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EVALUATING MORAL DISTRESS, MORAL DISTRESS RESIDUE AND
MORAL COURAGE IN ONCOLOGY NURSES

by

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A dissertation submitted in partial fulfillment of the requirements
for the degree of Doctor of Philosophy
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Orlando, Florida

Spring Term
2016

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ABSTRACT

Oncology nurses are at risk for moral distress when providing routine care. Nurses have reported barriers in delivering optimal pain relief and distress when giving chemotherapy to patients that are seriously ill. Although this situation can escalate moral distress in the nurse, some nurses have become stronger advocates for their patients. Moral distress is described as a perceived threat to one's values or identity that can inhibit the individual from pursuing the right course of action. As such, nurses who experience high levels of moral distress and repeated encounters may be more likely to have moral distress residue and leave a current position for one less stressful. Moral distress residue is cumulative or unresolved distress. How nurses take a stand or demonstrate moral courage during times of distress is not well understood. Therefore, this study was undertaken to examine relationships between moral distress, moral distress residue, and moral courage and to identify nurse characteristics that were predictors of moral distress and moral courage. For this mixed method, non-experimental correlation design, qualitative methods were used to expand quantitative results. Oncology nurses (n=187) working in inpatient and outpatient settings were recruited through the National Oncology Nursing Society in the Southeastern United States. Hamric's 21-item Moral Distress Scale-Revised (MDS-R) and Sekerka et al. 15-item Professional Moral Courage Scale were used for data collection. Findings from this study show that work setting and having left a previous job were predictors of moral distress but total years' experience in oncology was predictive of moral courage. Moral courage was displayed in major areas of supporting the patient, risk taking, advocacy, enlarging the circle for decision-making, putting aside personal beliefs, respecting patient autonomy, empowering the patient, fighting for the patient in the face of consequences in

a complex system, sharing information, getting to the meaning, handling tricky situations, protecting the patient and truth-telling. Despite experiencing levels of moral distress, oncology nurses demonstrate support and respect for patients' decision-making and autonomy. Ethics education derived from clinical practice can provide an opportunity for open discussion for nurses to create and maintain morally acceptable work environments that enable them to be morally courageous. This research underscores the presence of moral distress and moral distress residue among oncology nurses and the importance of finding ways to lessen moral distress and strengthen moral courage in nurses.

I dedicate this work to my husband Victor S. Melhado, whose encouragement inspired me to reach my full potential. His endless patience and selflessness deserves the highest praise. I also dedicate this work to my children, David, Melissa, and Christine, who recognized my passion and promoted endurance when I wanted to give up.

I trust that my work has inspired you to dream big and achieve your purpose in life. You can do all things through Christ who strengthens you. I could not be more proud of you and love you more than you can imagine.

ACKNOWLEDGMENTS

I wish to thank my advisors, Dr. Norma Conner and Dr. Susan Chase for their relentless support from the conception to refinement of ideas and through the dissertation proposal process. Their guidance and mentoring gave me a safe platform in which to plunge deeper into moral distress, find my voice and emerge as a full partner of this important work. I am also grateful to committee members, Dr. Nizam Uddin, Dr. Victoria Loerzel, and Dr. William Haley whose critique of my work was done with the utmost precision and inspiration. Their investment in my development afforded me a solid foundation to make sense of this phenomenon and shape science. I also wish to thank my colleagues and fellow classmates who encouraged my vision and lifted my spirits along the journey. I also want to thank Taylor Jackson and Anni Daugherty for their prayers, encouragement, and technical support.

TABLE OF CONTENTS

| | |
|---|-----|
| LIST OF FIGURES | xi |
| LIST OF TABLES | xii |
| CHAPTER ONE: INTRODUCTION..... | 1 |
| Background..... | 1 |
| Statement of the Problem..... | 6 |
| Purpose of Study..... | 7 |
| Research Questions..... | 7 |
| Significance of the Study..... | 8 |
| Organization of the Remainder of the Study | 10 |
| CHAPTER TWO: REVIEW OF RELEVANT LITERATURE AND FRAMEWORK .. | 11 |
| Theoretical Framework and Conceptual Model | 11 |
| Definition of Key Variables..... | 13 |
| Literature Review..... | 14 |
| Nurse as a Moral Agent and Nurse Characteristics | 17 |
| Moral Distress and Moral Distress Residue..... | 20 |
| Moral Courage | 22 |
| Gaps in Literature | 25 |
| Summary..... | 26 |

