undergraduate nursing students who have not had didactic and experiential education in palliative care.
2. There will be no significant change in attitudes toward care of the dying after an educational component in palliative care.
3. There will be no significant relationship between nursing students' attitudes toward care of the dying and their previous experience in care of the dying.
4. There will be no significant relationship between nursing students' attitudes toward care of the dying and their previous education in death and dying.

5. There will be no significant relationship between nursing students' attitudes toward care of the dying and their death experience(s).
6. There will be no relationship between nursing students' attitudes toward care of the dying and their current experience with dying patients.
7. There will be no significant difference in attitudes toward care of the dying in nursing students four weeks post educational component.

### Significance of Study

Individuals are not born with a specific attitude toward caring for the dying. Those attitudes are developed from life experiences, and socialization within a culture. Attitude has been defined as referring to a “psychological tendency that is expressed by evaluating a particular entity with some degree of favor or disfavor” (Eagly & Chaiken, 1993, p. 1). Within the psychological literature there is recognition that attitudes can be based on different sources of information: cognitive, affective and behavioral domains.

Recently the increase in EOL awareness in the United States and other countries has prompted some schools of nursing to evaluate their curricula and begin to add EOL material. Research has demonstrated that education does have a positive effect on nurses' attitudes toward care of the dying at least in the short term (Brent, Speece, Gates, Mood, & Kaul, 1991; Degner, 1985; Durlak & Reisenberg, 1991; Frommelt, 1991; Kaye, Gracely, & Loscalzo, 1994; Lev, 1986). Many of these studies also show that certain demographics seem related to nurses' and nursing students'

attitudes toward death and care of the dying. Studies on EOL education have included semester-long courses, two-day seminars and classes that last only a few hours.

Although research has indicated that EOL education does have a positive effect on attitudes toward death and care of the dying, the lasting effects of those attitude changes have had little research. Research on death experience indicates that it has long-lasting effects on death attitudes (Knight, Elfenbein, & Capozzi, 2000).

Further research needs to be conducted to assess the long-term effects of an educational component in palliative care. By assessing the long-term effects of an educational component in palliative care, inferences can be made about the effectiveness of the one-time educational component. If it is found that positive attitudes toward care of the dying diminish over time, then educators need to look at an integrated curriculum that introduces the topic repeatedly throughout the program.

The demographics assessed in this study included death education, death experience and time or maturation. Studies on attitudes toward death and care of the dying have indicated that education in death and dying or EOL care can change attitudes. Kaye, Gracely, & Loscalzo (1994) found that participants in a death education course showed a clear decline in negative attitudes as compared with the control group. Lev's (1986) study indicated that an elective course in hospice nursing was effective in decreasing subjects' negative attitudes toward death and dying and avoidance behaviors. Frommelt (1991) stated "the only demographic variable which proved to have a significant effect on the nurses' attitudes toward caring for the



terminally ill was having taken a specific course on death and dying previously (F prob =0.04)''(p.41).

Brent, Speece, Gates, Mood & Kaul, (1991) found that coursework devoted specifically to death and dying, when combined with direct clinical experience in the care of dying patients, can make a significant contribution toward reducing nursing students' aversion and increasing their attraction to this area of nursing. Degner's (1985) study suggests that if nurses were to receive systematic death education with planned assignments to care for dying patients, they would experience reduced death anxiety and improved attitudes toward care of the dying. In this study the researcher assessed student's death and dying education prior to the treatment to determine if previous education is a factor in students' attitudes toward care of the dying.

Experiences surrounding death have been found to play a significant role in nurses and nursing students' attitudes toward death and care of the dying. In Franke and Durlak's (1990) study on life factors affecting death attitudes they found death of a significant other was the most important factor affecting attitudes. Brockopp, King, & Hamilton, (1991) found that nurses who work on a continuous basis with dying patients will have more positive attitudes toward dying. Knight, Elfenbein, & Capozzi's (2000) study suggests that recalled aspects of first death experiences are related to current death attitudes. Their study also indicated that first experiences are more differentially related to current death attitudes for the women more than the men in the study. Women who had parents who talked about the death were associated with higher neutral death acceptance than for those whose parents did not talk about death.

Men showed no difference whether their parents talked to them about the death or not. Men who remember crying, associated with their first death, have a greater fear of death and greater death avoidance. Brent, Speece, Gates, Mood, & Kaul (1991) found that “aversiveness decreased, attractiveness increased, and overall attitudes became more positive as the number extent, and specificity of a student’s death related experiences increased”(p. 249). Gates, Kaul, Speece & Brent (1992) found that students with general life experiences with death and dying were less aversive to talking to dying patients. Brent, Speece, Gates, Mood, & Kaul (1991) also found that direct, hands-on engagement with death and dying itself, rather than casual or incidental exposure exerts the greatest influence over attitudes.

Research indicates that previous death experience can be a factor in death anxiety and death attitudes. Therefore, this research study assessed previous death experiences, and current death experience and sought to determine their effect on attitudes toward care of the dying. Subjects were asked to share significant death experiences, how they were related to the death, and how long ago the experience occurred. They were also asked about dying patients they have cared for and significant relationships they were currently in with a dying person. The assessment tool allowed the subjects to identify several deaths if necessary.

Very few longitudinal research studies on EOL care have been conducted. Johnson (1986) looked at death anxiety and death attitudes in first-year associate degree nursing students immediately after a five-hour death and dying course and at the end of the semester when students had completed a clinical experience. This study

found that clinical experiences tended to increase negative attitudes toward death and dying in the control group, which did not have the didactic treatment. Lockard (1989) assessed the longitudinal effects of death education on nursing students' death anxiety using the Templer (1970) Death Anxiety Scale (DAS). She found a significant reduction in death anxiety immediately following the educational experience. That reduction in death anxiety remained four weeks after the experience and one full year after. Lockard attributes some of the reduction in anxiety long-term to what she calls the "sleeper effect" (p. 149). The sleeper effect has been described as attitude change that may occur at a later date than the instruction. It apparently takes some students longer to process material thoroughly enough to produce an attitude change (Zimbardo & Ebbesen, 1977). This obviously does not occur for all students, and the significant change that Lockard saw in her study and that stayed for a full year after the educational experience must in part be attributed to the educational experience. Using the Collett-Lester Fear of Death Scale (1969) and the DAS, Chen (1992) found that attitudes toward death and dying were improved after a two-day workshop and those differences in attitude were retained after a four-week period. Hsieh (1995) used the Templer Death Anxiety Scale and the Care Givers Inventory to assess attitude changes immediately after a death education seminar and one month after the seminar. Results indicated that the death education program was effective in increasing the positive attitudes of the nurses, but death anxiety returned one month after the seminar. The study also reported that without on-going death education, fear of death was highly variable, widely dispersed and increased with time.

The long-term effects of an educational program are significant to any topic being taught, but critical to EOL education. As nursing education is making real strides to implement EOL education, it is imperative that the education be such that students carry their attitude changes into their nursing practice. This research assessed subjects' attitudes immediately following the palliative care educational component and four weeks later. The four-week timeframe gave the students time to assimilate the information and include those who might be part of the "sleeper effect". It also is a short enough timeframe that students did not have a significant amount of clinical experience to "contaminate" the effects of the educational experience.

After a thorough search of the literature, the Frommelt Attitudes Toward Care of the Dying (FATCOD) was found to have been used several times to assess nurses' attitudes toward care of the dying (Frommelt, 1991; Rooda, Clements & Jordan, 1999). It has not been used previously with nursing students. It is important to assess nursing students' attitudes prior to their palliative care education and longitudinally to ensure the effectiveness of the program. It is still unclear if there are lasting effects in attitude change after an educational program and what role death education, and death experience play in a nursing students' attitude toward care of dying patients.

### Limitations

1. The research tool cannot identify all previous death experience and death education that would affect attitudes toward care of the dying.

2. The study was limited to the attitudes that the students are aware of and/or willing to report and the attitudes that the Frommelt Attitudes Toward Care of the Dying scale (FATCOD) measures.
3. The researcher was the instructor for the palliative care education, which may have introduced bias.
4. Asking nursing students on a pretest about their attitudes toward caring for dying patients could have an effect on their attitudes on the posttest (Gall, Borg, & Gall, 1996).
5. The study is only generalizable to the populations being assessed.

#### Assumptions

1. An attitude of anxiety is associated with care of the dying
2. Avoidance behaviors are associated with care of the dying.
3. One of the principle sources of nursing students' aversion to certain aspects of caring for dying patients is their lack of direct experience with death and dying.
4. The more concrete, specific, and intentional a student's involvement in a death-related situation, the more rapidly that aversion will dissipate. (Brent, Speece, Gates, Mood, & Kaul, 1991).
5. Most nursing students bring an interest in caring for all patients, regardless of whether they are actively dying or will recover quickly.

6. Repeated exposure to previously aversive situations gradually decreases the intensity of the aversion through some combination of skill, learning, habituation, and desensitization (Brent, Speece, Gates, Mood, & Kaul, 1991).

## Definitions

End-of-Life Care- a nursing role that advocates for decision-making at the end-of-life, provides treatment and symptom management, life support, addresses professional issues and societal concerns (Haisfield-Wolfe, 1996); the comprehensive nurse management of all aspects of a dying patient's care.

Death Experience- a personal and individual experience with death, either through personal loss, professional experience or community tragedy.

Palliative Care Education- A set educational component to teach undergraduate nursing students "comprehensive management of the physical, psychological, social, spiritual, and existential needs of patients, particularly those with incurable, progressive illness; to help them achieve the best possible quality of life through relief of suffering, control of symptoms, and restoration of functional capacity, while remaining sensitive to personal, cultural and religious values, beliefs and practices" (Last Acts Task Force, 1999, p.109).

Longitudinal Study – A panel study that involves following subjects for a period of time after they have received a specific intervention (Norwood, 2000).

Attitudes Toward Care of the Dying – A complex structured psychological pattern of mental views that produces a tendency to respond in certain ways when

caring for dying patients (Yeaworth, Kapp, & Winget, 1974). This pattern of mental views, established by cumulative prior perceptions and experiences, includes cognitive, affective and behavioral components.

Undergraduate Nursing Student- a person actively enrolled in a Bachelor of Science in Nursing (BSN) program.

## CHAPTER TWO

### REVIEW OF LITERATURE

The purpose of this literature review will be to identify (a) the significant history of death education in nursing (b) a theoretical framework of attitudes toward care of the dying (c) the effects of death education on attitudes toward care of the dying, and (d) the significant factors affecting attitudes toward care of the dying. This literature review has provided direction for this research study on nursing students' attitudes toward care of the dying.

#### Method of Review

This review of literature was conducted utilizing the InfoHunter On-line Resource at Western Carolina University and the on-line resources of the D.H. Hill Library at North Carolina State University. The literature search included the following databases: (a) the Educational Research Information Center (ERIC), (b) the Dissertation Abstracts International (DAI), (c) Academic Search Elite, (d) Medline, (e) EBSCO Host, and (f) CINAHL. The following descriptors were used for all the database searches: death, dying, death experience, nursing, palliative care, attitudes, attitudes toward care of the dying, attitude change, education, research, longitudinal, and end-of-life. Relevant citations were reviewed. Books and articles were gleaned from reference lists and utilized in this review. Citations that were relevant to the study of attitudes toward care of the dying were utilized in this literature review. A



complete list of all of the citations in the literature review is located in the reference section.

## HISTORY

Discussions on attitudes toward death and care of the dying in nurses and nursing students began to show up in the literature after Jeanne Quint's book, The Nurse and the Dying Patient was published in 1967. Quint addressed the work that nurses do on a daily basis and how frequently they come in contact with dying patients. She pointed out that nurses were not well equipped to care for dying patients. Quint then focused on the schools of nursing in which the nurses were educated. She assessed what happens to nursing students when they encounter dying patients in the course of learning to be a nurse. This ultimately led to the issue of what happens to dying patients in hospitals. Her book pointed out that nursing care could be key in determining how patients live the last days of their lives.

Quint identified several issues paramount to educating nursing students to care for the dying. She saw the problem not only as an issue for the schools of nursing, but also as society's issue. Quint said the "provision of care for those who are dying is a delicate and serious matter" (p. 7). In her book Quint addressed faculty issues with teaching care of the dying and the clinical issues involved in assigning a nursing student to a dying patient. She noted the importance of talking with dying patients and the whole impact on nursing students who work with dying patients. She talked about the carry-over of what students learn and feel about dying patients in nursing school is

how they will care for dying patients in their nursing practice. She ended her book with strong suggestions for how to improve nursing education on EOL care and subsequently improve care of the dying.

Research into the care of dying patients has revealed critical nursing behaviors in the care of the dying. As the result of a qualitative study, the following behaviors were deemed critical to the care of the dying: Responding during the death scene, providing comfort, responding to anger, enhancing personal growth, responding to colleagues, enhancing the quality of life during dying, and responding to the family (Degner, Gow, & Thompson, 1991). These behaviors were based upon the knowledge of ten palliative care nurses and ten nurse educators who described situations in which students displayed positive or negative attitudes to care for the dying. These behaviors establish a basis for where to begin looking at attitudes. These behaviors, deemed critical, lead the researcher to begin looking at how nursing education in the care of the dying is currently being taught. Does the current education provided in schools of nursing prepare students to carry out these critical behaviors competently?

Schools of nursing do not do a good job of educating nursing students to care for patients at the EOL. A study published in September 2000 found the majority of nurse respondents (89.5%) felt that EOL content was important to basic nursing education. Unfortunately, seventy-one percent of respondents said their pain management education was inadequate, 62% rated their overall content on EOL care as inadequate, and 59% rated management of other symptoms education as inadequate. The study also found that less than 35% of nurses rated their

grief/bereavement support and spiritual support to patients at the EOL as effective. (Ferrell, Virani, Grant, Coyne, & Uman, 2000).

Quint wrote her book in 1967 in conjunction with research being conducted on EOL nursing education at the University of California, San Francisco. It is interesting that thirty-three years later, her book is as accurate and true as the day it was written.

Although nursing education has not achieved what Quint had hoped for so many years ago, there have been many attempts to study EOL nursing education and improve on what has been done. A large number of studies focus on death anxiety and its effects on student's attitudes toward death and dying. Others focused on attitudes toward death and dying, and the third focus of the majority of studies has been on education of nursing students regarding death and dying and EOL issues. From these studies nursing education has gleaned much knowledge about what nursing students think and feel about EOL issues and how they compare to other healthcare providers in their willingness and ability to care for dying patients.

### Death Anxiety

Since the 1960s, researchers have been looking at ways to improve EOL care. Death anxiety has been defined as the anxiousness experienced in everyday life rather than in life threatening situations. It includes multiple components such as: anticipating one's self dead, fear of the process of dying, and fear about the death of significant others (Neimeyer, 1994). Many death education interventions have focused on death anxiety and improving nursing students' attitudes toward care of the dying.

Results have varied according to the educational format, such as didactic, experiential, or both and by demographics, such as whether or not the student had previous death experience (Beck, 1997).

Several instruments have been designed to assess death anxiety. Frequently used instruments include the Collett-Lester Fear of Death Scale (Collett & Lester, 1969), the Templer Death Anxiety Scale (Templer, 1970), and the Death Anxiety Profile – Revised (DAP-R) (Wong, Reker & Geger, 1994). Hutchison and Scherman (1992) found no difference in death anxiety related to whether nursing students had only didactic or experiential death and dying education. Their results did show an overall reduction in anxiety, but did not show a difference related to methodology. Durlak and Riesenber (1991) used a meta-analysis procedure to review 40 studies on death education looking at didactic versus experiential training to reduce death anxiety. They found that experiential training reduced anxiety and didactic training slightly increased anxiety.

Other studies have found that both didactic and experiential training in death and dying resulted in significantly higher death anxieties (Combs, 1981). Maglio and Robinson's meta-analysis (1994) of sixty-two studies found that education on death and dying tends to increase death anxiety. Johansson and Lally (1990) assessed the anxiety of junior and senior nursing students after a death education program. They found that senior's anxieties decreased, and juniors' anxieties increased. They speculated that the differences could be related to the senior students' clinical experience. Nursing students have historically had a more positive attitude toward

death than their counterpart medical students (Campbell, Abernethy, & Waterhouse, 1983). Servaty, Krejci & Hayslip (1996) found that senior nursing and medical students had less apprehension to communicating with the dying.

