Bone Marrow Transplant Nurses' Attitudes about Caring for Patients Who are Near the End of Life: A Quality Improvement Project

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Bone Marrow Transplant Nurses’ Attitudes About Caring for Patients Who are Near the End of Life: A Quality Improvement Project

by

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A thesis submitted in partial fulfillment of the requirements for the degree of
Master of Science
College of Nursing
University of South Florida

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Keywords: peripheral stem cell transplant, oncology, Frommelt Attitudes Toward Care of the Dying Scale, outlook, dying

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Abstract

In oncology setting, there is a range of emotions felt by patients and nurses alike such as helplessness, anger, sadness and anxiety; and this is especially the case as patients near the end of life. The literature shows there is an interest in nurses’ attitudes toward caring for patients who are near the end of life. This project examines the overall attitude of Bone Marrow Transplant (BMT) nurses’ attitudes toward caring for patients who are near the end of life using the Frommelt Attitudes Toward Care of the Dying Scale (FATCOD) and a Demographic Data Sheet. This project investigated the demographic variables including age, gender, ethnicity, religion, Oncology Certified Nurses status, highest degree held, years of nursing experience, years of oncology experience, years of BMT experience, prior continuing education in end of life, and prior experience taking care of a terminally ill patient, to see if they contribute to these differences in attitudes.

This was a descriptive project. The sample consisted of a total of 30 BMT nurses, which included 8 men, and 22 women who have worked on the BMT unit for over a year. The mean years of nursing experience was 13.9 (SD=10.10), mean years of oncology experience was
nursing experience was 8 (SD=5.80), and mean years of BMT experience was 7.2 (SD=.60).

The results of this project indicate that there is a positive relationship between number of years of experience as a nurse and positive attitudes toward caring for patients who are near the end of life. Scores on the FATCOD had a possibility to range from 30-150, with higher scores indicating a more positive attitude toward care of the dying. The scores from this project ranged from 113-148 with a mean of 128.6, indicating an overall positive attitude toward caring for the dying.

This project should spur further investigation into attitudes toward caring for patients who are near the end of life. Nurses strive to take the best possible care of their patients and having an understanding of their attitudes will help them recognize areas of strength and weakness. This project supports interventions that are already being done by End of Life (EOL) Committee on the BMT unit at the Moffitt Cancer Center. The EOL committee is helping to create positive attitudes about caring for patients who are near the end of life by both supportive and educational methods.
Chapter I: Introduction

In oncology settings there is a range of emotions felt by patients and nurses alike such as helplessness, anger, sadness and anxiety; and this is especially the case as patients near the end of life (Weigel, et al., 2007). Nurses become part of the oncology patients’ lives and are available to the inpatient twenty-four hours a day, to answer questions, manage symptoms, provide emotional support and to monitor the patient’s health status for any changes. The oncology nurses in outpatient settings have a similar role with the patient, but their availability is more limited. The outpatient nurse follows up with telephone questions the patient may have, makes sure appointment times and dates are clearly communicated to the patient, delivers test results to the patient, and helps facilitate communication between the patient, family, and the physician.

Oncology nurses care for a variety of patients ranging from those who are newly diagnosed, to cancer survivors, to persons at the end of life. The nurses’ attitude toward death and end of life may have an impact on how they care for the dying patients (Rooda, Clements, & Jordan, 1999). Caring for a patient at the end of life brings many challenges to the oncology nurse. There are many factors to look at when assessing nurses’ attitudes toward end of life care. It is possible that demographics, years of experience, Oncology
Certified Nurse status, and whether they have had formal continuing education about caring for patients at end of life, all contribute to the attitudes of nurses.

**Problem Statement**

Numerous studies have been conducted to look at nurses’ attitudes toward caring for patients with cancer who are near the end of life in relation to hospice, medical surgical nurses’, homecare, and evaluating and educational intervention (Lange, Thom & Kline, 2008). With cancer being the second leading cause of death in the United States, it is apparent that there is a need for more information concerning nurses’ attitudes toward end of life of the cancer patient, and only a few studies have examined these attitudes. The purpose of this project is to examine Bone Marrow Transplant (BMT) nurses’ attitudes toward caring for patients who are near end of life.

**Project Objectives**

1. What are the attitudes of the BMT nurses toward caring for patients who are near the end of life?

2. Do significant relationships exist between attitudes toward end of life and demographic variables such as age, gender, years of experience, years of oncology experience, ethnic origin, and formal continuing education?

**Definition of Terms**

For the purpose of this project the following terms are defined.

*Attitude*: manner, disposition, feeling, position (Attitude, 2008).
**End of life:** Having of a chronic disease or symptoms or functional impairments that persist but may also fluctuate. The symptoms or impairments resulting from the underlying, irreversible disease leading to death (Heitkemper, 2004).