| | |
|---|----|
| CHAPTER THREE: METHODOLOGY | 27 |
| Research Questions | 27 |
| Design | 28 |
| Setting and Sample | 29 |
| Sampling | 29 |
| Instrumentation | 31 |
| Moral Distress Scale-Revised (MDS-R)..... | 31 |
| Moral Distress Residue | 33 |
| Professional Moral Courage Scale..... | 34 |
| Moral Courage Examined Qualitatively | 35 |
| Demographic Data and Survey | 35 |
| Procedures..... | 35 |
| Recruitment..... | 35 |
| Data Collection | 36 |
| Confidentiality | 36 |
| Operationalizing Variables | 37 |
| Moral Distress Scale-Revised (MDS-R)..... | 37 |
| Moral Distress Residue | 37 |
| Professional Moral Courage Scale and open-ended question..... | 37 |

| | |
|---|-----|
| Demographic Data and Survey Questions | 38 |
| CHAPTER FOUR: RESULTS | 39 |
| Analysis of Data..... | 39 |
| Description of Sample..... | 39 |
| Descriptive Statistics of Demographic Variables | 43 |
| Reliability Analysis..... | 44 |
| Descriptive Statistics of Instrument (MDS-R and PMCS Scores)..... | 45 |
| Moral Distress Scale | 45 |
| Professional Moral Courage Scale (PMCS) | 49 |
| Major Study Variables | 51 |
| Quantitative Analysis for Main Research Questions | 66 |
| Qualitative Data Analysis | 80 |
| Qualitative Findings..... | 84 |
| CHAPTER FIVE: DISCUSSION..... | 95 |
| Discussion of Findings..... | 95 |
| Moral Distress | 95 |
| Moral Courage | 101 |
| Moral Distress Residue | 107 |
| Moral Agent Conceptual Framework | 108 |

| | |
|--|-----|
| Policy Implications | 109 |
| Nursing Implications and Research Recommendations | 110 |
| Limitations | 113 |
| Conclusion | 115 |
| APPENDIX A: APPROVAL OF EXEMPT HUMAN RESEARCH | 117 |
| APPENDIX B: ONCOLOGY NURSING SOCIETY APPROVAL..... | 119 |
| APPENDIX C: MORAL DISTRESS SCALE-R (MDS-R) NURSE QUESTIONNAIRE (ADULT) | 121 |
| APPENDIX D: PROFESSIONAL MORAL COURAGE SCALE (PMCS)..... | 124 |
| APPENDIX E: NURSE DEMOGRAPHIC DATA AND QUESTIONNAIRE..... | 126 |
| APPENDIX F: ABBREVIATED E-MAIL ANNOUNCEMENT TO PROSPECTIVE STUDY PARTICIPANTS | 128 |
| APPENDIX G: EXPLANATION OF RESEARCH..... | 130 |
| APPENDIX H: PERMISSION TO USE HAMRIC'S MORAL DISTRESS SCALE-R | 133 |
| APPENDIX I: TABLE 47 CODING CATEGORY FINAL CATEGORIES AND PROCESS OF ANALYSIS | 135 |
| APPENDIX J: ANNOUNCEMENT OF FINAL EXAMINATION | 141 |
| APPENDIX K: VITA | 143 |
| LIST OF REFERENCES | 145 |

LIST OF FIGURES

| | |
|--|----|
| Figure 1. Integrated model: moral distress, moral distress residue and moral courage.... | 12 |
| Figure 2. MDS-R with outlier..... | 41 |
| Figure 3. MDS-R after outliers removed..... | 41 |
| Figure 4. PMCS with outlier..... | 42 |
| Figure 5. PMCS after outlier removed..... | 42 |
| Figure 6. Histogram of the MDS-R Score . | 46 |
| Figure 7. Histogram of PMCS Scores | 51 |
| Figure 8. Histogram unstandardized residuals LogNMDS..... | 72 |
| Figure 9. Scatterplot of unstandardized residuals MDS-R | 73 |
| Figure 10. Histogram of unstandardized residuals LogNPMCS | 77 |
| Figure 11. Scatter plot of the unstandardized residuals LogNPMCS | 78 |
| Figure 12. Qualitative content analysis..... | 81 |
| Figure 13. Concept map of moral courage in oncology nurses. | 85 |