The educational component of this study included both didactic and experiential aspects. Students listened to lectures on death and dying and palliative care and participated in experiential activities. Lectures and activities were designed to challenge students' beliefs, ideas and views on death, dying and care of the dying. Students were encouraged to evaluate their beliefs and views using self-reflection and through learning transform to more positive attitudes toward care of the dying.

Research looking at practicing nurses' death anxieties found that nurses who work with dying patients on a regular basis, such as hospice nurses, have a lower death anxiety than those who do not (Carr & Merriman, 1996; Payne, Dean & Kalus, 1998). Research in death anxiety reveals that women express more fear of personal death than men (Lonetto, Mercer, Fleming, Bunting, & Clare, 1980; Neimeyer, Bagley, & Moore, 1986). Some researchers conclude that women have a tendency to report death anxiety more readily than men, which could skew whether they truly have more death anxiety, or are just more willing to report it (Dattel & Neimeyer, 1990). Death orientation is not stable across the course of adult development. Typically with age comes a greater comfort and knowledge of one's own mortality (Keller, Sherry, & Piotrowski, 1984). Studies show an inverse relationship between age and death anxiety and negative attitudes toward death.

In a study of nursing home caregivers, those who were older displayed lower levels of death anxiety and were less afraid of death than younger caregivers (DePaola, Neimeyer, Lupfer, & Fiedler, 1992). Rasmussen and Brems (1996) found age and psychosocial maturity to be significantly and inversely related to death anxiety. Caregivers with high rates of death anxiety many times have difficulty enacting their professional roles with dying patients. The opposite can also occur. The caregiver who has a successful experience with a dying patient may have reduced death anxiety and have a greater death competency (Neimeyer and Van Brunt, 1995).

#### Death Attitudes

Research on death attitudes provides a foundation for research in attitudes toward care of the dying. Yeaworth, Kapp and Winget (1974) assessed nursing students' attitudes toward death and dying. They compared freshmen nursing students to senior nursing students. They found that senior nursing students had greater feelings of acceptance, open communication, and were less likely to stereotype attitudes. They also found that freshmen nursing students were more likely to rely on religious beliefs to cope with death anxiety. Others found that individuals with more death education and death experience have more positive attitudes toward death and dying (Gesser, Wong, & Reker, 1987). Merriman (1996) found that in a comparison of hospice workers to other health care workers, hospice workers expressed a greater comfort with caring for the terminally ill. She also found that death anxiety and comfort with caring for the terminally ill were negatively correlated in both these populations.

Brent, Speece, Gates, and Kaul (1993) looked at students with no professional death-related experiences to assess the attitudes toward death they bring when entering nursing and medical school. On five of the six attitude scales, females were more positive than males. Hours of death and dying education and life experience with death and dying demonstrated a positive correlation with attitudes toward talking to the dying patient. In an earlier study by Brent, Speece, Gates, Mood and Kaul (1991), they found that aversiveness decreased, attractiveness increased, and overall attitudes became more positive as the number, extent and specificity of a student's death related experience increased. Sharma, Monsen and Gary (1996) found that nursing students had more positive attitudes toward death and dying than students preparing for other careers. Thompson (1985) supported the idea that more experience leads to less anxiety about dying and positive attitudes toward caring. She found that experienced nurses were more willing to share feelings, and attitudes and view the dying patient as a patient first and as a dying person second. This is supported by Waltman and Zimmerman (1992) who found that nurses who had experienced a close family member death in the previous two years were significantly more likely to provide continuing care for bereaved family members than those who had not. Franke and Durlak (1990) found death of a significant other to be the highest life experience to affect attitudes toward death, religion was the next highest with near-death experience as third. Individuals with strong intrinsic religious beliefs tend to report less death anxiety. Alvarado, Templer, Bresler, and Thomas-Dobson (1995) found that strong religious convictions and a belief in an afterlife were associated with less death

anxiety. Davis-Berman (1998) looked at attitudes toward aging and attitudes toward death. Contrary to her expected findings, she found that after a course on aging, student's attitudes toward death did not improve. It is anticipated that nursing students will have moderate to high negative attitudes toward death in this current study.

### Death Education

Education is a key factor in improving attitudes toward care of the dying. In reviewing the literature this researcher found that educators have used a variety of methods to teach students about death and dying. Although schools of nursing have conducted several studies in the past on how death education affects nursing students, medical schools have taken the lead in EOL education research in the last three years and have actively sought ways to improve their EOL educational process. This review will look at both nursing and medical death education and delineate the positive effects of didactic, experiential and clinical education.

The majority of studies in nursing education have looked at how death education affects death anxiety. Lockard (1989) found that her seven-hour course in death and dying had a significant effect in reducing nursing student's death anxiety. Other researchers have also demonstrated that death anxiety can be reduced by death education (Murray, 1974; Durlak, 1978; Miles, 1980; Murphy, 1986). When comparing didactic to experiential death education, Hutchison and Scherman (1992) found very little difference in change in student's death anxieties. They did find a significant change in overall death anxiety, which supported Lockard's study. They



also found that the effects of the attitude change stayed eight weeks after the educational experience. Abengozar and Bueno (1999) compared experiential and didactic death education and its effects on death anxiety across the lifespan. They found that middle-age adults experienced decreased death anxiety after experiential education, whereas older adults and younger adults experienced no change and increased anxiety respectively. Johansson and Lally (1990) found that their death education program decreased some senior nursing students' anxiety but had the opposite effect on junior nursing students. They attributed some of this effect to the fact that senior nursing students had more clinical experience and opportunities to work with dying patients.

In a more recent attempt to change death attitudes indirectly, Rasmussen, Templer, Kenkel, & Cannon (1998) used concentrated relaxation and stress management as a tool to try to reduce death anxiety in nursing students. They found no difference in death anxiety levels of their treatment group than the two control groups. Lev (1986) found that a course in hospice nursing decreased nursing students' attitudes of fear toward death and dying and avoidance behaviors toward the dying. Degner's (1985) course in palliative care decreased nursing students' death anxieties and improved attitudes toward care of the dying. McGee's (1980) study of Middle-Aged and Older adults found a small but significant change in death anxiety attitudes after a death education module.

Medical students experienced a positive change in attitude about treating dying patients and dealing with dying patients' families after a death education course

(Kaye, Gracely & Loscalzo, 1994). Schools of medicine have recently seen the need for improved EOL education and have begun to introduce EOL education in their curricula. After a three-hour session including didactic and small group discussions, the majority of medical students agreed that care of the dying could be a rewarding experience for physicians and expressed an interest in learning more about the subject (Ross, O'Mara, Pickens, Keay, Timmel, Alexander, Hawtin, O'Brien & Schnaper, 1997). Another group of medical students spent five days in a didactic and clinical rotation in a hospice and palliative care setting. The one-week program proved to be an effective means of changing students' attitudes toward death and care of the dying (Steen, Miller, Palmer, Malmberg, DeKrey, McManus, Hachfeld, Leitch, Slotnick, & Theige, 1999). Another study found that clinical interventions with physicians led to increased use of patient preferences for EOL care and provided limited evidence that physician education reduced the use of life-sustaining treatments. Clinical interventions did not have an effect on behaviors regarding pain management or suffering (Hanson, Tulskey, Danis, 1997). Linder, Blais, Enders, Melberg and Meyers (1999) assessed attitude change and knowledge of medical students regarding EOL care. They compared didactic and experiential approaches to EOL education. Results found that EOL education can be enhanced when delivered close to the point of care using multi-modal techniques that influence attitudes as well as knowledge.

Karnad (1999) used a unique approach to educate medical students about EOL care. The students had to read the book, The Diving Bell and the Butterfly: A Memoir of Life in Death by Jean-Dominique Bauby. After reading the book, students were

required to mark passages in the book that meant something to them, and then the instructor led small group discussions on the book. More than 90% of the residents felt that reading the book improved their attitudes toward care of the dying patient.

The interesting thing about each of these most recent research studies on EOL medical care reveals that only one of the studies used a standardized or previously used instrument for assessing attitudes toward death or care of the dying. That study by Levetown, Hayslip and Peel (2000) published an EOL care attitude scale for physicians to measure outcomes of palliative care education. It was tested and found to be valid and reliable and is currently being used to explore its utility in reflecting the consequences of different types of educational experiences.

In other studies researchers developed their own instrument or tool and did not report validity and reliability. As stated earlier, medical schools are seeing the need for improved EOL education and have begun to conduct research to assess the courses they are implementing. Unfortunately, the ability to compare these courses to each other, or to replicate in different settings is greatly hampered by the lack of uniformity of testing. As the field of nursing seeks to examine its educational process regarding attitudes toward EOL care it is imperative that valid and reliable instruments be used to ensure quality and viability of the research.

Change is occurring at a national level for nursing education regarding EOL care. Nurse researchers at the City of Hope National Medical Center in Duarte California are conducting a project funded by the Robert Wood Johnson Foundation titled “Strengthening Nursing Education to Improve End of Life Care” (Ferrell, Grant,

& Virani, 1999, p. 252). For this project the researchers established three goals: 1. Improve the content regarding EOL care in nursing textbooks, 2. Ensure adequacy of content in EOL care as tested by the national nursing examination, and 3. Support the three key nursing organizations in their efforts to promote nursing education and practice in EOL care. The three nursing organizations are The National Council of State Boards of Nursing, the American Association of Colleges of Nursing and the National League for Nursing Accreditation Commission (Ferrell, Grant & Virani, 1999). This project, along with individual researchers seeking the best way to educate nursing students about EOL care, has nursing heading in the right direction to achieve what Quint (1967) set out to achieve. It is exciting that nursing education is finally changing over thirty years later.

## THEORETICAL FRAMEWORK

The theoretical framework for this study is based upon Quint's adaptation of symbolic interaction theory and transformative learning theory. Research has demonstrated that many nursing students have negative attitudes toward care of the dying. Through an educational process incorporating transformative learning, attitudes toward care of the dying can be changed from negative to positive. Figure 1 demonstrates the use of transformative learning theory to change nursing students' attitudes toward care of the dying.

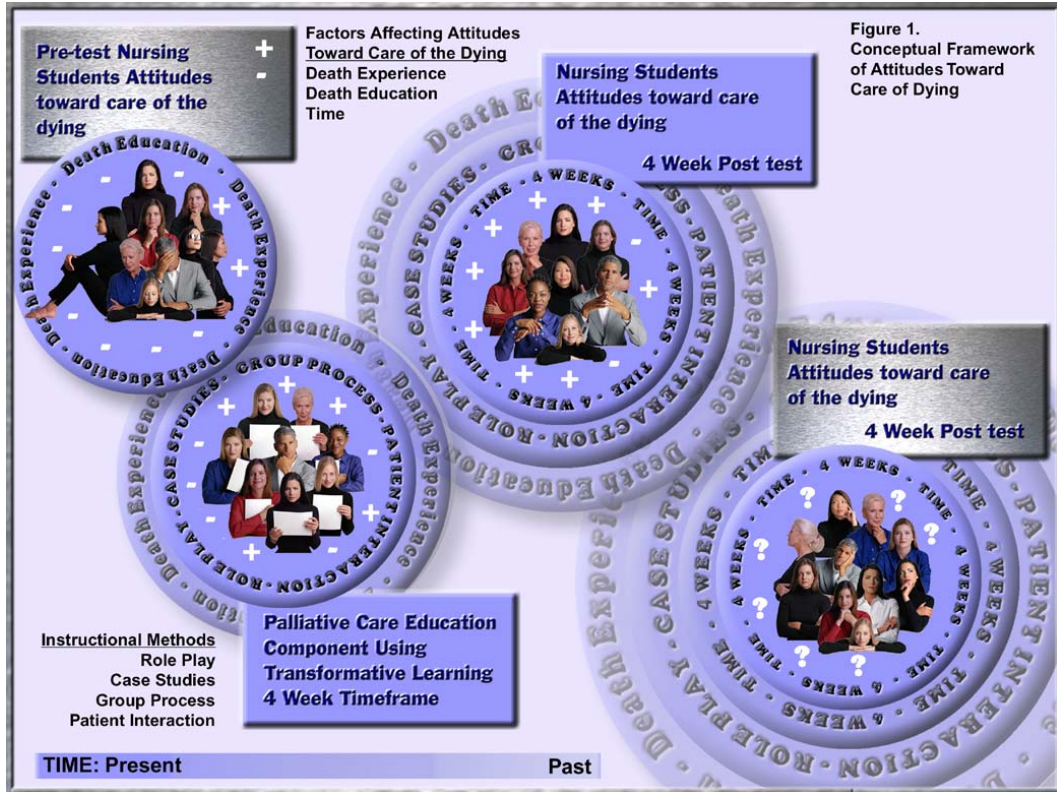


Figure 1. Conceptual Framework of Attitudes Toward Care of Dying

Figure 1. Conceptual Framework of Attitudes Toward Care of Dying

Quint's (1967) theoretical model suggested that nursing students exposed to dying patients, but lacking education in how to care for the dying, led to death anxiety and negative attitudes toward care of the dying and eventual withdrawal from care of the dying. Her theory proposed that if students were exposed to care of the dying without accompanying educational support, they would adopt the behavior of the other professionals around them and limit their involvement in death-related issues. Quint also theorized that if nursing students were to receive systematic death education with planned assignments, they would develop positive attitudes toward the dying and be less likely to withdraw from care of the dying.

Transformative learning theory involves the transformation of an individual's beliefs, ideas and views. Educators can create an atmosphere in which learners are encouraged to evaluate their beliefs and views using self-reflection. Change occurs as learners incorporate their new learning into their belief system and transform or reject their old beliefs. Educators can facilitate transformative learning in a number of education arenas. Palliative care provides an excellent example of an issue that lends itself readily to transformative learning theory.

Transformative learning is a gain in knowledge that brings about change within persons that is significant to their beliefs and thought processes. Habermas (1971) discussed three domains of knowledge: technical knowledge is knowledge related to cause and effect, practical knowledge pertains to understanding what others mean, and emancipatory knowledge involves critical self-reflection. Cranton (1994) notes that emancipatory knowledge is a process of removing constraints and being free

of forces that limit options and control lives. Transformative learning is primarily emancipatory knowledge. Transformative learning is “gained through critical self reflection, as distinct from the knowledge gained from our ‘technical’ interest in the objective world or our ‘practical’ interest in social relationships” (Mezirow, 1991, p. 87). Cranton (1994) expressed the importance of an emancipatory knowledge when she stated, “If we view education as the means by which individuals and societies are shaped and changed, fostering emancipatory learning is the central goal of adult education” (p. 19).

As learners experience emancipatory learning, they not only experience a change in their thinking and beliefs, but they also experience a change in who they are. They are freed from a previous way of thinking and believing, but now must incorporate their new beliefs, understandings, and knowledge into their lives. Emancipatory learning can be difficult and at times painful to the learner (Cranton, 1994).

Critical self-reflection, a foundational element of transformative learning, is the ability of learners to remove themselves from their own views and thoughts, then step back and view themselves from an etic perspective. The ability to disengage from one’s closely held beliefs and to look at something from another point of view provides for exciting learning opportunities combined with a sense of risk and adventure. Mezirow (1991) stated “the goal of adult education is to help adult learners become more critically reflective, participate more fully and freely in rational discourse and action, and advance developmentally by moving toward meaning

perspectives that are more inclusive, discriminating, permeable, and integrative of experience” (p. 224-225). Cranton (1994) discussed how adults have acquired a way of seeing the world through their experiences and values. As adults learn new things, they must incorporate them into their previous knowledge. When this incorporation does not occur easily or there is a contradiction, the learner must reject the new information, or upon reflection, experience transformative learning.

Educators seeking to facilitate transformative learning must first be aware of their own biases and be willing to have those views challenged. The ethical educator will inform learners that their views, thoughts, and beliefs may be challenged, and that through critical reflection, transformative learning may occur (Mezirow, 1991).

The educator starts by creating an environment that is conducive to learning. The classroom must be warm and inviting, a place where it feels safe to risk self-disclosure and experience open communication. Small class size or small groups within a larger class are important so that learners learn from each other and help each other in problem-solving (Cranton, 1997). In this environment, the educator begins by presenting the learners with real-life experiences that challenge their thinking and facilitating small group discussion to “assess reasons, examine evidence, and arrive at a reflective judgment”(Cranton, 1997, p. 10). The educator also uses case studies that present ideas and challenges to the learners and forces their participation in helping address the problems presented in the case studies.

Group projects allow the learners to work together, using skills of communication, cooperation, negotiation and consensus. Learners create a project that



is meaningful to each individual and representative of the group as a whole. During the group process each member of the group must participate in critical self-reflection, addressing self-beliefs, comparing their beliefs to the others in the group, and choosing how to come to a consensus without compromising what is uncompromisable.