**Significance to Nursing**

Nurses strive to provide comprehensive care to their patients, which involves caring for them physically and emotionally, and understanding their needs. Nurses who choose oncology may find it brings many challenges. Nurses’ are teaching the patients about their specific disease, reiterating the treatment plan, and listening to the patients’ hopes and fears about their new diagnosis and prognosis.

It is important to acknowledge one’s own attitudes toward death and dying in order to better understand patients’ needs at the end of life. Once nurses understand their own attitudes about death and dying, they can work to improve the way they handle situations. Nurses’ are caring for patients across the disease spectrum, and end of life is one of the most difficult for a nurse to manage. The goal of this project is to examine attitudes of nurses on the BMT unit about end of life and what variables are related to those attitudes as a first step to improving patient care.
Chapter II: Review of the Literature

This chapter looks at current literature pertaining to nurses’ attitudes toward caring for cancer patient who are near the end of life. The first section looks at nurses’ attitudes toward the dying patient. The next section focuses on educational interventions focused on end of life for nurses at a cancer center. Finally, the literature review is summarized.

Nurse’s Attitudes toward the Dying Patient

There are numerous studies concerning caring for patients at the end of life but none of them focus on nurses working in BMT. Weigel, et al. (2007) investigated 151 nurses, throughout 7 hospital units, at a 320-bed Midwest hospital, to determine apprehension toward caring for dying patients. They looked at total, and subscale scores including personal and professional apprehension levels related to professional degree, gender, personal experience and department using a 31 item Likert-type questionnaire called the Professional End of life Attitude Scale (PEAS) (Weigel, 2007).

The PEAS questionnaire asks questions that pertain to the level of discomfort when interfacing with any dying person, concern with touch and emotions experienced when talking with dying patients and their families, anxiety related to discussing advanced directives and the course of illness with the dying patients and their family and
the ability to control emotions when providing care. Higher scores on the PEAS questionnaire correlate with greater apprehension (Weigel, 2007).

The results of the study show there are no statistical differences in scores between nurses who had studied terminal illness and nurse who had not. There also were no differences between those who had clinical experience with terminally ill patients while in nursing school and those that did not. The scores did vary by hospital unit with the rehabilitation unit scoring the highest and the orthopedics/neurology unit scoring the lowest (Weigel, 2007).

In a 2001 study by Roman, Sorribes and Ezquerro, the investigators attempted to identify nurses’ attitudes towards terminally ill patients in Catalonia, Spain. The study included a total of 175 nurses from 18 health care institutions ranging from general hospitals to hospice and palliative care units. The nurses’ were given a two part questionnaire which inquired about socio-demographics as well as a free word association test.

The results of the questionnaire were analyzed using two methods, a quantitative analysis which looked at total word count and then a further analysis that recorded variations of words with similar meanings. In the second method, attitude evaluation was assessed in which the nurses gave responses scores ranging from 1-5 with one being the most negative response and 5 being the most positive. The words were assigned a numerical value based on the opinion of the authors’ who used a psychologist who specialized in attitudes and behaviors as a reference (Roman, 2001).
The results of the study showed that nurses’ in Catalonia, Spain have a slight negative attitude toward dying patients and the author speculates that awareness programs might have a positive influence on nurses’ attitudes. It suggests that men have a less positive attitude than women, and with respects to age, there is a slight variation with the older population of nurses being more positive (Roman, 2001).

The authors recognize study limitations as not being able to generalize Spanish nurses’ attitudes to American nurses’ because of possible cultural differences. Another study limitation is the difference between true attitudes and what nurses’ report, which may be what was socially acceptable and not what they actually believe (Roman, 2001).

A study conducted by Dunn, Otten, and Stephens (2005) looked into the relationship between demographic variables and attitudes’ toward death and caring for the dying patient. The study looked at 58 registered nurses who worked on either an oncology unit or a medical/surgical unit from two metropolitan hospitals in Detroit Michigan. The study collected data using a demographic survey, Fromment Attitudes Toward Care of the Dying Scale and the Death Attitude Profile-Revised Scale.

Although the results of the study showed no significant relationship between nurses’ attitudes toward death and their attitudes toward caring for the dying patient, it did show statistically significant relationships between demographic data and the Death Attitude Profile-Revised Scale. Older nurses viewed death in terms of escape from a painful existence and accepted death as a reality in a neutral way more so than younger nurses. Nurses who looked at death as an opportunity to escape from a painful existence reported more years of nursing experience, accepted death as a reality in a neutral way,
viewed death as an entry point to a happy afterlife, and had lower levels of negative thoughts and feelings about death than nurses who did not view death as an escape (Dunn, et al., 2005).

The findings of this study suggest that apart from how the nurse feels about death, providing professional and quality care to dying patients is paramount. This study suggests implementing continuing education programs to prevent anxiety about death and to identify barriers that the nurse may have.