LIST OF TABLES

| | |
|---|----|
| Table 1 Demographic Characteristics of the Sample | 43 |
| Table 2 Cronbach's Alpha Reliability Results for MDS-R, PMCS and Subscales | 45 |
| Table 3 Descriptive Statistics Moral Distress Scale-Revised (MDS-R)..... | 46 |
| Table 4 21-item Moral Distress Scale-R Frequency times Intensity Scores (fxi) Mean Scores and Standard Deviations in Rank Order..... | 47 |
| Table 5 Descriptive Statistics for PMCS and Subscale | 49 |
| Table 6 Correlation Matrix for Dependent Variables and Key Independent Variables ... | 52 |
| Table 7 MDS-R Mean Scores and Standard Deviations for Education Level..... | 53 |
| Table 8 Independent Samples T-test for MDS-R and Education Level | 53 |
| Table 9 PMCS Mean Scores and Standard Deviations for Education Level..... | 53 |
| Table 10 Independent Samples T-test for PMCS and Education level..... | 54 |
| Table 11 MDS-R Mean Scores and Standard Deviations for Oncology Certification | 54 |
| Table 12 Independent Samples T-test for MDS-R and Oncology Certification..... | 55 |
| Table 13 PMCS Mean Scores and Standard Deviations for Oncology Certification | 55 |
| Table 14 Independent Samples T-test for PMCS and Oncology Certification..... | 56 |
| Table 15 MDS-R Mean Scores, Standard Deviations Inpatient/Outpatient Worksetting | 56 |
| Table 16 Independent Samples T-test for MDS-R Inpatient/Outpatient Work setting | 57 |
| Table 17 PMCS Mean Scores, Standard Deviations Inpatient/Outpatient Work setting . | 57 |
| Table 18 Independent Samples T-test for PMCS Inpatient/Outpatient Work setting | 58 |

| | |
|--|----|
| Table 19 MDS-R Mean Scores, Standard Deviations End of Life Nursing Education (ELNEC)..... | 58 |
| Table 20 Independent Samples T-test MDS-R and ELNEC | 59 |
| Table 21 PMCS Mean Scores and Standard Deviations for ELNEC | 59 |
| Table 22 Independent Samples T-test for PMCS and ELNEC..... | 60 |
| Table 23 MDS-R Mean Scores and Standard Deviations for Basic Ethics Education..... | 61 |
| Table 24 ANOVA for MDS-R Scores and Basic Ethics Education | 61 |
| Table 25 PMCS Mean Scores and Standard Deviations for Basic Ethics Education..... | 62 |
| Table 26 ANOVA for PMCS and Basic Ethics Education..... | 62 |
| Table 27 MDS-R Mean Scores, Standard Deviations Ethics Continuing Education Units (CEU)..... | 63 |
| Table 28 Independent Samples T-test for MDS-R Scores and Ethics CEU | 63 |
| Table 29 PMCS Mean Scores and Standard Deviations for Ethics CEU | 63 |
| Table 30 Independent Samples T-test for PMCS Score and CEU..... | 64 |
| Table 31 MDS-R Mean Score, Standard Deviation for Participation in Ethics Consult.. | 64 |
| Table 32 Independent Samples T-test for MDS-R Score and Ethics Consult | 65 |
| Table 33 PMCS Mean Score, Standard Deviations for Participation in Ethics Consult .. | 65 |
| Table 34 Independent Samples T-test for PMCS Score and Ethics Consult | 65 |
| Table 35 Description of the Three Groups for Moral Distress Residue | 68 |
| Table 36 Descriptive Statistics of MDS-R by Group | 68 |
| Table 37 ANOVA Results for Comparing MDS-R among the Three Groups | 69 |
| Table 38 Stepwise Multiple Regression on MDS-R (without Transformation)..... | 70 |
| Table 39 Stepwise Multiple Regression on LOGNMDS (transformed MDS-R)..... | 71 |