Role-play, acting out a scenario in the safety of a classroom, allows the learners to challenge their beliefs in an active way. Rather than reading or talking about a given situation, students are placed in the situation and encouraged to respond in a way that would support their beliefs. As the role is played out, the learners may upon self-reflection see their views differently or feel a change is needed. Through repeated role-play the learners may find a new or different meaning, and their beliefs on a topic may be changed or confirmed. Cranton (1994) states “adults will resist contradiction to their beliefs and will deny discrepancies between new learning and previous knowledge” (p.18). By using several different strategies of adult learning the educator provides opportunities for the learners to challenge their beliefs, and change if desired. Even when learners are able to overcome their resistance to examining their own beliefs, emancipatory learning is still a great challenge (Cranton, 1997).

Adult learners, during their educational courses, should not only learn new information, but should, when appropriate, be challenged to reflect upon their current views on a given subject. Palliative care at the end of life is an example of a subject through which an adult learner could have a transformative learning experience. As the educator and the learner explore palliative care issues for end-of-life care, views

that are held strongly may be reaffirmed or challenged. New information is learned, and after reflection, previously held beliefs maybe challenged or changed.

The educational component will use role-play, group process, and patient interaction to facilitate transformative learning. Students will be educated in the seven nursing behaviors deemed to be critical in the care of the dying (Degner, Gow, & Thompson, 1991).

### SUMMARY

Nursing is an art; and if it is to be made an art, it requires as exclusive a devotion, as hard a preparation, as any painter's or sculptor's work; for what is the having to do with dead canvas or cold marble, compared with having to do with the living spirit—the temple of God's spirit? – It is one of the Fine Arts; I had almost said, the finest of Fine Arts. Florence Nightingale, 1868.

Care of the dying is a fine art, not to be approached lightly, but rather to be studied and practiced to ensure that living spirits receive the utmost care as they pass from this world. The behaviors deemed critical to care for dying patients have already been identified, they include: (1) responding during the death scene, (2) providing comfort, (3) responding to anger, (4) enhancing personal growth, (5) responding to colleagues, (6) enhancing the quality of life during dying, and (7) responding to the family (Degner, Gow, & Thompson, 1991). It is critical that educators take on this most important role of educating new nurses on how to care for the dying. History has shown that although we have not completely neglected the task of educating nurses to care for the dying, we have done very little in this area. The time has come to move

forward and seek the best ways to educate that will change negative attitudes toward care of the dying and improve care of the dying. Through education and change, nurses can facilitate improved care of the dying.

From this review of literature, it seems likely that transformative learning theory can play a significant role in changing attitudes toward care of the dying. By examining both Quints' adaptation theory and transformative learning theory, the literature review has established the importance of education, particularly experiential education in changing nursing students' attitudes toward care of the dying. The theoretical and historical framework of the proposed study points to the significance of the topic and the importance of future research.

The following research questions have come from the review of literature and theoretical framework:

1. Will there be a significant difference in attitudes toward care of the dying in nursing students who participated in didactic and experiential education and those who did not?
2. Will there be a change in attitudes toward care of the dying in nursing students who participate in a palliative care education component?
3. Is there a relationship between nursing students' attitudes toward care of the dying and their previous experience in care of the dying?
4. Is there a relationship between nursing students' attitudes toward care of the dying and their previous education on death and dying?

5. Is there a relationship between nursing students' attitudes toward care of the dying and their previous death experiences?
6. Is there a relationship between nursing students' attitudes toward care of the dying and their current experience with dying patients?
7. Will there be a difference in attitudes toward care of the dying in nursing students comparing posttest to post-posttest?

The answers to these questions will give direction to nurse educators on factors that affect attitudes toward care of the dying. This knowledge could lead to changes in EOL curriculum, both how it is delivered, and where and how often it is addressed in the curriculum.

Further, this literature review guided the researcher to a number of factors, both barriers and facilitating factors affecting attitudes toward care of the dying. Barriers to quality nursing care of the dying have been identified as death anxiety, and negative attitudes toward death. Factors that significantly affect these include previous death experience, and death education. The other factor that needs serious consideration is how time affects attitudes. These factors were assessed as a part of the research study.

After a thorough search of the literature it was determined that the Frommelt Attitudes Toward Care of the Dying (FATCOD) has been used several times to assess nurses' attitudes toward care of the dying. It has never been used with nursing students. It is important to assess nursing students' attitudes prior to their palliative

care education and longitudinally to ensure the effectiveness of the program. It is still unclear if there are lasting effects in attitude change after an educational program.

## CHAPTER THREE

### RESEARCH METHODOLOGY

#### Introduction

This chapter will describe various aspects of the study such as: the purpose of the study; the research design utilized; the pilot study; the population used; the instrument and its validity and reliability; the demographics questionnaire; data collection; measurement of variables and the statistical treatment.

#### Purpose of the Study

The purpose of this research was to assess the short-term and long-term impact of a palliative care educational component on the attitudes toward care of the dying in undergraduate nursing students and the relationship of previous education and death experience on attitudes toward care of the dying.

#### Research Design

A quasi-experimental, longitudinal design was used with a pretest, treatment, and double posttest format. There was one treatment group and one comparison group. Each group was asked to complete the Frommelt Attitude Toward Care of the Dying (FATCOD) Scale and a demographics questionnaire (see Appendix A). The treatment group then participated in an education component (see Appendix E) consisting of both didactic and clinical experiences in palliative care. The comparison group received no treatment. At the end of the education component both groups were

retested using the same instrument. A second posttest of the treatment group occurred four weeks after the posttest.

The research design can be depicted as follows:

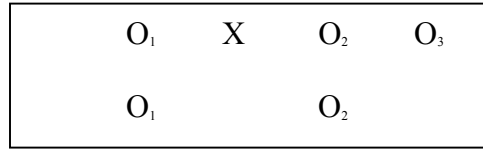


Figure 2. Research Design

### Pilot Study

A pilot study was conducted using undergraduate nursing students at Western Carolina University and a comparison group at East Tennessee State University. The pilot study was conducted at the beginning of a nursing class and under conditions similar to those planned for the study. Students were asked to give feedback on the FATCOD scale and the demographics questionnaire as well as the testing process. Feedback from the pilot study will be used to enhance the effectiveness of the study and insure that the purpose of the study is met (see Appendix B). Based on the feedback from the pilot study the demographics questionnaire was revised for easier understanding by the reader.

### Population

The population of junior undergraduate nursing students at Western Carolina University (WCU) was used as the treatment group. Western Carolina University is a regional comprehensive, rural university located in the Appalachian mountains of western North Carolina. The nursing program serves approximately 180

undergraduate nursing students annually. A similar number of junior undergraduate nursing students at East Tennessee State University (ETSU) were used as the comparison group. East Tennessee State University is a regional comprehensive, rural university located in the Appalachian Mountains in eastern Tennessee. WCU and ETSU are both SAC accredited and have accreditation from the National League for Nursing. They have similar entrance criteria, ETSU requires a minimum GPA of 2.60, WCU requires a 2.50, and students in both programs must make a minimum of “C” grade in all their course work. WCU’s national nursing exam pass rate has been averaging in the low nineties for its spring graduates and ETSU’s in the middle eighties for their spring graduates. Both universities report a large percentage of first generation college students (Report of self-study: Bachelor of science in nursing college of nursing East Tennessee State University, 2000; Report of self-study: Bachelor of science in nursing college of nursing Western Carolina University, 1995).

### Instrumentation

The Frommelt Attitude Toward Care of the Dying (FATCOD) Scale is a 30-item instrument designed to measure nurses’ attitudes toward providing care for terminally ill persons and their families. Two-thirds of the items relate directly to a person’s attitudes toward the patient and one-third relate directly to attitudes toward the family members of the terminally ill person. Other items came from the author of the instrument’s experience with terminally ill persons and from concerns expressed by caregivers, terminally ill persons, and families of terminally ill persons.



The FATCOD instrument (see Appendix A) consists 30 Likert-type items, which are scored on 5-point scale: 1 (strongly disagree), 2 (Disagree), 3 (Uncertain), 4 (Agree), to 5 (strongly agree). Fifteen of the items are worded positively and 15 are worded negatively. Scoring is reversed for the negative items. Thus, possible scores range from 0-150, with higher scores representing more positive attitudes toward providing care for dying patients.

### Validity

To assess validity, a content validity index was computed at the time of the original study. Expert content judges were chosen who were identified as experts in the field. Requirements for judges were that they be currently licensed in nursing, active in practice, have a minimum of a BSN degree and at least four years in the experience of hospice nursing. Two judges were given instructions and based on their findings an Index of Content Validity (CVI) was computed. The CVI was repeated with the addition of three more judges who met the criteria and a computed interrater agreement of .98 was obtained (Frommelt, 1991).

To relate the instrument with the seven critical nursing behaviors in care of the dying, this researcher used experts with end-of-life experience and knowledge to relate questions on the FATCOD to the seven critical nursing behaviors in care of the dying (See Appendix C). Four end-of-life nursing experts evaluated the questions from the FATCOD and categorized the questions into the seven critical nursing behaviors.

Requirements for an end-of-life expert included currently licensed in nursing, active in the practice of hospice or palliative care nursing and at least five years of hospice/palliative care experience. Five nurses met these criteria. The minimum time of end-of-life experience was eight years, and two of the nurses had over twenty years of experience.

### Reliability

In the original FATCOD a test-retest procedure was used to assess reliability. Reliability was tested at three different times. The first two times that the reliability was measured were related to the previous research, which was conducted in 1988. The first time the sample was composed of 18 nurses from an oncology unit who were tested with the instrument and then again were re-tested using the same instrument 3 weeks later. The first test had a Pearson Product-Moment Correlation Coefficient of  $r = .94$ , the second had an  $r = .90$  (Frommelt, 1991). Rooda, Clements and Jordan (1999) found that the FATCOD was significantly correlated with attitudes toward death. They found the FATCOD scores to be negatively correlated on the Death Anxiety Profile – Revised (DAP-R) with Fear of Death, and Avoidance of Death. It was positively correlated with Neutral Acceptance of Death and Approach Acceptance, which indicate that nurses who view death as the gateway to a happy afterlife have more positive attitudes toward care of the dying.

## Demographics Questionnaire

Based on the literature review several demographics were chosen for inclusion in the study. Demographics include: previous education on death and dying, previous experience in care of the dying, previous death experience, and current experience with the terminally ill (See Appendix D).

## Educational Component

The researcher, who has a strong background and education in EOL issues and EOL education, will teach the educational component. The component is designed to involve students in active learning. The educational component is based upon materials provided by the End-of-Life Nursing Education Consortium (ELNEC). Students in the treatment group were assigned to a study/support group; participated in lecture/discussion on palliative care, death and dying and pain management; engaged in small group discussions and role-play (See Appendix F) in a seminar format; visited a gross anatomy cadaver laboratory; visited a funeral home to learn about post-mortem care, burial options, and bereavement services; and spent a clinical day at a hospice observing hospice nurses, the interdisciplinary team, and patients. The following behaviors deemed critical to care for dying patients were incorporated into the educational component (see Appendix E): (1) responding during the death scene, (2) providing comfort, (3) responding to anger, (4) enhancing personal growth, (5) responding to colleagues, (6) enhancing the quality of life during dying, and (7) responding to the family (Degner, Gow, & Thompson, 1991).

### Collection of Data

Prior to administering the instrument the researcher obtained written permission from the participating schools and informed consent from each participant (See Appendix H). Written IRB approval was obtained from Western Carolina University and accepted by East Tennessee State University (See Appendix G). The researcher personally administered the instruments to the two groups of students and was available to answer questions. Students were asked to write the last four digits of their social security number on their questionnaire. The researcher did not obtain identifying information from any of the subjects.

### Measurement of Variables

The dependent variable was attitudes toward care of the dying. The independent variables were an educational component in palliative care, death education, death experience, and time.

### Analysis of Data

The initial step of data analysis for the pretest, double posttest, comparison group study was to compute descriptive statistics (Gall, Borg, & Gall, 1996, p.496). In order to assess the impact of the intervention, an analysis of covariance was conducted using the pretest as the covariate (Gall, Borg & Gall, 1996, p. 496). This method allowed the researcher to determine whether the intervention was associated with a difference in attitude after taking into account the initial attitude. To assess the

relationship of the demographic characteristics and the intervention, a factorial analysis of covariance (ANOVA) was conducted on the pretest and posttest and each demographic variable. Correlation analysis (Pearson's  $r$ ) was used to examine relationships between the two posttest scores in the treatment group from the FATCOD scale. A Chi-Square analysis was used to assess the relationship between the categorical demographic variables of death education, previous or present death experience, experience caring for the dying, and current experience with the terminally ill. This study used a .05 level of significance.

CHAPTER FOUR  
Results

Descriptive statistics were performed on the data. Western Carolina University (WCU), the treatment group, had an  $n$  of 45, and East Tennessee State University (ETSU), the comparison group, had an  $n$  of 59 on the pretest (Table 1).

Table 1. *Descriptive Statistics; Number of Participants: Pretest, Posttest, Post Posttest, and Missing Data.*

	WCU-n	ETSU-n	Total-n
<u>Pretest</u>	45	59	104
<u>Posttest</u>	41	54	95
Student's Absent from Posttest	4	5	9
<u>Post Posttest</u>	36	N/A	36
Student's Absent from Post Posttest	5	N/A	5
Missing Data from Post Posttest	2	N/A	2
Student's Dropped from course	2	N/A	2

Four WCU nursing students and five ETSU nursing students did not take the posttest because they were absent from class the day of the posttest. The total number of pretest participants was 104; the total number of posttest participants was 95. Thirty-six WCU nursing students participated in the post posttest. In the post posttest, one student did not complete the survey in its entirety and another student did not provide the required four-digit identification number. Two students withdrew from the nursing program and five students were absent on the day of the post posttest.

Fifty-six percent of WCU nursing students reported they had coursework or some information about death and dying prior to the study, (Table 2). Forty-four percent did not have any information on death and dying prior to the study. The ETSU

nursing students reported that 69% had coursework or some information about death and dying prior to the study, with 31% reporting no coursework or information. Forty-two percent of WCU nursing students reported having some experience in caring for dying patients, while 58% reported no experience. Forty-six percent of ETSU nursing students report having experience in caring for dying patients and 54% reported no experience. See Table 3 for the percentage of students reporting having experience in care of the dying.

Table 2. *Percentage of Nursing Students With Previous Education in Care of the Dying by Schools of Nursing*

<u>Education</u>	<u>n</u>	<u>WCU</u>	<u>n</u>	<u>ETSU</u>
% Previous coursework / information	25	56%	41	69%
% No previous coursework / information	20	44%	18	31%
Totals	45	100%	59	100%

Table 3. *Percentage of Nursing Students With Previous Experience in Care of the Dying by Schools of Nursing*

<u>Experience</u>	<u>n</u>	<u>WCU</u>	<u>n</u>	<u>ETSU</u>
% Previous experience caring for dying	19	42%	27	46%
% No experience caring for dying	26	58%	32	54%
Totals	45	100%	59	100%

Nursing students were given 11 different death experience categories to choose from to define their previous death experience(s) and were also asked to differentiate among time frames as to how long ago the death experience occurred. Students chose from categories such as death of a grandparent, sibling, miscarriage, other relative or pet. Nursing students then had to list the number of losses they had experienced in a given category in the related time frame. The time frame options were: less than six months, six months to one year, one year to five years and greater than five years. The

variety of categories and time frames available to describe losses limited the number of death experiences in any given category. See Table 4 for a detailed list of category and time frame responses reported by school.