**End of life Education for Nurses**

Hansen Goodell, DeHaven and Smith (2009) looked at nurses without adequate education to care for dying patients and their families, an adequate practice environment, or emotional and instrumental support and how it could influence critical care nurses’ experiences in providing end of life care. The sample was comprised of nurses from four intensive care units (ICU) from a university medical center. The study was completed using a pre and post intervention questionnaire, the first with 91 nurses and the second with 127 nurses. A 30-item tool was used with five subscales which consisted of knowledge and ability, work environment, support for staff, support for patients and patients’ families, and work stress related to specific end of life situations.

Hansen and colleagues (2009) included multiple interventions such as a nursing-developed bereavement program for patients’ families, a palliative medicine and comfort care team, use of preprinted orders for the withdrawal of life-sustaining treatment, hiring of a mental health clinical nurse specialist, and staff education in end of life care all in
efforts to support their ICU nursing staff. The post intervention questionnaire of their study reflected overall improvements in mean scores indicating improving nurses’ perceptions of end of life after the use of multiple interventions. The authors’ recognize limitations of the study as being a moderate response rate in the pre intervention questionnaire and the inability to compare the same participants in the pre and post intervention questionnaires, which they attribute to a high turnover rate in the ICUs. This study highlights a need for more education and resources for nurses who work in the ICU who conventionally receive little education regarding end of life.

Thompson (2005) examined the effects of end of life education on baccalaureate nursing students level of comfort providing end of life care. The study had a sample size of 14, with a mean age of 33.9. Students had experience from different areas including oncology, cardiology, intensive care, operating room, and there was one student with no prior experience. The participants took part in an end of life course that included classroom sessions with guest speakers from hospice, pain management, a field trip to a funeral home, role-playing session of ethical situations led by a psychologist, and they were asked to read two books related to end of life.

This intervention was evaluated using a questionnaire prior to the course and after completion that looked at the students’ degree of comfort related to dying. A scale of 0-10 was used, with 0 being completely uncomfortable and 10 being completely comfortable. A mean score prior to the intervention was 4.8 with scores in certain sections being as low as zero, the post intervention scores reflected great improvement with the mean score of 7.5 and a score of 10 in certain sections. All students responded
that the course was beneficial and recommended it to all nursing students. This study is clearly limited with respects to the small sample size of only fourteen. (Thompson, 2005)

Nurses’ Attitudes toward Death and Caring for patients at a Cancer Center

Lange, Thom and Kline, (2008) investigated nurses attitudes toward death and caring for dying patients at a Comprehensive Cancer Center and examined the relationships between their attitudes and demographic factors. They looked at a convenience sample of 355 inpatient and outpatient oncology nurses at a 432- bed Comprehensive Cancer Center in New York. The participants were asked to fill out questionnaires which included demographic data, the Frommelt Attitude Toward Care of the Dying Scale, Form B, and the Death Attitude Profile-Revised (Lange, et al. 2008).

Through analysis of the data the authors found that nurses who view death from a neutral or escape perspective associate with a more positive attitude toward caring for dying patients and their families which leads to better patient outcomes and satisfaction for the patient, family and nurse providing the end of life care. This study found that years working as a registered nurse, age and years employed at a cancer center were the strongest predictors of exhibiting a positive attitude toward caring for dying patients.

Summary

There is an interest in the nurses’ attitudes toward the dying patient (Dunn, et., al 2005, Roman, et., al 2001, Weigel, et.,al 2007). Multiple studies support the need for
further end of life educations for nurses (Thompson, et. al 2005, Hansen, et., al 2009). Only one study was found that looked at nurses’ attitudes toward the dying patients at a comprehensive cancer center (Lange, 2008). For oncology nurse to better care for their patients it is necessary to examine these attitudes and to see if demographic data has an influence upon them.
Chapter III: Methods

The purpose of this project was to look BMT nurses’ attitudes toward end of life at a Comprehensive Cancer Center. This chapter presents the project methods that were used to conduct this project. First, the sample and setting are clearly identified. The instruments used in the project are discussed. Next the procedures for contacting the participants and data collection are reviewed. Finally, data analysis information is discussed.

Setting and Sample

A convenience sample of 30 registered nurses working in the Bone Marrow Transplant unit from a 152-bed Comprehensive Cancer Center in central Florida were recruited. Inclusion criteria included registered nurse status and employment in the cancer center’s BMT unit. Nurses who were working on an agency contract and nurses with less than six months experience in nursing, and nurses who float from other units were excluded.