| | |
|---|-----|
| Table 40 Regression Model Summary with the Original MDS-R (without Transformation) | 71 |
| Table 41 Regression Model Summary with Transformed MDS-R (LogNMDS)..... | 71 |
| Table 42 Multiple Regression Model Summary MDS-R with Predictors Moral Residue and Work Setting | 74 |
| Table 43 Stepwise Multiple Regression on MDS-R with predictors Moral Residue and Work Setting | 75 |
| Table 44 Regression Model for PMCS and Total Years Oncology..... | 76 |
| Table 45 Regression Model Summary for PMCS and Total Years Oncology..... | 76 |
| Table 46 Other Morally Distressing Situations | 79 |
| Table 47 Coding Category Final Categories and Process of Analysis | 136 |

CHAPTER ONE: INTRODUCTION

Background

Oncology nurses play a fundamental role in caring for people with cancer (Ferrell & Coyle, 2008). The relief of suffering is at the core of caring, and oncology nurses alleviate suffering by means of a caring relationship, empowering patients and supporting the patient/family connection throughout cancer treatment (Iranmanesh, Axelsson, Savenstedt, & Haggstrom, 2009). Nurses in oncology strive to relieve pain, maintain open and honest communication, and collaborate substantially to improve patient-outcomes (Pavlish, Brown-Saltzman, Jakel, & Fine, 2014). Medicare reimbursement patterns in the last few weeks of a patient's life show that many cancer patients receive high-intensity treatments despite facing a terminal disease and poor prognosis (Morden et al., 2012). Medicare reimburses all aspects of cancer care such as paying separately for physician services, laboratory tests, procedures, imaging, radiation, drug administration and hospital admissions for adverse outcomes (Bach, 2007). The high costs of new chemotherapy drugs and provider incentives that have favored aggressive and costly treatments rather than alternative approaches may be driving this pattern (Bach, 2007; Miller, 2015).

Many factors contribute to the patterns that affect the cost of cancer care, including patient, family or provider preferences and opportunities exist to reduce spending that do not involve denying patients access to life-saving treatments (Miller, 2007). Deciding when to stop chemotherapy can be challenging because both patients and providers may think that ending

treatment is the same as giving up hope or abandoning the patient (Buiting, Rurup, Wijsbek, van Zuylen, & den Hartogh, 2011). However, a different problem occurs when a patient's preference for care does not align with the goals of therapy. Nurses are often caught in the middle of this conflict and experience moral distress when patients, families, and the medical team disagree about treatment (Ferrell & Coyle, 2008). An association exists between nurses' own suffering and the suffering witnessed in their patients (Ferrell & Coyle, 2008). When the patient's autonomy and preference for care conflicts with the goals of members of the treatment team, oncology nurses are usually the first to know and may become distressed if their efforts to advocate for and alleviate pain and suffering are perceived as ineffective in the treatment plan. Another factor that may promote moral distress rather than moral courage is a perceived power imbalance between physicians and nurses that may make it difficult for a nurse to take a stand against futile treatment. For example, when power imbalances exist, a nurse may feel that she cannot exercise autonomy or contribute to clinical decision-making which can have a negative impact on patient outcome (Kim, Nicotera, McNulty, 2015; Papathanassoglou, Karanikola, Kalafati, Giannakopoulou et al., 2012).

The oncology setting is the most cited with regards to nurses' suffering associated with cancer pain and death (Ferrell & Coyle, 2008). Nurses are at risk for moral distress when they encounter barriers to what they perceive as optimal patient outcomes, such as minimizing harm to patients or providing adequate pain control and good end-of-life care (Bernhofer & Sorrell, 2014; Corley, 2002; LeBaron, Beck, Black, & Palat, 2014). Moral distress is described as a perceived threat to one's core values or identity that inhibits the individual from taking the right course of action (Corley, 2002; Epstein & Hamric, 2009; Jameton, 1984). Nurses who have frequent encounters with morally challenging situations where they are not able to take their

perceived morally right action may have higher levels of distress. Nurses who are not able to alleviate the distress may have cumulative effects or moral distress residue (Hamric, 2012). Studies have shown that higher levels of moral distress or moral residue were present in nurses who left a job or considered leaving a previous job (Hamric, 2012). Thus, having left a job or considered leaving a previous job due to moral distress is an indirect or proxy indication of moral distress residue (A.B. Hamric, personal communication, November 9, 2014). Moral distress residue is the residual effect of compromising one's perceived moral or ethical duty (Epstein & Hamric, 2009; Jameton, 1993; Webster & Bayliss, 2000).