Table 4. *Nursing Student Death Experiences by Time frame and School of Nursing*

<u>Death Experience and Time Frame</u>	<u>WCU</u>	<u>ETSU</u>	<u>Total</u>
Near Death Experience < 6 months	2	1	3
Near Death Experience 1-5 years	0	3	3
Near Death Experience >5 years	1	2	3
Child 1-5 years	0	1	1
Parent < 6 months	1	1	2
Parent 6 months to 1 year	0	1	1
Parent 1-5 years	1	6	7
Parent > 5 years	0	2	2
Sibling < 6 months	0	2	2
Sibling 6 months to 1 year	1	0	1
Sibling 1-5 years	0	1	1
Sibling > 5 years	3	1	4
Grandparent < 6 months	4	2	6
Grandparent 6 months to 1 year	2	2	4
Grandparent 1-5 years	19	18	37
Grandparent > 5 years	12	24	36
Other relative < 6 months	2	5	7
Other relative 6 months to 1 year	4	1	5
Other relative 1-5 years	8	12	20
Other relative > 5 years	4	10	14
Friend < 6 months	9	5	14
Friend 6 months to 1 year	3	5	8
Friend 1-5 years	12	13	25
Friend > 5 years	2	10	12
Miscarriage < 6 months	2	1	3
Miscarriage 6 months to 1 year	1	0	1
Miscarriage 1-5 years	2	3	5
Miscarriage > 5 years	2	2	4
Pet < 6 months	4	5	9
Pet 6 months to 1 year	3	2	5
Pet 1-5 years	9	13	22
Pet > 5 years	8	9	17
Other < 6 months	2	1	3
Other 6 months to 1 year	0	3	3
Other 1-5 years	1	1	2
Other > 5 years	0	1	1
<b><u>Total</u></b>	<b><u>124</u></b>	<b><u>179</u></b>	<b><u>303</u></b>

At both schools the death of a grandparent was the most common experience with other relatives and friends being the second and third most common. The schools had approximately equal numbers of death experiences for the number of students participating in the study. It was noted that the ETSU group had experienced ten parental deaths and the WCU group had only experienced two parental deaths.

The two categories that were significant for death experience were “Death of Other Relative” less than six months ago and “Death of Other Relative” 1-5 years ago. See Table 5 and Appendix I. The nursing students who experienced death of an “Other Relative” less than 6 months ago had more positive attitudes toward care of the dying with a mean of 130.14, while nursing students who experienced the death of an “Other Relative” 1-5 years ago had a less positive attitude toward care of the dying, with a mean of 116.38. The “Miscarriage” category of 1-5 years ago, although not statistically significant had a less positive attitude, with a mean of 114.20.

Table 5. *WCU and ETSU Nursing Student’s Significant Death Experiences*

<u>Death Experience Category</u>	<u>Mean</u>	<u>n</u>	<u>Standard Deviation</u>
Other Relative – Less than 6 months	130.14	7	13.42
Group mean	121.47	97	10.04
Other Relative- 1-5 years ago	116.38	18	13.92
Group mean	123.25	86	9.27
Miscarriage – 1-5 years ago	114.20	5	10.05
Group mean	122.45	99	10.36

A limited number of students at each school were currently dealing with someone who was dying (Table 6). Only 14% of WCU students and only eight percent of ETSU students were currently dealing with someone who was dying.

Table 6. *Number and Percentage of Nursing Students With Current Experience in Care of the Dying, by Schools of Nursing*

	<u>n</u>	<u>WCU</u>	<u>n</u>	<u>ETSU</u>
Current Experience with the dying	6	14%	5	8%
No Current Experience with the dying	37	86%	54	92%
Missing Data	2		0	
Total	45	100%	59	100%

## RESULTS

An analysis of each hypothesis presents in detail the research findings of this study.

### Hypothesis 1.

Hypothesis 1: There will be no significant difference in measures of attitudes toward care of the dying between undergraduate nursing students after didactic and experiential education in palliative care and undergraduate nursing students who have not had didactic and experiential education in palliative care.

There was not a significant difference ( $p < .05$ ) between mean scores of attitudes toward care of the dying on posttest scores of nursing students at WCU and ETSU. Using ANCOVA, the p-value was .164 (Table 7). . The mean posttest score for WCU was 126.07; the mean posttest score for ETSU was 125.48. Analysis of

covariance was conducted using the pretest mean scores as the covariant. The mean scores for WCU and ETSU, once taking into account their pretest scores were: 127.19 (WCU) and 124.62 (ETSU). One of the underlying assumptions for the analysis of covariance is homogeneity of regression. This condition was checked and was met.

It was noted that one posttest score for WCU was an exceptionally low 85, when the student's pretest score was 114. While there is no way to know the reason for this abrupt change, one explanation for such a drop could be attributed to the student's aversion to the experiences at hospice, the funeral home, the anatomy lab, role-play or the lectures on palliative care. Other causes may be unrelated to the present experience and completely personal. When that one low posttest score is eliminated, the p-value is .039

Table 7. *Analysis of Covariance of FATCOD Posttest Scores using Pretest Scores as Covariant, by Schools of Nursing*

School	Pretest Mean	Posttest Mean	ANCOVA Mean	Standard Error	F-value	eta squared	p-value
WCU	119.82	126.07	127.19	1.37	-	-	-
ETSU	123.66	125.48	124.62	1.19	-	-	-
					1.97	.021	.164

### Hypothesis 2.

Hypothesis 2: There will be no significant change in attitudes toward care of the dying after an educational component in palliative care.

There was a significant ( $p < .05$ ) difference between measures of attitude toward care of the dying on the FATCOD in the treatment group (WCU). The WCU pretest scores on the FATCOD ranged from 105 to 139, and the posttest scores ranged from 85 to 146. Using a paired t-test the investigator rejected the null hypothesis. For the paired sample t-test, the p-value was .000. WCU's mean pretest score was 119.82, and the mean posttest score was 126.07. The ETSU students did not have a significant change in attitudes; their paired t-test p-value was .181, (Table 8).

Table 8. *Paired Sample T-Test Results Comparing FATCOD Pretest to Posttest Scores by Schools of Nursing*

Test Condition	n	Mean	Standard Deviation	t-value	p-value
<u>WCU</u>					
Pretest	45	119.82	9.40	-	-
Posttest	41	126.07	11.04	-	-
				-3.86	.000
<u>ETSU</u>					
Pretest	59	123.66	11.43	-	-
Posttest	54	125.48	9.59	-	-
				-1.35	.181

### Hypothesis 3.

Hypothesis 3: There will be no significant relationship between nursing students' attitudes toward care of the dying and their previous experience in care of the dying.

An Analysis of Variance (ANOVA) was conducted on the pretests of both groups to determine if previous experience in care of the dying had an effect on attitudes toward care of the dying. There was a significant relationship ( $p < .05$ ) between nursing students' attitudes toward care of the dying and their previous experience in care of the dying. Nursing students who had experience caring for dying patients had a mean score on the FATCOD of 125.28, while nursing students who did not have experience caring for dying patients had a mean score of 119.50 on the FATCOD. The p-value was .005. The Eta Square was .076 indicating that 8% of the variation in attitude can be attributed to the nursing student's previous experience in care of the dying, (Table 9).

Table 9. *Analysis of Attitudes Toward Care of the Dying In WCU and ETSU Nursing Students With Previous Experience in Care of the Dying*

<u>Experience Category</u>	<u>n</u>	<u>Mean</u>	<u>Standard Deviation</u>	<u>F-value</u>	<u>p-value</u>	<u>eta squared</u>
Experience	46	125.28	8.67	-	-	-
No Experience	58	119.50	11.09	-	-	-
				8.41	.005	.076

#### Hypothesis 4.

Hypothesis 4: There will be no significant relationship between nursing students' attitudes toward care of the dying and their previous education in death and dying.

An Analysis of Variance (ANOVA) was conducted on the pretests of both groups to determine if previous death education had an effect on attitudes toward care of the dying. There was not a significant relationship ( $p < .05$ ) between previous death education and attitudes toward care of the dying. The p-value was .476 (Table 10). It is important to note that the six students who reported having coursework prior to the pretest had a mean score of 125.83 on the FATCOD. Students who reported having no coursework, but information had a mean score of 122.51 on the FATCOD and students without any previous death and dying information had a mean score of 120.05 on the FATCOD. Although these numbers are not statistically significant, it is important to note that the students who had coursework on death and dying did have a higher mean score. Also it is important to note that only six students had previous coursework. This low number of students' makes it difficult to analyze the true effect that previous coursework might have on attitudes toward care of the dying.

To examine the data in Hypothesis 4 in a different way a Pearson Chi-Square analysis was conducted and a significant relationship between previous death education and attitudes toward care of the dying was found. The Pearson Chi-Square 2-sided score was  $p=0.21$  indicating there was a relationship (Table 11). The pattern of percentages indicated the nature of the relationship. Fifty-six percent of WCU nursing students had previous coursework or information on death and dying, while 69% percent of ETSU students had previous coursework or information on death and dying. The Lambda score of .067 indicated the strength of the relationship between previous education and attitudes toward care of the dying (Table 11).

Table 10. *Analysis of Attitudes Toward Death and Previous Death Education*

<u>Previous Education</u>	<u>n</u>	<u>Mean</u>	<u>Standard Deviation</u>	<u>F-value</u>	<u>p-value</u>	<u>eta squared</u>
Coursework on Death and Dying	6	125.83	10.24	-	-	-
Information on Death and Dying	60	122.51	10.93	-	-	-
No Information	38	120.73	9.73	-	-	-
				.749	.476	.015

As a result of knowing which “school” (WCU versus ETSU) the risk of errors in predicting previous death education was reduced by 7%. The Cramer’s V was .27.

See table 11.

Table 11. *Cross Tabulation Between College Attended and Previous Death Education*

<u>School</u>	<u>Coursework</u>	<u>Info</u>	<u>No Info</u>	<u>Chi-Square value</u>	<u>p-value</u>	<u>Lambda Score</u>	<u>Cramer V</u>
WCU	11%	44.5%	44.5%	-	-	-	-
ETSU	2%	68%	30%	-	-	-	-
				.719	.021	.067	.27

Hypothesis 5.

Hypothesis 5: There will be no significant relationship between nursing students’ attitudes toward care of the dying and their previous death experience(s).

Correlation analysis was conducted on previous death experiences and pretest scores on the FATCOD (See appendix I). Using correlation analysis two categories of previous death experience were found significant at the  $p < .05$  level. “Death of other



relative” less than six months ago had a significance level of .033, these nursing students had less positive attitudes toward care of the dying. “Death of other relative” one to five years ago had a significance of .047, the nursing students who experienced these deaths had a more positive attitude toward care of the dying. Although not statistically significant, “miscarriage” one to five years ago had a significance of .085. (Table 12). The large number of categories and the limited number of responses in each category hindered the capability to determine significant differences regarding any previous death experience and its effect on attitudes toward care of the dying.

Table 12. *Correlation Analysis of Previous Death Experiences and Attitudes Toward Care of the Dying*

<u>Previous Death Experience</u>	<u>Time frame</u>	<u>p-value</u>
Death of Other Relative	Less than 6 months ago	.033
Death of Other Relative	One to five years ago	.047
Miscarriage	One to five years ago	.085

#### Hypothesis 6.

Hypothesis 6: There will be no relationship between nursing students’ attitudes toward care of the dying and their current experience with dying patients.

An Analysis of Variance (ANOVA) was conducted on the pretests of both groups to determine if current experience with the dying had an effect on attitudes toward care of the dying. No significant difference was found in attitudes toward care of the dying in those nursing students who were currently in a relationship with a dying patient and those who were not. Only 11 students were currently in a

relationship with a dying patient. The mean FATCOD scores for those in a relationship was 121.54; the mean score of those who were not in a relationship with a dying patient was 121.96. Using an ANOVA, the p-value was .901 (Table 13). It is interesting to note that the six nursing students at WCU who were in a relationship with a dying patient had a mean pretest FATCOD score of 122.5 and a posttest score of 132.66. The five ETSU nursing students who were in a relationship with a dying patient had a mean pretest FATCOD score of 120.4 and a mean posttest score of 117.2.

Table 13. *Analysis of WCU and ETSU Nursing Student's Attitudes Toward Death and Current Death Experience*

<u>Current Death Experience</u>	<u>n</u>	<u>Mean</u>	<u>Standard Deviation</u>	<u>F-value</u>	<u>p-value</u>	<u>eta squared</u>
Current Experience with Dying	11	121.54	12.77	-	-	-
No Current Experience with Dying	91	121.92	10.28	-	-	-
				.016	.901	.000

#### Hypothesis 7.

Hypothesis 7: There will be no significant difference in attitudes toward care of the dying in nursing students four weeks after the educational component.

Using a paired t-test, there was no significant difference between nursing student's attitudes toward care of the dying four weeks after an education component in palliative care. Of the thirty-six WCU students who took both the posttest and the post posttest, their mean score on the FATCOD for the posttest was 125.50. In the post

posttest, their mean score on the FATCOD increased to 126.38. This increase was not statistically significant. See table 14.

Table 14. *WCU Nursing Student's Post Posttest Paired Samples T-Test.*

<u>Test Condition</u>	<u>n</u>	<u>Mean</u>	<u>Standard Deviation</u>	<u>t-value</u>	<u>p-value</u>
Posttest	36	125.50	11.19	-	-
Post Posttest	36	126.38	11.03	-	-
				-.603	.550

In conclusion, based on the results of this study, hypotheses two, four, and six warrant further discussion. Hypothesis two examined WCU nursing student's attitudes toward care of the dying prior to receiving and following an educational experience. There was a significant positive change in attitude following the education component. Hypothesis four was interesting in that previous research indicated that education on death and dying had a positive effect on attitudes toward care of the dying but that did not prove to be the case in this study. Hypothesis six, although not statistically significant, had interesting raw numbers. The numbers indicated that students who were currently caring for dying patients and had concurrent education in care of the dying resulted in improved attitudes toward care of the dying. The opposite effect occurred in students who were caring for dying patients, but did not have concurrent education, their attitudes actually decreased and became more negative.

## CHAPTER FIVE

### Conclusions, Implications and Recommendations

#### Introduction

Death and dying are a normal and natural part of life and an integral component of the nursing profession. This study looked at how death education, experience in care of the dying, previous death experiences and current death experiences affect nursing student's attitudes toward care of the dying. It also explored if an educational component on palliative care might affect attitudes toward care of the dying and if attitude changes remained over time. The study compared the treatment group, WCU nursing students, to a comparison group, ETSU nursing students.

Quint's (1967) theoretical model suggested that nursing students exposed to dying patients, but lacking education in how to care for the dying, experienced death anxiety and negative attitudes toward care of the dying and eventually withdraw from caring for the dying. Quint's theory proposed that if students were exposed to care of the dying without accompanying educational support, they would adopt the behavior of the other professionals around them and limit their involvement in death-related issues. Quint also theorized that if nursing students were to receive systematic death education with planned assignments, they would develop positive attitudes toward the dying and be less likely to withdraw from care of the dying. The second theoretical framework used was Transformative Learning Theory, which involves the change in an individual's beliefs, ideas and views. Using transformative learning, educators create an atmosphere in which learners are encouraged to evaluate their beliefs and

views using self-reflection. Change will occur as learners incorporate new knowledge into their belief system and transform or reject their old beliefs.

The research design was a quasi-experimental, longitudinal design with a pretest, treatment, and double posttest format. There was one treatment group (WCU) and one comparison group (ETSU). Each group completed the Frommelt Attitude Toward Care of the Dying (FATCOD) Scale and a demographics questionnaire. The treatment group then participated in an education component consisting of both didactic and clinical experiences in palliative care. The comparison group received no treatment. At the end of the education component both groups were retested using the same instrument. A second posttest of the treatment group occurred four weeks after the completion of the educational component.

#### Confounding Factors

It is important to note two events that occurred that could have had an effect on nursing students' attitudes toward care of the dying that were outside the control of the researcher. The first event that occurred was the terrorist attacks on September 11, 2001. Terrorist flew two commercial airplanes into the World Trade Centers, causing the twin towers to collapse, another plane was flown into the Pentagon, and a fourth plane crashed into a field in Pennsylvania. These events resulted in the thousands of deaths of Americans.

Students at both WCU and ETSU were devastated, bewildered, frightened, shocked and spent much time grieving over these events. Both universities took great

efforts to meet students' needs to grieve, ask questions and ponder the meaning of all that had happened.

The second event occurred at ETSU. The instructor for the comparison group's mother died during the study. When the instructor returned to teach her class after the funeral she spent at least one hour with the class discussing her mother's death and how she was coping with the death.

### Conclusions

This study found that a 6-week palliative care education component made no difference in the attitudes of nursing students toward care of the dying **when compared** to a group of nursing students who did not receive the 6-week palliative care education component. These findings are in opposition to Kaye, Gracely, & Loscalzo (1994) who found that participants in a death education course showed a clear decline in negative attitudes as compared with the control group. Other studies, such as Abengoza and Bueno (1999) and Johansson and Lally (1990), found that some students had an increase in negative attitudes toward death and dying or death anxiety while other students experienced a decrease.

Although other research has found a difference between groups of nursing students who had education in death and dying and those who did not, this study indicated that the educational component did not result in significant difference between the two groups' attitudes toward care of the dying. The groups were different in some demographics, which may have affected their attitudes. For example, the

ETSU group had more education on death and dying, and more experience in caring for the dying and had experienced more parental deaths.