The Moffitt Cancer Center offers an end of life course that is geared toward nurses who take care of patients who are near the end of life. The End of Life Intensive Training and Education (ELITE) is an eight hour course that is offered three times a year.
The BMT Palliative Care and End of Life committee was started in the summer of 2008 after a need was recognized by a staff nurse and by the BMT Clinical Nurse Specialist. The BMT unit had experienced numerous deaths in a short span of time, increase nurse burnout, and compassion fatigue. The committee’s goals are to increase palliative care and end of life knowledge as well as provide support to the BMT unit.

**Instruments**

**Frommelt Attitude Toward Care of the Dying Scale.** The Frommelt Attitude Toward Care of the Dying (FATCOD) Scale is a scale designed to measure participants’ attitudes toward caring for dying patients (Appendix A) (Lange et, al., 2008). This instrument was chosen because it addresses attitudes toward caring for the dying patient. This 30 item instrument uses a five-point Likert-type scale that consists of equal number of positively and negatively worded statements with response options ranging from strongly disagree to strongly agree, with scores ranging from 30-150; higher score indicates a more positive attitude toward caring for dying patients.

**Reliability and Validity.** Reliability of the FATCOD has been evaluated multiple times. Frommelt used a test-retest method with a small sample of 18 oncology nurses with a 3 week lag in retest. The alpha coefficient was 0.90-0.94, indicating good internal consistency reliability (Lange et., al 2008). The computed inter-rater agreement was evaluated with an agreement of 0.98-1.00. Validity was studied using a panel of experts (Lange et., al 2008).
Demographic Data Sheet

A demographic tool was developed for this project (Appendix B). Variables assessed included, age, ethnic origin, gender, Oncology Certified Nurse status, years of experience in nursing, educational level, continuing education on death and dying and religious preference.

Approvals and Use of Information

Approval from the nurse manager of the Bone Marrow Transplant unit at Moffitt Cancer Center was obtained (Appendix C). The information obtained from this project was shared with the nurses in a staff meeting so that each nurse can become more aware of his/her attitudes regarding end of life care and use the information to enhance patient care. Since this was a quality improvement project, scientific and IRB review was not required.

Procedures

Participants for the project were approached at staff meetings on the Bone Marrow Transplant Unit. The project was explained to the nurses and they were invited to participate. All questions regarding the project were answered. Potential participants were instructed that participation is voluntary, and that choosing not to participate would not negatively influence employment at the center or performance appraisal. Potential participants were assured that the identity of the participants will be kept confidential. All questionnaires were collected at the end of the staff meeting.
Data Analysis

Demographic data was analyzed using descriptive statistics. Means and standard deviation of the Frommelt Attitude Toward Care of the Dying Scale was calculated to answer the project objective, What are the attitudes of the BMT nurses toward caring for patients at the end of life? Pearson and Spearman correlations was used to analyze the second project objective, Do significant relationships exist between attitudes toward end of life and demographic variables such as age, and years of experience?
Chapter IV: Results, Discussion and Conclusion

This chapter discusses the findings of this quality improvement project. The results, discussion of the results, limitations of the study, implications for nursing, and the conclusions are presented.

Results

Relationships with demographic variables. The sample consisted of 30 BMT nurses, which included 22 females and 8 males. The age categories ranged from 18-22 years to 66 years and over, with 60% being between 46-66 years. With 90% of the sample being white, the remaining 10% was comprised of Hispanic, mixed ethnicity of white and black, and Guyanese Indian. Thirty percent of the BMT nurses were Oncology Certified Nurses. Education varied from diploma to doctorate in education prepared nurses with 44.8% having an associates degree as their highest level of education. The majority of the sample (68.9%), had previous continuing education in death and dying. Only one BMT nurse (3.3%), had never cared for a terminally ill person (Table 1).

Mean years of experience in nursing was 13.9 years with a range of 1-36 years. Years of experience in oncology nursing mean was 8 years with a range of 1-20 years and years of experience in BMT mean was 7.2 a range of 1-20 years.
Table 1. Frequencies and Percentages of Demographic Data (n=30)