Study findings on moral distress have shown nurses' weakness and suffering (Ferrell, 2006; Gutierrez, 2005), but how nurses elicit inner strength or moral courage during times of distress has not been investigated. Moral courage is needed to take moral action so that nurses can uphold their moral duty and accept moral challenges with integrity (Sekerka, Bagozzi, & Charnigo, 2009). While previous studies have examined moral distress in nurses, the relationship between moral distress and moral courage in oncology nurses working in the adult oncology inpatient and outpatient settings has not been studied. The conceptual framework was proposed to guide the study and to examine the relationship between moral distress, moral distress residue, and moral courage.

The frequency with which nurses encounter morally challenging situations and barriers to optimal patient care could be the catalyst for moral distress (Corley, 2002) or moral courage. Studies have reported high levels of moral distress in nurses who witness the delivery of medically ineffective interventions (Elpern, Covert, & Kleinpell, 2005; Ferrell, 2006; Gutierrez, 2005; Maningo-Salinas, 2010; Sirilla, 2014). An intervention can be perceived as medically futile when its goals are not attainable or the degree of success is suboptimal and prolongs the

dying process rather than restoring health (Coppa, 1996; Meltzer & Huckabay, 2004; Mobley, Rady, Verheijde, Patel, & Larson, 2007). Nurses who provide what they perceive as overly aggressive treatments near end-of-life may consciously object and silently suffer in such care (Ferrell, 2006; Hamric & Blackhall, 2007; Wiegand & Funk, 2012) or they may take a moral stand. According to a study by Gutierrez (2005), nurses in a critical care unit did not want to be assigned to the care of a patient whose medical situation they judged to be overly aggressive and medically futile. Nurses with high moral distress levels also reported physical and emotional symptoms, avoidance behavior, and fewer interactions and communication with providers, patients and family (DeVillers, & DeVon, 2012; Elpern, Covert, & Kleinpell, 2005; Gutierrez, 2005; LeBaron, Beck, Black, & Palat, 2014).

Physical symptoms associated with moral distress in nurses included insomnia, headaches, and stomach aches (Ferrell, 2006; Gutierrez, 2005; McClendon & Buckner, 2007; Wiegand & Funk, 2012). Emotional symptoms included stress, anxiety, guilt, frustration, and burnout (Gutierrez, 2005; McClendon & Buckner, 2007). Consequently, moral distress has the potential to alter the quality of care and impact patient safety (Austin, 2012; Gutierrez, 2005; Maiden, Georges, & Connelly, 2011; Wiegand & Funk, 2012). The negative consequences of nurses' moral distress have not been evaluated in patients or families, but nurses have perceived indirect consequences such as fewer interactions and delayed care to the patients and families (Gutierrez, 2005; Rice et al., 2008; Wiegand & Funk, 2012).

The literature on moral distress presents barriers to taking action when moral distress occurs and introduces strategies for reducing moral distress (American Association of Critical Care Nurses, 2006). However, missing from the literature is whether ethics education has been effective in reducing moral distress and how nurses take a stand to assume their moral challenges