This study found that nursing students who participated in a 6-week educational component on palliative care, had an positive increase in their attitudes toward care of the dying. The use of the ELNEC education package along with experiences at hospice, the funeral home, the anatomy lab and role-play may have helped to facilitate transformative learning in nursing students. From this finding it appears that one may be able to conclude that a well-organized, systematic exposure to didactic and experiential components of palliative care may result in an increase in positive attitudes toward care of the dying.

These findings were consistent with Degner's (1985) and McGee's (1980) findings that nursing students' attitudes toward care of the dying improved after a course in palliative care or death education. Medical students were found to have a positive change in attitudes toward care of the dying after a variety of different lengths and types of educational programs on EOL care (Kaye, Gracely & Loscalzo, 1994; Ross, O'Mara, Pickens, Keay, Timmel, Alexander, Hawtin, O'Brien & Schnaper, 1997; Steen, Miller, Palmer, Malmberg, DeKrey, McManus, Hachfeld, Leitch, Slotnick, & Theige, 1999; Karnad; 1999).

This study found that previous experience in caring for dying patients resulted in a more positive attitude toward care of the dying. Students who have cared for dying patients may have been forced, due to the circumstances, to deal with their feelings and attitudes about death and dying. Also, students may have seen others,

possibly registered nurses, physicians, and/or family members caring for dying patients and developed attitudes about the care that was viewed. Study participants may have provided direct care to a dying patient, which may have had a unique impact.

This finding was consistent with Brockopp, King & Hamilton (1991) who found that nurses who work on a continuous basis with dying patients have more positive attitudes toward the dying. Thompson's (1985) research also supported the idea that more experience with death and dying leads to less anxiety about dying and promoted positive attitudes toward care of the dying. Thompson's study found that nurses who cared for dying patients were more willing to share feelings and attitudes, and viewed the dying patient as a person foremost.

This study found that previous death education did not have an affect on attitudes toward care of the dying. However, one must be cautious in this position due to the small number of participants who had previous death education. It is important to note that those who did have death education, scored very highly on the FATCOD. Frommelt's (1991) research, with a larger sample size, found that the only significant factor affecting nursing students attitudes toward care of the dying was previous education on death and dying.

This study found that some previous death experiences might have an effect on attitudes toward care of the dying in nursing students. Previous death experience was a variable that was challenging to quantify. The large number of death experience category options and the numerous time frame options used in this study resulted in



small individual category numbers. The attitudes of students who indicated having had previous death experiences varied toward care of the dying. The study was unable to conclude the effect previous experience had due to small numbers of respondents in each category.

Knight, Eifenbein & Capozzi (2000) found that death experiences had long-lasting effects on death attitudes. This study found that in the categories of “other relative” and “miscarriage”, there were long-lasting effects on nursing students’ attitudes toward care of the dying. Another interesting note concerning previous death experience was that ETSU nursing students had experienced more parental deaths than WCU’s nursing students. As noted previously, ETSU’s pretest FATCOD mean scores were higher than WCU’s. This may be related to the fact that ETSU had more close family death experiences, and therefore more death experiences, possibly resulting in more death information.

Brent, Speece, Gates, Mood & Kaul (1991) found that “aversiveness decreased, attractiveness increased, and overall attitudes became more positive as the number, extent, and specificity of a student’s death related experiences increased”(p.249). In Franke and Durlak’s (1990) study on life factors affecting death attitudes they found that death of a significant other was the most important factor affecting attitudes. Waltman and Zimmerman (1992) found that nurses who had experienced a close family member death in the previous two years were significantly more likely to provide care for bereaved family members.

This study found that nursing students in a current relationship with a dying patient, did not have a change in their attitudes toward care of the dying. The small number of students who had current experience in caring for dying patients resulted in no statistically significant findings. Looking at the raw numbers, there was an improvement in attitudes toward care of the dying within the WCU treatment group of students who were currently caring for dying patients. This finding supported Quint's theory that as the student received education and accompanying positive experiences related to palliative care, they formed positive attitudes toward care of the dying. The students in the treatment group were able to implement what they learned as they were learning, which may have enhanced their positive attitudes. This was in contrast to students at ETSU who were currently in a relationship with a dying patient. Those ETSU students experienced a decrease in their attitudes toward care of the dying.

The post posttest results indicated that the nursing students who had developed positive attitudes toward care of the dying after participating in a palliative care education component, still maintained the positive attitudes four weeks later. These findings were similar to findings by Lockard (1989) and Hutchison and Scherman (1992). The fact that the scores even increased slightly may be attributed to the "sleeper effect" (p.149) which is described as an attitude change that may occur at a later date after the instruction when the student has processed the material thoroughly enough to produce a change in attitude (Zimbardo & Ebbesen, 1977).

## Implications

Research has shown that many nurses and nursing students have difficulty dealing with death (Payne, Dean, & Kalus, 1998; Servaty, Krejci, & Hayslip, 1996; Waltman & Zimmerman, 1992; Thompson, 1985; Brockopp, King, & Hamilton, 1991). Attitudes can be created and changed through education and experience. This study explored how experiences and education relating to death and dying affected nursing students' attitudes toward care of the dying. Recent trends in nursing education in the United States have nursing schools exploring and implementing EOL education. This study helps give credibility to that trend and some direction regarding implementation. Although caution must be exercised in not generalizing beyond the sample utilized, the results of this study suggest several implications for consideration.

This study indicated that nursing students' attitudes toward care of the dying were improved after an educational component in palliative care. This was consistent with previous research that demonstrated that education does have a positive effect on nurses' attitudes toward care of the dying (Brent, Speece, Gates, Mood, & Kaul, 1991; Degner, 1985; Durlak & Reisenberg, 1991; Frommelt, 1991; Kaye, Gracely, & Loscalzo, 1994; Lev, 1986). In contrast, when WCU's FATCOD scores were compared to ETSU's, which did not receive the educational component, there was not a significant difference in attitudes toward care of the dying. It was interesting to note that although nursing students' attitudes did improve, there was room for further improvement as illustrated by the highest possible FATCOD score of 150, and the mean posttest scores for the two schools were only 125 and 126.

In accordance with Quint's (1967) theoretical model that indicated nursing students needed education on death and dying prior to clinical experience in order to avoid a negative experience, the treatment group received the treatment prior to beginning clinical experiences. Therefore any previous death experiences, or death education students brought to the research was prior to their nursing student career. The timing of the palliative care education component may be important to how students receive, assimilate and possibly transform their attitudes toward care of the dying. Placing palliative care education at the beginning of the curriculum was challenging because students had very little background. However this early placement may help prevent students from developing false ideas and assumptions about care of the dying based on clinical experiences.

Previous experience in caring for the dying had a significant relationship with nursing students' attitudes toward care of the dying. This finding contradicted Quint's (1967) theory that to have a positive outcome students needed education prior to experience with dying patients. The nature and extent of the care that was provided by the nursing students to dying patients was not assessed. Therefore it was impossible to determine if these were work related experiences, experiences involving loved-ones, or experiences observing practicing nurses care for dying patients.

Caring for dying patients, along with didactic and experiential learning about care of the dying, has the potential to enhance nursing students' attitudes toward care of the dying. As this study found, an educational component in palliative care may result in an increase in positive attitudes toward care of the dying, the study also

indicated that students who are currently working with dying patients could benefit from concurrent education in care of the dying. Ultimately the goal is to enhance the nursing care given to dying patients and to improve the death experience. As society continues to expect end-of-life quality healthcare, nursing must meet these expectations and set the standard that allows the patient to die in the way he or she chooses.

### Recommendations

Based on the findings of this study and previous research, it is recommended that EOL education for nursing students have a combination of both clinical experiences and didactic education in care of the dying. It is recommended that this study be repeated using a larger sample size. It would also contribute to the body of knowledge to incorporate a qualitative component to the study that addresses the affective issues related to previous death experiences, previous death education, and previous experience in care of the dying and current experience with dying patients. Assessing how students feel about these experiences and having them relate that to their current attitude toward care of the dying would greatly enhance the researcher's ability to gain a greater understanding of how these factors affect attitudes toward care of the dying.

A palliative care elective course should be considered to allow the content to be expanded to a full semester course. By expanding the didactic experience, students would be able to assimilate more of the content and implement what has been learned

in the clinical setting prior to a posttest. Posttests could be conducted at the one-year and two-year mark just prior to graduation. These posttest times should better indicate if the education component has a long-lasting effect or if the content needs to be repeated at regular intervals throughout the curriculum.

It is also recommended that baccalaureate degree nursing students be compared with associate degree nursing students. Associate degree nursing students tend to be older with more life experience, while baccalaureate degree nursing students tend to be younger and are required to complete two years of general education or liberal studies courses prior to starting the nursing program. It would be interesting to assess which, if either, of these factors have an affect on attitudes toward care of the dying.

The purpose of this research was to assess the short-term and long-term impact of a palliative care educational component on the attitudes toward care of the dying in undergraduate nursing students and the relationship of previous education and death experience on attitudes toward care of the dying. The findings from this study help nurse educators assess the effects of EOL education on attitudes toward care of the dying in nursing students and adds to the body of knowledge in the specialty of palliative care.

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**Appendix A Frommelt Attitudes Toward Care of the Dying Scale**

Please mark the answer on the Scan-tron sheet that 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 numbers are:

**1=Strongly Disagree 2=Disagree 3=Uncertain 4=Agree 5=Strongly Agree**

#	ATTITUDES
1.	Giving nursing care to the dying person is a worthwhile learning experience.
2.	Death is not the worst thing that can happen to a person.
3.	I would be uncomfortable talking about impending death with the dying person.
4.	Nursing care for the patient's family should continue throughout the period of grief and bereavement.
5.	I would not want to be assigned to care for a dying person.
6.	The nurse should not be the one to talk about death with the dying person.
7.	The length of time required to give nursing care to a dying person would frustrate me.
8.	I would be upset when the dying person I was caring for gave up hope of getting better.
9.	It is difficult to form a close relationship with the family of a dying person.
10.	There are times when death is welcomed by the dying person.
11.	When a patient asks, "Nurse am I dying?" I think it is best to change the subject to something cheerful.
12.	I would feel like running away when the person actually died.
13.	Families need emotional support to accept the behavior changes of the dying person.
14.	As a patient nears death, the nurse should withdraw from his/her involvement with the patient.
15.	Families should be concerned about helping their dying member make the best of his/her remaining life.
16.	The dying person should not be allowed to make decisions about his/her physical care.
17.	Families should maintain as normal an environment as possible for their dying member.
18.	It is beneficial for the dying person to verbalize his/her feelings.
19.	Nursing care should extend to the family of the dying person.
20.	Nurses should permit dying persons to have flexible visiting schedules.
21.	The dying person and his/her family should be the in-charge decision makers.
22.	The family should be involved in the physical care of the dying person.
23.	I would hope the person I'm caring for dies when I am not present.
24.	I am afraid to become friends with a dying person.
25.	Addiction to pain relieving medication should not be a nursing concern when dealing with a dying person.
26.	I would be uncomfortable if I entered the room of a terminally ill person and found him/her crying.
27.	Dying persons should be given honest answers about their condition.
28.	Educating families about death and dying is not a nursing responsibility.
29.	Family members who stay close to a dying person often interfere with the professionals' job with the patient.
30.	It is possible for nurses to help patients prepare for death.



## Appendix B

### Comments from Pilot Test of Attitudes Toward Care of the Dying October 25, 2000

“Very simple and straightforward”

“I did not totally understand question # 29”

“I thought questions were comprehensive”

“I am not sure but, I think a few more questions dealing with the type of feelings that go along with caring for the terminally ill patient might add to the survey. There are some very good questions, and they are all easy to read”

“Clarify question #4 on the second page as to whether you mean student experience or personal experience”

“Questionnaire was good and easy to understand”

“On question 22, it’s hard to pick an answer because it would depend on if the patient wanted the family to help and if the family was willing. Other than that, very good questionnaire”

“Some questions are hard to answer if the test-taker has not had that or a similar experience, like #29, 12, Plus, some questions require specific training in hospice/death and dying nursing, like # 14”

“Many of the questions draw on the basics of nursing, like open-trust patient/nurse relationships, open communication, acknowledging client feelings. So, test reveals to taker that the nurse would need training by those experiences, but can also draw upon body of nursing knowledge”

“The questionnaire was easy to fill out. The only question that was confusing was #21. I assumed it meant they should make all the decisions (not that they should have that attitude) Great Idea!”

“Good survey. I believe care of the death and dying is important”

“This study was very effective at increasing the awareness of nursing students’ feelings/attitudes about death and dying.”

“This test was very well written and it touches on subjects very real to undergrad nursing students. I think we’re (students) all had some of these feelings. I feel, for myself that your (Mallory) lectures have helped me when I needed them to care for a dying patient; as well as in my own life as well.”

Appendix C

Seven Critical Nursing Behaviors in Care for the Dying

1. Responding during the death scene
2. Providing comfort
3. Responding to anger
4. Enhancing personal growth
5. Responding to colleagues
6. Enhancing the quality of life during dying
7. Responding to the family

A panel of end-of-life nursing expert assessed the questions from the FATCOD and put the questions in the seven critical nursing behaviors. The original FATCOD did not address responding to colleagues.

Frommelt Attitudes Toward Care of the Dying Scale

FATCOD #	Positive/Negative Statement	Critical Nurse Behavior Nurse #1	Nurse #2	Nurse #3	Nurse #4
#1	Positive	4	4	4,6	1,4,6
#2	Positive	4,6	1,2,6	4,6	4,7
#3	Negative	1,4,6	1,2,3,4,6	1,2,4,6	1,4,6
#4	Positive	7	7	4,6,7	7
#5	Negative	1,3,4	1,2,3,4	1,4,6	2,4
#6	Negative	4,6	1,2,3,4,6	1,2,4,6	4,6
#7	Negative	1,2,4	1,2,3,4,6	1,4,6	1,2,4
#8	Negative	1,4	1,4,6	4	1,4
#9	Negative	6, 7	4,6,7	4,7	1,7
#10	Positive	1,6	6	1,6	1,6
#11	Negative	1,2,3,4,6	1,2,3,4,6	1,2,4,6	1,2,4,6
#12	Negative	1,2	1,2,4,6,7	1,4	1,7
#13	Positive	2,6,7	2,4,6,7	1,2,6,7	2,7
#14	Negative	1,2,3,4,6	1,2,3,4,6	1,4,6	1,2,6
#15	Positive	1,6	1,6,7	2,6,7	1,6
#16	Negative	1,2,6	1,6	1,2,5,6	1,2,6
#17	Positive	6,7	1,2,6,7	6,7	1,2,6,7
#18	Positive	3,6	6	2,3,4,6	1,2,6
#19	Positive	6,7	6,7	6,7	7
#20	Positive	6,7	6,7	2,6,7	1,2,6,7
#21	Positive	2,4,6,7	1,2,4,6,7	2,6,7	1,6,7
#22	Positive	2,6,7	1,2,4,6,7	1,2,6,7	2,6,7
#23	Negative	1,2,3,4	1,2,3,4,6	1,4	1,4

Palliative Care Education

#24	Negative	4	4	1,2,4,6	1,4
#25	Positive	2	2	1,2,6	1,2
#26	Negative	1,2,3,4,6	1,2,3,4,6	1,2,3,4,6	1,2,4,6
#27	Positive	4,6	4,6	2,6	1,6
#28	Negative	6,7	4,6,7	2,4,5,6,7	6
#29	Negative	1,2,3,6,7	1,2,3,6,7	1,2,6,7	1,2,7
#30	Positive	1,4,6	1,2,4,6	1,2,4,6	1,4,6

**Appendix D Demographics for Study on Attitudes Toward Care of the Dying**

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

Please circle your answer and specify your answer when indicated.

1. Previous education on death and dying
  - a. I previously took a course on death and dying.
  - b. I did not take a specific course on death and dying, but material on the subject was included in other courses.
  - c. No information dealing with death and dying was previously presented to me.
2. Previous experience in dealing with dying patients
  - a. I have cared for terminally ill patients and their family members previously.
  - b. I have had no experience caring for terminally ill patients and their family members previously.