<table>
<thead>
<tr>
<th>Demographic Data</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>8</td>
<td>26.7</td>
</tr>
<tr>
<td>Female</td>
<td>22</td>
<td>73.3</td>
</tr>
<tr>
<td>Age</td>
<td>1</td>
<td>3.3</td>
</tr>
<tr>
<td>18-22 years</td>
<td>2</td>
<td>6.7</td>
</tr>
<tr>
<td>23-27 years</td>
<td>6</td>
<td>20</td>
</tr>
<tr>
<td>28-35 years</td>
<td>7</td>
<td>23.3</td>
</tr>
<tr>
<td>36-45 years</td>
<td>11</td>
<td>36.7</td>
</tr>
<tr>
<td>46-55 years</td>
<td>2</td>
<td>6.7</td>
</tr>
<tr>
<td>56-65 years</td>
<td>1</td>
<td>3.3</td>
</tr>
<tr>
<td>66 years or older</td>
<td>1</td>
<td>3.3</td>
</tr>
<tr>
<td>Religion</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Protestant</td>
<td>9</td>
<td>31</td>
</tr>
<tr>
<td>Not Religious</td>
<td>9</td>
<td>31</td>
</tr>
<tr>
<td>Other</td>
<td>6</td>
<td>20.7</td>
</tr>
<tr>
<td>Catholic</td>
<td>5</td>
<td>17.3</td>
</tr>
<tr>
<td>Jewish</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Ethnic Origin</td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>27</td>
<td>90</td>
</tr>
<tr>
<td>Black</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Asian/ Pacific Islander</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Other</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td>OCN</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Certified</td>
<td>9</td>
<td>30</td>
</tr>
<tr>
<td>Not Certified</td>
<td>21</td>
<td>70</td>
</tr>
<tr>
<td>Degree</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diploma</td>
<td>1</td>
<td>3.4</td>
</tr>
<tr>
<td>Associate</td>
<td>13</td>
<td>44.8</td>
</tr>
<tr>
<td>Bachelors</td>
<td>11</td>
<td>37.9</td>
</tr>
<tr>
<td>Masters</td>
<td>3</td>
<td>10.3</td>
</tr>
<tr>
<td>Beyond Masters</td>
<td>1</td>
<td>3.4</td>
</tr>
<tr>
<td>Continuing Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>None</td>
<td>9</td>
<td>31</td>
</tr>
<tr>
<td>1-2 hours</td>
<td>3</td>
<td>10.3</td>
</tr>
<tr>
<td>3-4 hours</td>
<td>2</td>
<td>6.9</td>
</tr>
<tr>
<td>5-8 hours</td>
<td>5</td>
<td>17.2</td>
</tr>
<tr>
<td>&gt;8 hours</td>
<td>10</td>
<td>34.5</td>
</tr>
<tr>
<td>Experience with Terminal Patient</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>29</td>
<td>96.7</td>
</tr>
<tr>
<td>No</td>
<td>1</td>
<td>3.3</td>
</tr>
</tbody>
</table>
Frommelt Attitudes Toward Care of the Dying Scale. The scores have a potential to range from 30-150, with higher score indicating a more positive attitude toward care of the dying. The scores ranged from 113-148 with a mean score of 128.6.

An item analysis was performed on the 30 item questionnaire to determine the questions that received the highest score, the lowest score and the questions that indicated the most uncertainty. The statements that received the highest score which indicate a more positive attitude are: The dying person should not be allowed to make decisions about his/her physical care, and there are times when death is welcomed by the dying person. The statements that received the highest amount of negative responses are, I would be uncomfortable talking about impending death with the dying person, and I would be uncomfortable if I entered the room of a terminally ill person and found him/her crying. The questions received the most number of uncertain answers were, I would hope the person I’m caring for dies when I am not present, and The non-family care-givers should not be the one to talk about death with the dying person (Table 2).

Pearson and Spearman correlations were preformed to evaluate if relationships exists among the demographic data and total scores from the FATCOD. There was a significant relationship between the number of years of nursing experience and the total FATCOD score ($r = 0.37$ and $p=0.048$). No significant relationships between attitudes toward caring for a dying person and years of BMT experience, years of oncology experiences, age, religion, ethnicity, OCN designation, higher education level, and amount of continuing education hours where shown to exist.
Table 2. Means and Standard Deviations (SD) of Attitude Items