with integrity. Moral courage is described as the capacity to overcome fear by standing up for one's core values, and disposition to speak out or to take action in an assertive and principled manner (Lachman, 2007a, Simola, 2014). The extent to which moral courage is cultivated and exercised could strengthen moral judgment and action (Simola, 2014) thus alleviating moral distress. Moral courage is essential to decreasing moral distress in the nursing profession (Gallaher, 2011; Lachman, 2010; Murray, 2010). While ample studies have examined moral distress in nurses (Elpern, Covert, & Kleinpell, 2005; Hamric & Blackhall, 2007; Lazzarin, Biondi, & DiMauro, 2012; Sirilla, 2014), moral courage remains elusive. Within the field of business ethics, moral courage is an important construct applicable to practices leading to ethical action and specific types of ethical situations (Simola, 2014). Although a framework was introduced for moral courage for nurses, (Lachman, 2010; LaSala & Bjarnason, 2010; Simola, 2014), it has not been tested and the relationships between moral distress and moral courage are not clear. Qualitative studies for moral courage are scarce and a few anecdotal reports and case studies have suggested strategies or activities to support moral courage, but such strategies have not been tested (Lachman, 2007b; Lachman, 2010; LaSala, 2010; Murray, 2010). The literature on moral distress has described nurses as strong patient advocates (Ferrell, 2006; Gutierrez, 2005). Whether or not nurses take action in specific moral challenges has not been quantifiable.

A few researchers investigated moral distress in oncology nurses, yet none of those studies examined the relationship between moral distress and moral courage. The oncology literature indicates that oncology nurses are observers of both the benefits and burdens of chemotherapies (Ferrell, 2006; Hamric & Blackhall, 2007; Rice, Rady, Hamrick, Verheijde, & Pendergast, 2008; Shepard, 2010) suggesting that the oncology nurse's experience is an emotionally and morally sensitive one with repeated exposure to moral challenges (Cohen &

Erickson, 2006; LeBaron, Beck, Black, & Palat, 2014). Therefore, identifying which oncology nurse characteristics are predictors of moral distress and moral courage can increase understanding and provide context specific content to enhance the development of interventions that lessen moral distress while supporting moral courage. Besides, understanding which nurse actions exemplify morally courageous actions taken by these nurses can lead to methods to better measure this phenomenon in the future. Because oncology nurses bear witness to suffering and many moral conflicts (Cohen & Erickson, 2006), their experience provides them a chance to bring an important voice in contributing to this body of research.

Statement of the Problem

Oncology nurses are fundamental to the care of those who have cancer. When oncology nurses become morally distressed it is because they feel that their efforts to advocate for and alleviate pain are not aligned with the patients' treatment preferences or with treatments nurses feel patients should be receiving. Nurses who reported frequent encounters of moral distress and who are not able to resolve their distress may have moral distress residue. Nurses with repeated exposure to distressing situations are likely to have higher moral distress, which can lead to moral distress residue and to nurses leaving their current positions. Moral distress residue is the cumulative effect occurring after a morally distressing clinical situation whereby the nurse's moral or ethical duty is compromised. Moral distress can lead to negative physical symptoms for nurses and can alter the quality of care for patients, creating safety concerns as a result of delayed care and decreased interactions with patients and their families. Ethical work environments that nurture moral courage can potentially diminish these problems.

Purpose of Study

The purpose of this study was twofold: (1) to investigate the relationship between moral distress, moral distress residue, and moral courage in oncology nurses working in the adult inpatient and outpatient settings, and (2) to identify oncology nurse predictors of moral distress and moral courage, and specifically, oncology nurse actions that show moral courage. Data were collected using the Moral Distress Scale-Revised (MDS-R) to measure moral distress and moral residue, and the Professional Moral Courage Scale to measure moral courage. One open-ended question was posed to obtain a more thorough understanding of the specific source of moral distress and actions that demonstrate moral courage.

Research Questions

The major research questions asked in this study were:

- 1) Is there a difference between oncology nurses in adult inpatient and outpatient settings with respect to their moral distress and moral courage?
- 2) Among oncology nurses, to what extent, if any, are moral distress and moral courage related?
- 3) What is the level of moral distress as reported by oncology nurses who report moral distress residue described as having left a previous job, considered leaving a previous job but stayed, or considering leaving a current job now?
- 4) Which of the following nurse characteristics (education level, total number of years working as registered nurse, total number of years working as oncology nurse, oncology setting, oncology certification, ELNEC education, ethics education, and participation in ethics consult) are significant predictors of Moral Distress in oncology nurses?