3. Previous experience with death  
 I have experienced death of someone close to me (specify relationship and length of time since death).  
 I have experienced near death (specify length of time since experience)

	Relationship	< 6 months	6 mon to 1 yr	1-5 years	> 5 years
a.	Near-death experience of self				
b.	Spouse				
c.	Child				
d.	Parent				
e.	Sibling				
f.	Grandparent				
g.	Other relative				
h.	Friend				
i.	Miscarriage				
j.	Pet				
k.	Other (specify: _____)				

4. Present experience
  - a. I presently have a relationship with someone who is terminally ill (life expectancy 1 year or less).
  - b. I am not dealing with any impending death at the present time.

## Appendix E

### I. Introduction

#### THE NEED FOR IMPROVED CARE AT THE END OF LIFE (EOL)

- A. Death and dying in America: Changes over the last century
  - 1. Late 1800s
  - 2. Early to middle 1900s
  - 3. Cause of death
    - a. Degenerative diseases replaced communicable diseases as leading causes of death
    - b. Infant and maternal death rates have declined dramatically
  - 4. Demographics and social trends (see Table 1)
    - a. Decreased death rate
    - b. Increased life expectancy
    - c. Racial and ethnic differences
    - d. Aging of the population
  - 5. Site of death
  - 6. Disease/dying trajectories
    - a. Sudden, unexpected death
    - b. Steady decline, short terminal phase
    - c. Slow decline, periodic crises, death
  - 7. Impact
  - 8. SUPPORT study
- B. Disparity between the way people die, and they way they want to die
  - 1. Patient/family perspective
  - 2. Barriers to quality care at the end of life
    - a. The realities of life-limiting diseases
    - b. Lack of adequate training of professionals
    - c. Delayed access to hospice and palliative care services
      - 1) Services not well understood
      - 2) Rules and regulations
      - 3) Denial of death
  - 3. Need for palliative care

### II. PRINCIPLES OF HOSPICE AND PALLIATIVE CARE

- A. Hospice
  - 1. Definition of hospice
  - 2. History
  - 3. Eligibility
- B. Palliative care
  - 1. Definition
  - 2. History
- C. Philosophy and principles of hospice and palliative care
  - 1. Philosophy of care

2. Goals of care: Comfort and quality end-of-life closure
  3. General principles of palliative care
    - a. The patient and family as the unit of care
    - b. Attention to physical, psychological, social and spiritual needs
    - c. The interdisciplinary team (IDT)
    - d. Education and support of patient and family
    - e. Extends to all patients and families across diverse life-threatening illnesses
    - f. Bereavement support
- III. INDIVIDUAL ASSESSMENT OF CARE AT THE END OF LIFE BASED ON A MODEL FOR QUALITY OF LIFE
- A. Quality of Life Model
  - B. Achieving quality of life at the end of life: Addressing multiple dimensions of care
    1. Physical well-being
    2. Psychological well-being
    3. Social well-being
    4. Spiritual well-being
  - C. Concept of suffering
  - D. Depth of suffering
  - E. Focus on cure may increase suffering
- IV. THE ROLE OF THE NURSE: EXTENDING PALLIATIVE CARE PRINCIPLES ACROSS SETTINGS TO IMPROVE END OF LIFE CARE
- A. Nurses as the constant across all settings
  - B. Expanding the concept of healing
  - C. The role of the nurse
- V. CONCLUSION

### **CRITICAL NURSING BEHAVIORS IN CARE FOR THE DYING**

#### **Responding to the family-**

##### Positive

- Behaviors that respond to the family's need for information
- Behaviors that reduce the potential for future regret
- Behaviors that include family in care or relieve them of this responsibility according to what's best for the family

##### Negative

- Ignoring the family's need for information

- Refusing to discuss dying and spiritual issues even when the family clearly wants to do so
  - Passing judgment on family decisions and family behaviors toward the dying
2. Enhancing the quality of life during dying –
- Positive
- Behaviors that help patients do things that are important to them
- Negative
- Behaviors that show lack of respect for the patient or family
3. Responding to colleagues-
- Positive
- Behaviors that provide emotional support and critical feedback to colleagues
- Negative
- Behaviors that show difficulty in providing or receiving support or criticism from colleagues
4. Responding to anger-
- Positive
- Behaviors that show respect and empathy even when anger is directed at nurse
- Negative
- Avoidance behavior or angry response
5. Providing Comfort-
- Positive
- Behaviors that increase physical comfort, particularly pain
- Negative
- Avoidance behavior that results in neglect
  - Poor symptoms management due to poor knowledge base
6. Responding during the death scene-
- Positive
- Behaviors that maintain a sense of calm
  - Behaviors that maintain family involvement
- Negative
- Behaviors that show the nurse's horror of the death scene

- Controlling behavior that excludes the family

Adapted from: Degner, L. F., Gow, C. M., & Thompson, L. A. (1991). Critical nursing behaviors in care for they dying. *Cancer Nursing*, 14(5), 246-253.

## **Pain**

### **I. INTRODUCTION**

- A. Definitions
- B. Current status of pain relief

### **II. BARRIERS TO PAIN RELIEF**

- A. Importance of discussing barriers
  - 1. Identify where obstacles exist
  - 2. Recognize when and what patient teaching is required
- B. Specific barriers
  - 1. Healthcare professionals
  - 2. Healthcare system
  - 3. Patients
  - 4. Patient education

### **III. PAIN ASSESSMENT**

- A. Importance
- B. Components (see Tables 1 and 2)
  - 1. Pain history
    - a. Self-report
    - b. Emotional state
    - c. Location (s)
    - d. Intensity
    - e. Quality
    - f. Pattern
    - g. Aggravating/alleviating factors
    - h. Medication history
    - i. Meaning of the pain
  - 2. Physical examination
  - 3. Reassess
- C. Common syndromes seen at end-of-life
- D. Pain versus suffering at the end-of-life
- E. Patients at risk for poor pain assessment and treatment
  - 1. Children
  - 2. Elderly
  - 3. Cognitively impaired persons/unconscious patients
  - 4. Patients who deny pain
  - 5. Non-English speaking
  - 6. Persons of different cultures than healthcare professionals
  - 7. Persons with a history of substance use



F. Communicating assessment findings

IV. PHARMACOLOGICAL THERAPIES

A. Nonopioids

1. Acetaminophen
2. Nonsteroidal antiinflammatory drugs (NSAIDs)

B. Opioids

1. Agonists
2. Mixed agonist-antagonists
3. Definitions
  - a. Tolerance
  - b. Physiological dependence
  - c. Psychological dependence (addiction)
  - d. Double effect

C. Adjuvant analgesics

1. Tricyclic antidepressants
2. Anticonvulsants
3. Local anesthetics
4. Corticosteroids
5. Baclofen
6. Capsaicin

D. Routes of administration

1. Oral
  - a. Immediate-release tablets/capsules
  - b. Long-acting (sustained-release) tablets/capsules (“sprinkles”)
  - c. Liquid
2. Mucosal
3. Rectal (also stomal/vaginal)
4. Transdermal
5. Topical
6. Parenteral
  - a. Intravenous
  - b. Subcutaneous
  - c. Intramuscular (not recommended)
7. Nasal
8. Spinal
  - a. Epidural
  - b. Intrathecal

E. Principles regarding the use of analgesics

1. World Health Organization (WHO) 3 step ladder
2. Prevent and treat adverse effects
3. Use of long-acting and breakthrough medications
4. Converting from one route or drug to another (equianalgesia)
5. Opioid rotation

- F. Special populations
  - 1. Pediatrics
  - 2. Elderly
  - 3. Persons with a history of substance abuse
  - 4. Uninsured and poor persons
- V. NONPHARMACOLOGICAL TECHNIQUES
  - A. Cognitive-behavioral therapies
    - 1. Relaxation
    - 2. Guided imagery
    - 3. Distraction
    - 4. Cognitive reframing
    - 5. Support groups
    - 6. Pastoral counseling
  - B. Physical measures
    - 1. Heat/cold
    - 2. Massage
    - 3. Repositioning/bracing
  - C. Complementary therapies
- VI. OTHER PAIN RELIEVING THERAPIES
- VII. PAIN DURING THE LAST HOURS OF LIFE
  - A. Assessment/management
  - B. Dosage of opioids
  - C. Accumulation of metabolites
  - D. Comfort

## VIII. CONCLUSION

### **Symptom Management**

- I. INTRODUCTION
  - A. Essential elements of symptom management
    - 1. Assessment and evaluation
    - 2. Interdisciplinary teamwork
    - 3. Economics
    - 4. Indications for diagnostic tests
    - 5. Research
  - B. Priority symptoms in end of life care
  - C. Symptoms and suffering
- II. COMMON SYMPTOMS
  - Respiratory Symptoms
    - A. Dyspnea
      - 1. Definition/overview

- 2. Causes
    - a. Pulmonary
    - b. Cardiac
    - c. Neuromuscular
    - d. Other
  - 3. Assessment
    - a. Impact on function and quality of life
    - b. Clinical assessment
  - 4. Treatments
    - a. Pharmacologic
    - b. Non-pharmacologic
    - c. Other
- B. Cough
- 1. Definition/overview
  - 2. Causes
  - 3. Assessment
  - 4. Treatment
    - a. Pharmacologic
    - b. Non-pharmacologic

GI Symptoms

- C. Anorexia/Cachexia
- 1. Definition/overview
  - 2. Causes
    - a. Disease related
    - b. Psychological
    - c. Treatment related
  - 3. Assessment
    - a. Physical findings
    - b. Impact on function
    - c. Impact on self/family
    - d. Calorie counts/daily weights
    - e. Laboratory tests
  - 4. Treatment
    - a. Dietary consult/Dietary interventions
    - b. Medications
    - c. Parenteral or enteral nutrition
    - d. Problem odors
    - e. Counseling
- D. Constipation
- 1. Definition/overview
  - 2. Causes
    - a. Disease related
    - b. Treatment related
  - 3. Assessment

- a. Bowel history
- b. Abdominal assessment
- c. Rectal assessment
- d. Medication review
- 4. Treatment
  - a. Medications
  - b. Dietary and fluid interventions
  - c. Additional approaches
- E. Diarrhea
  - 1. Definition/overview
  - 2. Causes
    - a. Disease related
    - b. Psychological
    - c. Treatment related
  - 3. Assessment
    - a. Bowel history
    - b. Medication review
    - c. Evaluate for infectious process
  - 4. Treatment
    - a. Treat etiology as appropriate
    - b. Dietary modifications (increase bulk, decreased gas-producing foods)
    - c. Medications
    - d. Hydration
- F. Nausea/vomiting
  - 1. Definition/overview
  - 2. Causes
    - a. Physiological
    - b. Psychological
    - c. Disease related
    - d. Treatment related
    - e. Other
  - 3. Assessment
    - a. Clinical/physical
    - b. History
    - c. Laboratory values
  - 4. Treatment
    - a. Pharmacologic
    - b. Non-pharmacologic
    - c. Invasive therapies
- General/Systemic
- G. Fatigue
  - 1. Definition/overview
  - 2. Causes

- a. Disease related
      - b. Psychological
      - c. Treatment related
    - 3. Assessment
      - a. Subjective
      - b. Objective
      - c. Laboratory data
    - 4. Treatment
      - a. Pharmacologic
      - b. Non-pharmacologic
  - H. Depression
    - 1. Definition/overview
    - 2. Causes
      - a. Disease related
      - b. Psychological
      - c. Treatment related
    - 3. Assessment
      - a. Situational factors
      - b. Previous psychiatric history/treatment
      - c. Presence of risk factors
      - d. Questions for depression assessment
      - e. Suicide assessment
    - 4. Treatment
      - a. Pharmacologic
      - b. Non-pharmacologic
  - I. Anxiety
    - 1. Definition/overview
    - 2. Causes
    - 3. Assessment
      - a. Symptoms
      - b. Questions for assessment
    - 4. Treatment
      - a. Pharmacologic
      - b. Non-pharmacologic
- III. CONCLUSION
- A. Symptom management challenges
  - B. Key nursing roles

## **Ethical and Legal Issues**

### Responding to Ethical Issues in End-of-life Care

- A. Introduction

B. Nurses' role in addressing ethical issues

Ethical Issues and Dilemmas in End-of-life Care

- A. Issues of decision making and communication
  - 1. Consent
  - 2. Confidentiality
  - 3. Disclosure
- B. Ethical issues at the end of life
  - 1. Prolongation of life and quality of life
  - 2. Withholding and/or withdrawing of treatment
  - 3. Do Not Resuscitate/No Code orders
  - 4. Medical futility
  - 5. Assisted suicide and euthanasia
  - 6. Research
- C. Issues of care and comfort
  - 1. Professional/patient relationship
  - 2. Provision of palliative care
  - 3. Control of symptoms
  - 4. Principle of double effect
- D. Issues of needs and resources
  - 1. Provision of quality end-of-life care
  - 2. Cost of end-of-life care
  - 3. Allocation of resources

III. FACILITATING ETHICAL & LEGAL PRACTICE

Hospice principles and practice as a framework for ethical end-of-life care

Standards of care

Code of organizational ethics

Advance care planning

- E. Advance directives
- F. Living wills
- G. Durable Power of Attorney for Health Care
- H. Health care surrogate or proxy

IV. WHEN ETHICAL DILEMMAS OCCUR

- A. The nurse as advocate
- B. Formal case analysis
- C. Ethics Committee involvement

V. Conclusion

**Communication**

DEFINITION/OVERVIEW

MYTHS/REALITIES OF COMMUNICATION

THE COMMUNICATION PROCESS

- A. Patient/family expectations
- B. Verbal and non-verbal communication
- C. Listening/silence
- D. Guidelines for encouraging free conversation

FACTORS INFLUENCING COMMUNICATION

- A. Patient/family unit
  - 1. Family systems
  - 2. Financial/educational/physical
  - 3. Physical limitations
  - 4. Coping/grief
- B. Health care professional
  - 1. Communication barriers
  - 2. Breaking bad news
  - 3. Some adaptive and maladaptive responses

TEAM COMMUNICATION

- A. Interdisciplinary team
- B. Resolving conflict

SUMMARY

**Grief, Loss and Bereavement**

I. INTRODUCTION

- A. Patient, family and nurse
- B. Nurse's role

II. THE GRIEF PROCESS

- A. The process
- B. Loss, mourning grief and bereavement
  - 1. Loss
  - 2. Mourning
  - 3. Grief

4. Bereavement
  5. Cultural considerations
    - C. Types of grief
      1. Anticipatory grief
      2. Normal grief
      3. Complicated grief
        - a. Types
        - b. Risk factors
        - c. Complicated reactions
      4. Disenfranchised grief
      5. Children's grief
        - a. Based on age & developmental level
        - b. Symptoms of grief in younger children
        - c. Symptoms of grief in older children
    - D. Stages and tasks of grief
    - E. Factors affecting the grief process
- III. GRIEF ASSESSMENT
- A. Who
  - B. When
  - C. Nursing assessment of grief
    1. Type of grief
    2. Grief reactions
    3. Stages and tasks of grief
    4. Factors that affect the grief process
    5. Assessment
    6. Bereavement assistance
- IV. BEREAVEMENT INTERVENTIONS
- A. Plan of care
  - B. Attitude
  - C. Cultural practices
  - D. What to say
  - E. Anticipatory grief
    1. Emotional support
    2. Encourage verbalization
    3. Assist with role change, education and/or resources
    4. Encourage life review
    5. Educate the patient/family about dying process
    6. Encourage patient/family to complete unfinished business
    7. Provide presence, active listening, touch and reassurance
    8. Decrease sense of loss
  - F. Grief interventions
    1. Presence, active listening, touch, silence



2. Identify and facilitate support systems
  3. Use of bereavement specialists, bereavement resources
  4. Normalizing grief process and individual differences
  5. Actualizing the loss and facilitating living without the deceased
  6. Identifying and expressing feelings
  7. Disenfranchised grief - acknowledgment
  8. Public funerals, memorial services, rites, rituals and traditions;  
private rituals
  9. Spiritual care
  10. Identifying need for additional assistance and making referrals
  - G. Bereavement interventions for children and parents
  - H. Completion of the grieving process
- V. THE NURSE: DEATH ANXIETY, CUMULATIVE LOSS, GRIEF
- A. Death anxiety
  - B. Defenses
  - C. Personal death awareness
  - D. Cumulative loss
  - E. Stages of adaptation for the nurse
  - F. Factors influencing the nurse's adaptation process
    1. Professional training
    2. Personal death history
    3. Life changes
    4. Support systems
  - G. System of support
    1. Balance
    2. Assessing support systems
    3. Formal support systems
- a. Pre-planned gatherings
  - b. Post-clinical debriefing
  - c. Ceremonies, programs
    4. Informal support
    5. Instructor support
    6. Spiritual support
    7. Education
    8. Individual facilitated support
      - a. Acknowledge limitations
      - b. Ask for help
      - c. Journal writing
      - d. Exercise
      - e. Relaxation
      - f. Socialization
      - g. Hobbies
      - h. Play