<table>
<thead>
<tr>
<th>Item</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>The dying person should not be allowed to make decisions about his/her physical care</td>
<td>4.8</td>
<td>0.43</td>
</tr>
<tr>
<td>Giving care to the dying person is a worthwhile experience.</td>
<td>4.7</td>
<td>0.67</td>
</tr>
<tr>
<td>There are times when death is welcomed by the dying person.</td>
<td>4.7</td>
<td>0.48</td>
</tr>
<tr>
<td>Addiction to pain relieving medication should not be a concern when dealing with a dying person</td>
<td>4.7</td>
<td>0.66</td>
</tr>
<tr>
<td>It is beneficial for the dying person to verbalize his/her feelings.</td>
<td>4.6</td>
<td>0.61</td>
</tr>
<tr>
<td>Care should extend to the family of the dying person.</td>
<td>4.6</td>
<td>0.50</td>
</tr>
<tr>
<td>Care should continue throughout the period of grief and bereavement.</td>
<td>4.6</td>
<td>0.63</td>
</tr>
<tr>
<td>Care-givers should permit dying persons to have flexible visiting schedules.</td>
<td>4.6</td>
<td>0.50</td>
</tr>
<tr>
<td>When a patient asks, &quot;Am I dying?&quot;, I think it is best to change the subject to something cheerful</td>
<td>4.5</td>
<td>0.57</td>
</tr>
<tr>
<td>Dying persons should be given honest answers about their condition.</td>
<td>4.5</td>
<td>0.63</td>
</tr>
<tr>
<td>As a patient nears death, the non-family care-giver should withdraw from his/her involvement with the patient.</td>
<td>4.5</td>
<td>0.54</td>
</tr>
<tr>
<td>Families need emotional support to accept the behavior changes of the dying person.</td>
<td>4.5</td>
<td>0.51</td>
</tr>
<tr>
<td>I would not want to care for a dying person.</td>
<td>4.4</td>
<td>0.77</td>
</tr>
<tr>
<td>The family should be involved in the physical care of the dying person if they want to.</td>
<td>4.4</td>
<td>0.61</td>
</tr>
<tr>
<td>I would feel like running away when the person actually died.</td>
<td>4.4</td>
<td>0.67</td>
</tr>
<tr>
<td>Families should be concerned about helping their dying member make the best of his/her remaining life.</td>
<td>4.3</td>
<td>0.56</td>
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<tr>
<td>It is possible for non-family care-givers to help patients prepare for death.</td>
<td>4.3</td>
<td>0.45</td>
</tr>
<tr>
<td>Death is not the worst thing that can happen to a person.</td>
<td>4.3</td>
<td>0.69</td>
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<td>The length of time required to give care to a dying person would frustrate me.</td>
<td>4.2</td>
<td>0.77</td>
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<td>The dying person and his/her family should be the in-charge decision maker</td>
<td>4.2</td>
<td>0.57</td>
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<tr>
<td>Educating families about death and dying is not a non-family care-givers responsibility.</td>
<td>4.2</td>
<td>0.76</td>
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<tr>
<td>I would be upset when the dying person I was caring for, gave up hope of getting better.</td>
<td>4.2</td>
<td>0.75</td>
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<tr>
<td>It is difficult to form a close relationship with the dying person.</td>
<td>4.2</td>
<td>0.70</td>
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<td>Families should maintain as normal an environment as possible for their dying member.</td>
<td>4.1</td>
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<td>Item (continued)</td>
<td>Mean</td>
<td>SD</td>
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<tr>
<td>------------------</td>
<td>------</td>
<td>----</td>
</tr>
<tr>
<td>I am afraid to become friends with a dying person.</td>
<td>4.0</td>
<td>.072</td>
</tr>
<tr>
<td>I would be uncomfortable if I entered the room of a terminally ill person and found him/her crying.</td>
<td>4.0</td>
<td>0.98</td>
</tr>
<tr>
<td>The non-family care-givers should not be the one to talk about death with the dying person.</td>
<td>3.9</td>
<td>0.65</td>
</tr>
<tr>
<td>Family members who stay close to a dying person often interfere with the professionals’ job with the patient.</td>
<td>3.9</td>
<td>0.88</td>
</tr>
<tr>
<td>I would hope the person I’m caring for dies when I am not present.</td>
<td>3.8</td>
<td>0.94</td>
</tr>
</tbody>
</table>

**Discussion**

According the National Marrow Donor Program, the one-year survival rate at the Moffitt Cancer Center was 57.5% for 167 patients that were transplanted from an unrelated donor between January 1, 2003, through December 31, 2007 (2011). This data indicates that 42.5% of BMT patients may die following the transplant and most will do in a hospital setting. The goal of this project was to assess BMT nurses’ attitudes toward caring for the dying patient. Since the one year survival statistics for a BMT reflect that roughly one in two patients will not survive, it is imperative for nurses working in BMT to examine their own attitudes and comfort toward caring for patients at the end of life.

**Demographic data.** Nurses who attended the March 10, 2011 staff meeting were asked to participate in this project by completing the 30 item questionnaire and the 10 item demographic tool. As staff meetings are mandatory it was believed that this would be a good way to reach the greatest number of BMT nurses.
The main limitation of this project was the small sample size of BMT nurses. This project did however meet the goal of a sample size of 30. A total of 38 questionnaires were reviewed for participation in the study, 7 failed to complete the demographic portion of the packet and 1 BMT nurse had been employed for 2 months, thus meeting the exclusion criteria for this project.

The findings of this project suggest that positive attitudes toward caring for the terminally ill are significantly correlated with length of nursing experience. It is possible that these nurses have a more positive attitude because they have had more experience with taking care of patients who are near the end of life and more time to learn the necessary skills. If these skills are taught to new BMT nurses through an educational program, it could teach them the necessary skills to acquire a more positive attitude toward caring for patients who are near the end of life without having the an increased number of years of nursing experience.