## VI. CONCLUSION

### **Preparation and Care for the Time of Death**

- I. INTRODUCTION
  - A. The nurse, dying and death
  - B. Dying is a unique experience
  - C. Dying as a physical, psychological, social, and spiritual event
  
- II. PATIENT AND FAMILY PREPARATION THROUGH ADVOCACY, COMMUNICATION, EDUCATION AND SUPPORT IN ANY PRACTICE SETTING
  - A. The nurse as advocate
  - B. Setting
  - C. Open, honest communication as death approaches
  - D. Education about care at the time of death
  
- III. THE IMMINENTLY DYING PATIENT: SIGNS, SYMPTOMS AND NURSING INTERVENTIONS
  - A. Determining prognosis
  - B. Psychological and spiritual symptoms and interventions
    - 1. Fear of the dying process
    - 2. Fear of abandonment
    - 3. Fear of the unknown
    - 4. Nearing death awareness
    - 5. Withdrawal from family, friends and/or caregivers
    - 6. Increased focus on spiritual issues
  - C. Physical symptoms
    - 1. Confusion, disorientation, delirium
    - 2. Weakness and fatigue
    - 3. Increased drowsiness, sleeping and decreased responsiveness
    - 4. Decreased oral intake
    - 5. Decreased or lack of swallow reflex
    - 6. Surges of energy
    - 7. Restlessness and/or terminal agitation
    - 8. Fever
    - 9. Change in bowel elimination including constipation/diarrhea
    - 10. Incontinence
  - D. Universal symptoms of imminent death
    - 1. Decreased urine output
    - 2. Cold and mottled extremities
    - 3. Vital sign changes
    - 4. Respiratory congestion including respiratory bubbling

- 5. Breathing pattern changes
- E. The dying child
- F. The death vigil
  - 1. Family desires/preferences
  - 2. Common fears
  - 3. Nursing interventions

IV. DEATH

- A. Communicating the death
- B. Signs and symptoms of death
  - 1. Absence of heart beat/respirations
  - 2. Release of stool and urine
  - 3. No response
  - 4. Pupils fixed
  - 5. Body color pale and waxy
  - 6. Body temperature drop
  - 7. Eyes remain open
  - 8. Jaw may fall open
- C. Death pronouncement
  - 1. Identify policies
  - 2. Procedure
    - a. Identify patient
    - b. Note signs of death
    - c. Document
- D. Cultural considerations

V. CARE IMMEDIATELY FOLLOWING DEATH

- A. Preparing the family
- B. Nursing responsibilities for care after death
  - 1. Evaluate circumstances of death
  - 2. Assess if patient is an organ donor
  - 3. Removal of tubes, medical supplies and equipment
  - 4. Bathing and dressing body
  - 5. Time with the body and removal of body
  - 6. Assistance with phone calls
  - 7. Notifications
  - 8. Destroying medications
  - 9. Assisting with funeral arrangements
  - 10. Initiating bereavement support
- C. Children

VI. SUPPORT FOR THE NURSE

- A. Ask for help
- B. Verbalize

- C. Post clinical debriefing

## VII. CONCLUSION

### **Achieving Quality Care at the End of Life**

- I. THE CHALLENGE FOR NURSES FOR QUALITY END OF LIFE CARE
  - A. Integrating palliative care principles across settings
  - B. Nursing's competencies in end-of-life care
  - C. The Importance of presence
- II. COSTS OF END OF LIFE CARE
  - A. Managed care
  - B. Expenses for care
  - C. Payment for care
  - D. Access to end of life care
  - E. Resource allocation
  - F. Optimum use of community resources
  - G. Patient/family perspective
  - H. Outcomes of end of life care
- III. THE NURSES' ROLE IN IMPROVING CARE SYSTEMS
  - A. Why we must participate in and lead reform
  - B. What would reform aim to do
  - C. Personal improvement
  - D. Your own service team
  - E. Your provider organization
  - F. Your regional health care system
  - G. Your state and federal policy
- IV. OPPORTUNITIES FOR GROWTH AT THE END OF LIFE
  - A. Personal growth
  - B. Achieving a peaceful death
    - Patient/family perspective
    - Professional perspective
- V. THE GOOD DEATH
  - A. How does one define "a good death"?
  - B. Each person's dying process presents with unique circumstances
  - C. Not all deaths are peaceful or "good"
  - D. Maintaining a realistic perspective
  - E. The "good death" versus "dying well"
- VI. CONCLUSION

Palliative Care Education

- A. Dignity
- B. Benefits/enrichments
- C. Nurses as a vital role in end of life care

Educational Component Adapted from: The End-Of-Life Nursing Education Consortium Training Program, Funded by the Robert Wood Johnson Foundation, March 15-17, 2001.

## Appendix F

### **Role-play**

Discuss the purpose of role-play:

- To allow participants to try newly learned skills in a safe environment.
- To provide honest feedback/critique of role-play experiences
- To learn new techniques for facilitation from fellow role-play participants
- Improve facilitation skills

Discuss the importance of giving and taking critique safely.

Role-play involves intensive management of feelings of performance anxiety, humiliation, mastery, and peer acceptance. You will need to learn how individuals respond to criticism, help others deliver negative feedback in a positive and kind, yet clear and specific way. When a role-play does not go well, it is often helpful to provide input and allow the same person to do the role-play again, demonstrating mastery (or at least improvement) over the previous performance.

### Case Study and Role-play scenario

Mr. Johnson is a 78 year old male who presents to Oncology clinic reporting recent increase in abdominal pain. He also reports a ten- pound weight loss in the last two weeks. He has experienced alternating constipation and diarrhea. He hasn't slept well because of pain. His past medical history includes high cholesterol and hypertension. He had a lipoma removed from his neck in 1982. He had a triple bypass in 1981. He had his tonsils and adenoids removed when he was 8 years old. He quit smoking in his 50's and reports being a "social drinker".

Mr. Johnson has been followed in Oncology for two years.

When he first presented to his primary care physician two years ago, he reported sharp abdominal pain and bloating "for a year". He reported sharp pain that began in the right lower quadrant and radiated to the lower left quadrant associated with bowel movements. He also began to notice decreased bowel control and increased flatus, with a three-day bout of constipation followed by frequent, small bowel movements. He reported that half of his stool was black. At that time, his weight was stable and his appetite "excellent". He was taking Maalox with some relief but quit one week before coming in to see his doctor. A colonoscopy revealed a polypoid lesion at 20 cm. Mr. Johnson had a surgical bowel resection, chemotherapy and radiation.

Unfortunately after chemotherapy and radiation Mr. Johnson's disease has continued to progress. His prognosis was discussed with him and his wife and they were told that it was not likely that he would live much longer, maybe another six weeks or so. Care options were discussed with them. They initially hoped to go home with hospice care in place. However, Mr. Johnson became concerned about the burden on his wife, who

had recently fractured her leg and was on crutches. He stated that he did not want to leave the hospital because he could no walk and because he required a great deal of physical care and monitoring.

Discuss the Johnson's case, come up with at least three nursing diagnoses and develop a short care plan for them.

Subsequently the Johnson's' decide that it would be best for Mr. Johnson to be in the inpatient palliative care program. Shortly after transferring to the inpatient palliative care unit, Mr. Johnson tells one of the night nurses "couldn't you just give me a pill... I just want to get this over with." Mr. Johnson stated that he is not afraid of death. He talked at length about his concerns regarding pain and suffering, and the indignity associated with being unable to care for himself.

Role-play: You are the staff nurse on the night shift. Mr. Johnson has just had an incontinent bowel movement that you had to help clean up. He is extremely embarrassed and says to you "Couldn't you jut give me a pill.... I just want to get this over with."

Case Study continued...

Mr. Johnson is also concerned about the expense and suffering his family will have to go through. He denies symptoms of clinical depression and reports that he continues to enjoy interacting with his family and close friends. He denied suicidal ideation or intent; he just wanted to avoid suffering for himself and his family. He was informed that physician assisted suicide was not available to him. The psychologist found him able to provide informed consent and participate in decision-making.

The hospital ethics committee chair met with Mr. Johnson and reiterated that physician-assisted suicide was not an option that could be offered. He was told that he could choose to stop feeding and hydration if he felt he was ready to do so; the pros and cons of implementing this option were discussed at length. He was referred to the Palliative Care Unit social worker to complete his Advance Directives. He met with his doctor and had a "do not resuscitate" order written.

Discuss the importance of educating patients on their options and giving patients choices and control. Discuss how and why some caregivers may struggle with giving the patient control.

Mrs. Johnson is having a hard time accepting that Mr. Johnson is dying. She confides in you that she has never had anyone close to her die before. She was orphaned as a child and is very frightened about how her husband will die.

Role-play: Role-play a discussion with Mrs. Johnson about her fears about death, use your knowledge about approaching death to help educate Mrs. Johnson on what to expect as Mr. Johnson gets closer to death.

As Mr. Johnson continues to prepare for his death, he meets with the social worker to make his funeral arrangements. She reviews all of his options (burial, cremation, funeral homes and so on). Mr. Johnson decides to have his body donated to the local medical school as a contribution to medical science and to help educate future physicians. Although Mrs. Johnson cannot say she is completely comfortable with this, she agrees to support her husband's decision.

Mr. Johnson begins to deteriorate significantly. During his six-week stay in the palliative care unit, several of the nurses have become very close to the Johnson family. At shift change tonight Joan the day shift nurse says she will probably call in sick tomorrow because she can't bear to watch Mr. Johnson die.

Role-play: Role-play your response to Joan as she discusses her feelings about caring for Mr. Johnson and his family.

Mr. Johnson becomes increasingly somnolent and will only arouse to touching of his arm or calling his name. He is unable to keep his eyes open for more than a moment. He is passing large blood clots from his rectum and is leaking urine from his urethra. His condition is deteriorating rapidly. He is Cheyne-Stoke breathing and he is mottled. As you give him pain medication for comfort.....

Role-play: Use role-play to demonstrate how you will talk with the family at Mr. Johnson's bedside, model care at the end-of-life and be present for the patient and family at the time of death.



## **Negotiating Treatment Goals: Standardized Patient Script**

Role-play Script:

### Nurses' Role:

You have been following Ms. Tucker, a 32-year old woman with metastatic breast cancer for the past two years. She has been on an extensive range of chemotherapeutic agents, and has demonstrated slow, but consistent disease progression through each of them. She currently has extensive liver and bone metastases, for which she requires high doses of opioids. Her pain has been under good control. The doctor has told her that her disease is not curable and has discussed her lack of chemotherapeutic options openly with her.

You are meeting with Ms. Tucker today to talk about her future and assist her, if she is ready in making some end-of-life decisions.

She has always asked you to be honest with her about what is happening and what she can expect. Throughout her illness, her primary concern has been about her 12-year old son, for whom she is a single parent. She recently moved nearer her parents because of concerns about her deteriorating medical condition. She has been resolute on maintaining as much independence as possible, and is very disturbed by the idea of being a burden to her son and parents. Over the past year, with some coaxing, she has made custody arrangements for her son, but has not told him how ill she is.

You enter her room to talk with her about how she is doing. She is showing signs of rapid decrease in her physical health and you feel it is time that she made some end-of-life decisions.

## Role-Play

### *Patient's Role:*

You are a 32-year old woman with metastatic breast cancer for the past two years. You have been on an extensive range of chemotherapeutic agents, and have experienced slow, but consistent disease progression through each of them. You know that you have extensive liver and bone metastases, that your disease is incurable, and that your therapeutic choices are dwindling. You have had considerable pain that is well controlled on high doses of opioids and ibuprofen. Although you are aware at some level that you are becoming progressively weaker, you try not to think about it and tend to minimize this change.

You have always thought, that even with your widespread disease, you would have several years more of life. When you saw on a note that you read in your chart that you were “in the last phase of life”, you were deeply disturbed. As a single mother, your biggest concern is for your son, and you are very frightened that you will not be around to raise him. You had a great deal of difficulty addressing the custody issues for him if you die, but finally, with a lot of support, were able to complete all the custody arrangements for him to go live with your parents. In addition to your son, you are very concerned about your parents, both of whom have health problems. Your mother is mentally ill, and you are afraid that she will not be able to deal with your dying. You have been trying to maintain as much independence as possible, and are very disturbed by the idea of being a burden on your son and parents. You have not told your son how sick you are, although he understands that you have cancer.

You feel that your life hasn't meant much, that you haven't contributed much to the world, and you have a sense of regret about not having done more. Before your son's birth, you worked as a nursing home aide. Your relationship with your son's father was disastrous, and he now lives far away. Your son visits him once a year. You are extremely proud of your son, and deeply distressed at the idea that you might not be here to see him grow up.

You have always asked your oncologist to be honest about what is happening and what you can expect. You are terrified of dying and have always wanted to pursue any highly aggressive treatment that would provide you with even a remote chance of a positive outcome.

The first thing you should say when the nurse enters your room is that “I can see by your face that it is bad news”. Allow the nurse to explain what is happening to your body, then immediately ask “Am I dying?” Show your distress clearly. Persist on the questions of “does this mean I am dying?” “What is dying like?” “This can't be happening to me” “There must be something you can do” As the nurse asks about end-

of-life decisions, talk about your son and your inability to think about not being here for him.

Express strong emotions (sadness, despair, bewilderment, anger) about the fact that you are dying.

Role-Play-

Patient should be seated in wheelchair, wrapped in a blanket. She is very weak and shaky. She is extremely frightened, but is in a great deal of denial. She should focus on the fact that she just wants to get home. She should persist in being quite unrealistic even as the nurse discusses what is going on. Comments like: “This can’t be happening” “I don’t believe it.” “I was fine last week” should alternate with sadness and tearfulness. Even by the end of the interview, she should remain in denial.

*Adapted from Harvard School of Medicine Program in Palliative Care.*

Role-play

**End-of-Life Communication in the ICU**

The Patient:

Ms. Duncan is a 54-year-old woman with pancreatic cancer diagnosed six months ago. She has been pursuing a strategy of very aggressive treatment since diagnosis, and has received 5FU, gemcitabine, and, most recently, been on a Phase I trial. Over the past two months, she has been losing weight, and her most recent work-up showed liver metastases. She was admitted to the hospital for abdominal pain, developed jaundice and a prolonged INR, and subsequently began GI bleeding. At her family's insistence, she was treated aggressively, but aspirated and was intubated. Since coming to the ICU two days ago, she has stabilized medically, and her GI bleeding has stopped. However, she is requiring continued pressors, has persistently elevated liver functions tests and an elevated ammonia level. She remains on a ventilator, on 100% oxygen. She is receiving antibiotics for aspiration pneumonia. In spite of lightening her sedation, she is unresponsive to pain. The oncologists believe that her prognosis is hopeless and say that they have explained how terrible her prognosis is to her family from the beginning.

Ms. Duncan has a 17 year-old daughter who lives at home, and a son who is in college nearby. Her husband is a businessman. Her sister, to whom she is very close, lives about 200 miles away. She did not discuss the possibility that she might die from her illness with her husband, and consistently tried to protect her children from learning the seriousness of her illness understanding how bad her disease was.

Although unconscious, Ms. Duncan can be seen to become agitated and uncomfortable when suctioned. She grimaces spontaneously at seemingly random moments.

The Setting:

You are an ICU nurse assigned to care for Ms. Duncan. In reviewing Ms. Duncan's situation, it is clear to you and the rest of the team that her prognosis is hopeless. Although the physicians have tried a time-limited trial of aggressive treatment, you believe that this trial has failed. You have decided to broach this issue with the family at your meeting with them today. Your goal is to obtain the family's consent for the withdrawal of treatment as soon as possible.

The husband:

Mr. Duncan is a successful businessman. He is a rational, "can-do" person, who deals with things unemotionally. He wants to know the facts, the levels of certainty, and has tremendous faith in scientific medicine. He does not want to see himself or be seen as "giving up" on his wife. At the same time, he is deeply distressed by the idea of her

suffering. He and his wife have never had any discussions about what her wishes would be under these circumstances, but he knows that she was “a fighter” and would not want to give up if there were any chance for hope. He is somewhat dominating, but also can listen and be reasonable.