This sample was not ethnically representative of the BMT nurses; the project reflected 90% white, and the remaining 10% comprised of Hispanic, mixed ethnicity of white and black and Guyanese Indian. A literature search using PubMed and CINAHL using key words nurses, attitudes toward death, and ethnicity did not reflect any articles that would have provided information that would help to determine if ethnicity played a role in attitudes toward caring for the dying patient.

Moffitt Cancer Center offers a monetary incentive for taking and passing the Oncology Certified Nurse (OCN) examination, although only 30% of BMT nurses are
certified. The data shows that having the OCN does not statically improve nurses’ attitudes toward caring for patients who are at the end of life. The Oncology Nursing Certification Corporation test blue print shows that 6% of test content is dedicated to End of Life Care (2011). With such a small percent dedicated to end of life, this could be a reason that the certification does not impact nurses’ attitudes. This emphasizes the point that knowledge and attitudes are not necessarily the same.

The data shows that the mean years of nursing experience is 13.97, and years of oncology nursing 8, and the years of BMT experience is 7.23. In respect to years of nursing experience, years of oncology experience and years of BMT experience the data can be interpreted that once nurses starts their careers and decide to go into the field of oncology, and specifically BMT, they stay in that department for numerous years. Based on this data and the results of the Pearson correlation, the number of years of nursing experience is correlated with more positive attitudes of caring for a patient that is toward the end of life.

BMT patients and their nurses develop a unique relationship. This is partly because the length of stay that is associated with the transplant procedure. The expected length of stay for transplants that have minimal or no complications can range from 5 days if they are a candidate for early discharge to up to 30 days or time of bone marrow engraftment. The nurses are available to the patient twenty-four hours a day for medical and emotional support, information related to the transplant process, and companionship. A nurse patient bond can develop when the patient is undergoing the transplant process.
and patients have been known to come back to the inpatient unit months and years post transplant to visit the nurses who took care of them.

As level of education does not seem to impact attitudes toward caring for patients at end of life, it would not be beneficial to look into each institution that each nurse attended. If level of education had been statistically significant looking at the program that each nurse graduated from and looking into their curriculum may have been beneficial. It is possible that with a larger sample size that this would have been significant. Thompson (2005) looked at the effects of end of life education on nursing students and found that their attitudes improved significantly, although the sample size was only 14. This project had similar findings to that of Weigel (2007), who found no significant relationship between education in terminal illness and attitudes. The findings of this project show that end of life education does not correlate with attitudes which may have been due to the small sample or because the majority of our sample had previous end of life education.

**Implications for nursing.** When nursing students are learning about the life cycle there are semesters dedicated to maternal and pediatric nursing, child and adolescent nursing, women’s health nursing, psychiatric and mental health nursing, and medical surgical nursing and there is little emphasis on end of life in nursing education. Caring for patients who are near the end of life should be integrated into each semester of nursing school as caring for an infant, child, adolescent, teenager, adult and older adult all pose different challenges to the nurse. It is important for the nurse to recognize the goals of
care for each patient, which have the potential to change depending on where the patient is in the life cycle, in their trajectory and prognosis.

Creating a BMT end of life educational program or making the Moffitt End-of-Life Intensive Training (ELITE) program, which is geared toward nurses who care for patients who are near the end of life, part of the mandatory BMT education bundle may help to foster a more positive attitude in the new nurses. The ELITE course objectives focus on palliative care in oncology, pain management at the end of life, the last hours of life, cultural considerations, communication, loss, grief and bereavement, and ethical perspectives. Introducing this program to the nurses who are new to BMT will help to better prepare them to care for these patients and thus creating a more positive attitude.

Conclusions

This is the first project to look at BMT nurses attitudes toward caring for patients who are near the end of life. This project should spur further investigation into attitudes toward caring for patients who are near the end of life. Nurses strive to take the best possible care of their patients and having an understanding of their attitudes will help them to recognize areas of strength and weakness. This project examined the attitudes of the BMT nurses and found that overall they have very positive attitudes about caring for patients who are near the end of life as reflected by the high scores on the FATCOD.

Recommendations for Practice

This project supports the efforts of the BMT Palliative care EOL committee and its two fold effort to increase knowledge about palliative care and end of life and to
provide support to the nursing staff. Given the significant mortality rate among BMT patients, it is recommended that all nurses in BMT orientation be told about the Moffitt BMT Palliative Care and EOL committee and they are encouraged to be involved.

The BMT Palliative Care and EOL committee dedicates half of the meetings to supportive care which the BMT social worker and BMT chaplain attend regularly. To create additional support for the staff the BMT Palliative Care and EOL committee has a goal to have a resource nurse on each shift.
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Appendices
Appendix A. Frommelt Attitudes Toward Care of the Dying Scale

Form B

Frommelt Attitudes Toward Care of the Dying Scale

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

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

SD = Strongly Disagree  D = Disagree  U = Uncertain  A = Agree  SA = Strongly Agree

1. Giving care to the dying person is a worthwhile experience.
   SD   D   U   A   SA

2. Death is not the worst thing that can happen to a person.
   SD   D   U   A   SA

3. I would be uncomfortable talking about impending death with the dying person.
   SD   D   U   A   SA

4. Caring for the patient's family should continue throughout the period of grief and bereavement.
   SD   D   U   A   SA
5. I would **not** want to care for a dying person.