The daughter:

Ms. Duncan’s daughter is close to her mother, and realizes her mother is suffering profoundly. She sees her mother’s discomfort and is very upset by what she perceives as her mother’s loss of dignity lying unconscious in the ICU. She does not want her mother to suffer. Although she knew that her mother had cancer, she had no idea that she was so sick until this hospitalization.

The son:

Ms. Duncan’s son is suspicious of the motivations of the doctors in wanting to withdraw treatment, but also is concerned about his mother’s suffering. Because he was away at college, his parents shielded him from information about his mother’s illness. He, too, did not know how ill she was and how poor her prognosis was.

The sister:

Ms. Duncan did share with her sister her concerns about her illness, her intense wish to protect her husband and children, and some of her feelings about death. She said that she would not want to be kept alive if her situation was hopeless, but that she was willing to go through “a lot” if there was any chance that she could get better. Ms. Duncan’s sister works in the health care field, and feels comfortable around the hospital. She has never had a conversation with the rest of Ms. Duncan’s family about their conversations, and about Ms. Duncan’s wishes.

*Adapted from Harvard School of Medicine Program in Palliative Care.*

## Talking with the Dying Patient

1. Questions for getting started:
  - a. What is your understanding of your illness?
    - How did your illness begin?
    - How has it been treated?
    - What have you been told?
    - How have you responded to the news?
    - How has your family responded?
    - What are your expectations and concerns about the future?
  - b. What has this illness been like for you?
    - How has it affected you physically? Emotionally?
    - What has been most difficult about this illness?
    - Have you been sad? Frightened?
    - What have been the surprises for you about your illness?
  - c. How have you been helped?
    - What gives you strength?
    - How have you been helped by family and friends?
    - By doctors? Nurses? Other healthcare people?
    - By your minister? (priest, rabbi, etc)?
  - d. How have you dealt with other tough times you have had to face?
    - Have there been serious losses before?
    - How did you get through the loss (es)?
  - e. Have you been thinking about dying?
    - What kinds of thoughts have you had?
    - What are your fears?
    - What kinds of plans have you made?
    - If you were to die today, what would be left undone?
    - What are your goals for this last phase of your life? Are there things we can work on that would help you come to a sense of peace as you think about dying?
  - f. How have your family (or close friends) been affected by your illness?
    - What have you discussed with them?
    - How do you think they are coping with your illness?
    - What are your concerns about them?

## 2. Assessing Psychosocial and Spiritual Pain

When confronting illness and death, many patients experience isolation, loneliness, a changed sense of self, and a crisis of meaning. Often patients suffer more from psychosocial and existential/spiritual crisis than they do from physical pain.

- a. Assessing personhood
  - What keeps you going?
  - What are the qualities that you value most in yourself?
  - Are you able to feel like yourself with this illness?

- How has your illness changed you as a person?
  - How has your illness changed the roles you play in life?
  - How has it changed your relationship with your body?
  - How has it changed your inner life?
- b. Assessing Depression
- How do you see your future?
  - Are there any things you can enjoy or look forward to?
  - Do you think that things could get so bad that you would consider ending your life?
- c. Assessing spiritual/religious beliefs and practices
- What gives your life meaning?
  - What do you value most about your life?
  - What do you feel proudest about in your life?
  - Does religion or spirituality play a role in your life?
  - Are you part of a religious or faith community?
  - Do you have religious or spiritual practices that give you a sense of meaning and connection?
  - What kind of relationship would you say you have with God?
  - Have you struggled with feelings of doubt, anger at God, or a crisis of faith? How have you handled it?
  - What are your beliefs about death and what comes afterwards?

Adapted from Harvard School of Medicine Program in Palliative Care  
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Appendix G

October 5, 2000

Dr. Nancy Alley  
Executive Associate Dean  
College of Nursing  
East Tennessee State University  
Johnson City, TN 37614-0617

Dear Dr. Alley,

I am writing to request permission to administer a questionnaire on Attitudes Toward Care of the Dying to your junior nursing students this fall. The study will be conducted in partial fulfillment of the requirements for the Doctor of Education degree at North Carolina State University.

I have spoken with Dr. Sally Blowers and she has agreed to let me use the students in her fundamentals classes as potential subjects. These students will serve as my comparison group and not receive any treatment. The study involves a pretest, one posttest administered six weeks later, and a final posttest twelve weeks following the six-week posttest. I will personally administer the tests.

Approximately 20 minutes of class time should be allotted to complete the questionnaire. Students' participation in the study is voluntary, and this is stated both on the questionnaire as well as by the researcher in the explanation given for completion of the questionnaire. Students are also free to withdraw their consent and discontinue participation in the study at any time. Copies of the survey, consent form and IRB approval are included.

Thank you for your consideration of my request and proposed study. I look forward to working with you, Dr. Blowers, and ETSU nursing students. If I can supply more information, please let me know.

Sincerely,

Judy L. Mallory, MS, CRNH  
Assistant Professor of Nursing  
Western Carolina University

enclosures



Appendix H

Western Carolina University

College of Applied Sciences  
Department of Nursing

Project Title: Attitudes Toward Care of the Dying

Investigator(s) Judy L. Mallory, MS (N), CRNH

I, \_\_\_\_\_ a student at **Western Carolina University or East Tennessee State University**, hereby certify that I have been told by Judy L. Mallory about the research on Attitudes Toward Care of the Dying and its purpose, in which I have been asked to take part. I have been told the procedure to be followed, and how much time is involved. I have also been told the extent to which any records, which may identify subjects, will be kept confidential. I have been given an opportunity to ask questions.

I understand that I have the right to ask questions at any time and that I should contact Judy L. Mallory for answers about the research and my rights.

I understand that I have the right to withdraw this consent to take part in the project at any time and withdraw from the project without penalty.

I hereby freely consent to taking part in this research project.

\_\_\_\_\_  
Signature of Participant

\_\_\_\_\_  
Witness

\_\_\_\_\_  
Date

## Appendix I Correlation Analysis of Death Experiences

### Correlations

		NEARDE1	TOTALPRE
NEARDE1	Pearson Correlation	1.000	-.117
	Sig. (2-tailed)	.	.237
	N	104	104
TOTALPRE	Pearson Correlation	-.117	1.000
	Sig. (2-tailed)	.237	.
	N	104	104

### Correlations

		TOTALPRE	NEARDE2
TOTALPRE	Pearson Correlation	1.000	. <sup>a</sup>
	Sig. (2-tailed)	.	.
	N	104	104
NEARDE2	Pearson Correlation	. <sup>a</sup>	. <sup>a</sup>
	Sig. (2-tailed)	.	.
	N	104	104

a. Cannot be computed because at least one of the variables is constant.

### Correlations

		TOTALPRE	NEARDE3
TOTALPRE	Pearson Correlation	1.000	-.062
	Sig. (2-tailed)	.	.534
	N	104	104
NEARDE3	Pearson Correlation	-.062	1.000
	Sig. (2-tailed)	.534	.
	N	104	104

### Correlations

		TOTALPRE	NEARDE4
TOTALPRE	Pearson Correlation	1.000	-.045
	Sig. (2-tailed)	.	.649
	N	104	104
NEARDE4	Pearson Correlation	-.045	1.000
	Sig. (2-tailed)	.649	.
	N	104	104

**Correlations**

		TOTALPRE	PARENT1
TOTALPRE	Pearson Correlation	1.000	.073
	Sig. (2-tailed)	.	.460
	N	104	104
PARENT1	Pearson Correlation	.073	1.000
	Sig. (2-tailed)	.460	.
	N	104	104

**Correlations**

		TOTALPRE	PARENT2
TOTALPRE	Pearson Correlation	1.000	.028
	Sig. (2-tailed)	.	.779
	N	104	104
PARENT2	Pearson Correlation	.028	1.000
	Sig. (2-tailed)	.779	.
	N	104	104

**Correlations**

		TOTALPRE	PARENT3
TOTALPRE	Pearson Correlation	1.000	.088
	Sig. (2-tailed)	.	.375
	N	104	104
PARENT3	Pearson Correlation	.088	1.000
	Sig. (2-tailed)	.375	.
	N	104	104

**Correlations**

		TOTALPRE	PARENT4
TOTALPRE	Pearson Correlation	1.000	-.014
	Sig. (2-tailed)	.	.886
	N	104	104
PARENT4	Pearson Correlation	-.014	1.000
	Sig. (2-tailed)	.886	.
	N	104	104

**Correlations**

		TOTALPRE	SIBLING1
TOTALPRE	Pearson Correlation	1.000	.114
	Sig. (2-tailed)	.	.251
	N	104	104
SIBLING1	Pearson Correlation	.114	1.000
	Sig. (2-tailed)	.251	.
	N	104	104

**Correlations**

		TOTALPRE	SIBLING2
TOTALPRE	Pearson Correlation	1.000	-.114
	Sig. (2-tailed)	.	.248
	N	104	104
SIBLING2	Pearson Correlation	-.114	1.000
	Sig. (2-tailed)	.248	.
	N	104	104

**Correlations**

		TOTALPRE	SIBLING3
TOTALPRE	Pearson Correlation	1.000	.047
	Sig. (2-tailed)	.	.637
	N	104	104
SIBLING3	Pearson Correlation	.047	1.000
	Sig. (2-tailed)	.637	.
	N	104	104

**Correlations**

		TOTALPRE	SIBLING4
TOTALPRE	Pearson Correlation	1.000	.148
	Sig. (2-tailed)	.	.134
	N	104	104
SIBLING4	Pearson Correlation	.148	1.000
	Sig. (2-tailed)	.134	.
	N	104	104

**Correlations**

		TOTALPRE	GRAND1
TOTALPRE	Pearson Correlation	1.000	-.049
	Sig. (2-tailed)	.	.622
	N	104	104
GRAND1	Pearson Correlation	-.049	1.000
	Sig. (2-tailed)	.622	.
	N	104	104

**Correlations**

		TOTALPRE	GRAND2
TOTALPRE	Pearson Correlation	1.000	.066
	Sig. (2-tailed)	.	.505
	N	104	104
GRAND2	Pearson Correlation	.066	1.000
	Sig. (2-tailed)	.505	.
	N	104	104

**Correlations**

		TOTALPRE	GRAND3
TOTALPRE	Pearson Correlation	1.000	.037
	Sig. (2-tailed)	.	.713
	N	104	104
GRAND3	Pearson Correlation	.037	1.000
	Sig. (2-tailed)	.713	.
	N	104	104

**Correlations**

		TOTALPRE	GRAND4
TOTALPRE	Pearson Correlation	1.000	.003
	Sig. (2-tailed)	.	.979
	N	104	104
GRAND4	Pearson Correlation	.003	1.000
	Sig. (2-tailed)	.979	.
	N	104	104

**Correlations**

		TOTALPRE	OTHERR1
TOTALPRE	Pearson Correlation	1.000	.209*
	Sig. (2-tailed)	.	.033
	N	104	104
OTHERR1	Pearson Correlation	.209*	1.000
	Sig. (2-tailed)	.033	.
	N	104	104

\*. Correlation is significant at the 0.05 level (2-tailed).

**Correlations**

		TOTALPRE	OTHERR2
TOTALPRE	Pearson Correlation	1.000	-.144
	Sig. (2-tailed)	.	.145
	N	104	104
OTHERR2	Pearson Correlation	-.144	1.000
	Sig. (2-tailed)	.145	.
	N	104	104

**Correlations**

		TOTALPRE	OTHERR3
TOTALPRE	Pearson Correlation	1.000	-.195*
	Sig. (2-tailed)	.	.047
	N	104	104
OTHERR3	Pearson Correlation	-.195*	1.000
	Sig. (2-tailed)	.047	.
	N	104	104

\*. Correlation is significant at the 0.05 level (2-tailed).

**Correlations**

		TOTALPRE	OTHERR4
TOTALPRE	Pearson Correlation	1.000	.009
	Sig. (2-tailed)	.	.931
	N	104	104
OTHERR4	Pearson Correlation	.009	1.000
	Sig. (2-tailed)	.931	.
	N	104	104

**Correlations**

		TOTALPRE	FRIEND1
TOTALPRE	Pearson Correlation	1.000	-.023
	Sig. (2-tailed)	.	.814
	N	104	104
FRIEND1	Pearson Correlation	-.023	1.000
	Sig. (2-tailed)	.814	.
	N	104	104

**Correlations**

		TOTALPRE	FRIEND2
TOTALPRE	Pearson Correlation	1.000	-.031
	Sig. (2-tailed)	.	.755
	N	104	104
FRIEND2	Pearson Correlation	-.031	1.000
	Sig. (2-tailed)	.755	.
	N	104	104

**Correlations**

		TOTALPRE	FRIEND3
TOTALPRE	Pearson Correlation	1.000	.099
	Sig. (2-tailed)	.	.320
	N	104	104
FRIEND3	Pearson Correlation	.099	1.000
	Sig. (2-tailed)	.320	.
	N	104	104

**Correlations**

		TOTALPRE	FRIEND4
TOTALPRE	Pearson Correlation	1.000	.007
	Sig. (2-tailed)	.	.946
	N	104	104
FRIEND4	Pearson Correlation	.007	1.000
	Sig. (2-tailed)	.946	.
	N	104	104

**Correlations**

		TOTALPRE	MISCAR1
TOTALPRE	Pearson Correlation	1.000	-.023
	Sig. (2-tailed)	.	.816
	N	104	104
MISCAR1	Pearson Correlation	-.023	1.000
	Sig. (2-tailed)	.816	.
	N	104	104

**Correlations**

		TOTALPRE	MISCAR2
TOTALPRE	Pearson Correlation	1.000	-.010
	Sig. (2-tailed)	.	.920
	N	104	104
MISCAR2	Pearson Correlation	-.010	1.000
	Sig. (2-tailed)	.920	.
	N	104	104

**Correlations**

		TOTALPRE	MISCAR3
TOTALPRE	Pearson Correlation	1.000	-.170
	Sig. (2-tailed)	.	.085
	N	104	104
MISCAR3	Pearson Correlation	-.170	1.000
	Sig. (2-tailed)	.085	.
	N	104	104

**Correlations**

		TOTALPRE	MISCAR4
TOTALPRE	Pearson Correlation	1.000	-.054
	Sig. (2-tailed)	.	.586
	N	104	104
MISCAR4	Pearson Correlation	-.054	1.000
	Sig. (2-tailed)	.586	.
	N	104	104



**Correlations**

		TOTALPRE	PET1
TOTALPRE	Pearson Correlation	1.000	.071
	Sig. (2-tailed)	.	.476
	N	104	104
PET1	Pearson Correlation	.071	1.000
	Sig. (2-tailed)	.476	.
	N	104	104

**Correlations**

		TOTALPRE	PET2
TOTALPRE	Pearson Correlation	1.000	.016
	Sig. (2-tailed)	.	.872
	N	104	104
PET2	Pearson Correlation	.016	1.000
	Sig. (2-tailed)	.872	.
	N	104	104

**Correlations**

		TOTALPRE	PET3
TOTALPRE	Pearson Correlation	1.000	.004
	Sig. (2-tailed)	.	.969
	N	104	104
PET3	Pearson Correlation	.004	1.000
	Sig. (2-tailed)	.969	.
	N	104	104

**Correlations**

		TOTALPRE	PET4
TOTALPRE	Pearson Correlation	1.000	-.015
	Sig. (2-tailed)	.	.880
	N	104	104
PET4	Pearson Correlation	-.015	1.000
	Sig. (2-tailed)	.880	.
	N	104	104

**Correlations**

		TOTALPRE	OTHER1
TOTALPRE	Pearson Correlation	1.000	.121
	Sig. (2-tailed)	.	.223
	N	104	104
OTHER1	Pearson Correlation	.121	1.000
	Sig. (2-tailed)	.223	.
	N	104	104

**Correlations**

		TOTALPRE	OTHER2
TOTALPRE	Pearson Correlation	1.000	.060
	Sig. (2-tailed)	.	.547
	N	104	104
OTHER2	Pearson Correlation	.060	1.000
	Sig. (2-tailed)	.547	.
	N	104	104

**Correlations**

		TOTALPRE	OTHER3
TOTALPRE	Pearson Correlation	1.000	.041
	Sig. (2-tailed)	.	.680
	N	104	104
OTHER3	Pearson Correlation	.041	1.000
	Sig. (2-tailed)	.680	.
	N	104	104

**Correlations**

		TOTALPRE	OTHER4
TOTALPRE	Pearson Correlation	1.000	-.048
	Sig. (2-tailed)	.	.629
	N	104	104
OTHER4	Pearson Correlation	-.048	1.000
	Sig. (2-tailed)	.629	.
	N	104	104