   SD  D  U  A  SA

6. The non-family care-givers should **not** be the one to talk about death with the dying person.

   SD  D  U  A  SA

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

   SD  D  U  A  SA

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

   SD  D  U  A  SA

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

   SD  D  U  A  SA

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

    SD  D  U  A  SA

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

    SD  D  U  A  SA

12. The family should be involved in the physical care of the dying person if they want to.

    SD  D  U  A  SA

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

    SD  D  U  A  SA

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

    SD  D  U  A  SA
15. I would feel like running away when the person actually died.
   SD  D  U  A  SA

16. Families need emotional support to accept the behavior changes of the dying person.
   SD  D  U  A  SA

17. As a patient nears death, the non-family care-giver should withdraw from his/her involvement with the patient.
   SD  D  U  A  SA

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

19. The dying person should not be allowed to make decisions about his/her physical care.
   SD  D  U  A  SA

20. Families should maintain as normal an environment as possible for their dying member.
   SD  D  U  A  SA

21. It is beneficial for the dying person to verbalize his/her feelings.
   SD  D  U  A  SA

22. Care should extend to the family of the dying person.
   SD  D  U  A  SA

23. Care-givers should permit dying persons to have flexible visiting schedules.
   SD  D  U  A  SA

24. The dying person and his/her family should be the in-charge decision makers.
   SD  D  U  A  SA
25. Addiction to pain relieving medication should not be a concern when dealing with a dying person.
   SD D U A SA

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

27. Dying persons should be given honest answers about their condition.
   SD D U A SA

28. Educating families about death and dying is not a non-family care-givers responsibility.
   SD D U A SA

29. Family members who stay close to a dying person often interfere with the professionals' job with the patient.
   SD D U A SA

30. It is possible for non-family care-givers to help patients prepare for death.
   SD D U A SA
## Appendix B. Demographic Data Sheet

### DEMOGRAPHIC DATA SHEET

Please check the appropriate spaces:

<table>
<thead>
<tr>
<th>1. Age</th>
<th>2. Sex</th>
</tr>
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<tbody>
<tr>
<td>18-22 years</td>
<td>Female</td>
</tr>
<tr>
<td>23-27 years</td>
<td>Male</td>
</tr>
<tr>
<td>28-35 years</td>
<td></td>
</tr>
<tr>
<td>36-45 years</td>
<td>Catholic</td>
</tr>
<tr>
<td>46-55 years</td>
<td>Protestant</td>
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<tr>
<td>56-65 years</td>
<td>Jewish</td>
</tr>
<tr>
<td>66 years and over</td>
<td>Not Religious</td>
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<table>
<thead>
<tr>
<th>5. Ethnic Origin</th>
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<tr>
<td>White</td>
</tr>
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<td>Black</td>
</tr>
<tr>
<td>Asian/ Pacific Islander</td>
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<tr>
<td>Other, Specify</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>4. Oncology Certified Nurse</th>
<th>6. Years of Experience in Nursing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>years</td>
</tr>
<tr>
<td>No</td>
<td></td>
</tr>
</tbody>
</table>
7. Years of Experience in Oncology Nursing
   ____ years

8. Years of Experience in Bone Marrow Transplant
   ____ years

9. Highest degree held:
   ____ Diploma
   ____ Associate Degree
   ____ Bachelors Degree
   ____ Masters Degree
   ____ Education Beyond Masters
   ____ Other (Please Specify)

9. Previous education on death and dying
   I took a continuing education course in death and dying previously.
   ____ None  ____ 1-2hrs  ____ 3-4hrs  ____ 5-8 hrs  ____ More than 8 hours

10. Previous experience in dealing with terminally ill persons
    ____ I have cared for terminally ill persons and their family members previously.
    ____ I have had NO experience caring for terminally ill persons and their family members previously.
Appendix C: Manager Approval Letter

March 1, 2011

Dear Colleagues,

It is with great pleasure that I pen this letter to approve Leslie Lauersdorf's graduate project related "Blood and marrow Transplant Nurses Attitudes Towards Caring for Patients at the End of Life". I am so proud to have witnessed and supported Leslie's exponential professional growth over the past 16 months.

Leslie has been granted permission to complete this project from a quality assurance perspective. She will compile the data and share her conclusions with the staff. Her project aligns with unit-specific goals and her data will be instrumental in a future process improvement initiative.

Sincerely,

Alix Beaupierre