- 5) Which of the following nurse characteristics (education level, total number of years working as registered nurse, total number of years working as oncology nurse, oncology setting, oncology certification, ELNEC education, ethics education, and participation in ethics consults) are significant predictors of Professional Moral Courage in oncology nurses?
- 6) What actions are indicative of moral courage? Specifically, if you experienced a morally challenging situation, describe how you took a stand for your patient; what influenced or inhibited your action? What was the outcome of your stand? How did that make you feel?

Significance of the Study

The qualitative and quantitative studies on moral distress have mainly focused on nurses in the critical care setting (Browning, 2013; Gutierrez, 2005; Hamric & Blackhall, 2007; Meltzer, & Huckabay, 2004; Mobley, Rady, Verheijde, Patel, & Larson, 2007; Wiegand & Funk, 2012). These studies showed that nurses experienced a variety of symptoms such as frustration, anger, anxiety, and burnout, associated with providing medically futile treatments to patients that did not improve outcomes at the patients' end of life (Corley, Elswick, Gorman, & Clor, 2001; Gutierrez, 2005; Meltzer, & Huckabay, 2004; Wiegand & Funk, 2012). Anecdotal reports suggest that oncology nurses witness firsthand the conflicts arising from the delivery of aggressive treatments to patients with terminal cancer and poor prognoses (Shepard, 2010). Delivering aggressive interventions may generate moral distress for some nurses when they perceive that their actions do not align with patient preferences or infringe upon an ethical duty to prevent or minimize harm (Shepard, 2010). In general, ethical decision-making involves a

hierarchy of principles whereby nurses are taught to support patient self-determination and a duty to honor in any situation (ANA, 2015). Learning how oncology nurses internalize these ethical principles to take a moral stand expands the current literature. Oncology nurses have expressed challenges in 1) giving treatments that cause suffering, 2) being honest without taking away hope, and 3) speaking out to prevent further distress (Pavlish, Brown-Saltzman, Jakel, & Fine, 2014). Moral distress can arise when patients' autonomy and decision making are disregarded whereby the nurse's core values include promoting, advocating for, and protecting the health, safety and rights of the patient (ANA, 2015; Cohen & Erickson, 2006). The compromised value could have unfavorable consequences that diminish the nurses' moral dimensions of caring and could prevent them from being full partners in healthcare (Hamric, 2012). Being a full partner in healthcare requires that the nurse recognize moral distress and act courageously and professionally to address morally distressing clinical situations (Institute of Medicine, 2011; Pendry, 2007).

Nurses are important human capital within healthcare organizations. A nurse's resignation emanating from moral distress and moral distress residue can have overwhelming implications for patient safety and the quality of care. The implications can have a ripple effect on patient satisfaction and the organization's mission and goals (American Association of College of Nursing, 2012; Devillers & DeVon, 2012; Pendry, 2007). Consequently, a study that examines the relationship between moral distress, moral distress residue, and moral courage in oncology nurses, in adult inpatient and outpatient settings, adds to existing knowledge and expands the science on moral distress and moral courage. This study also gives important perspectives from oncology nurses on moral courage and underscores the importance of supporting positive work environments, preserving nurse integrity, and improving nurse

retention in oncology nurses. This study was particularly important because a primary focus was to understand the relationships between moral distress, moral distress residue, and moral courage.

Organization of the Remainder of the Study

Chapter two contains the conceptual framework model, definitions, and synthesis of relevant literature and identification of gaps in research on moral distress. Chapter three describes the methodology and procedures used to gather data for the study. Chapter four presents the study results and Chapter five contains the discussion of the study findings.

CHAPTER TWO: REVIEW OF RELEVANT LITERATURE AND FRAMEWORK

The chapter is divided into sections that include (a) the theoretical and conceptual framework, (b) key definitions of variables (c) literature review of relevant research and synthesis, (d) identification of gaps in the literature, and (e) summary.

Theoretical Framework and Conceptual Model

This study proposed an integrated conceptual framework (Figure 1) for investigating moral distress, moral residue and moral courage in oncology nurses as moral agents. The basic elements of the framework include moral challenges, nurse characteristics (i.e., age, education, years of work experience, years of oncology nurse experience, work setting, ethics education, end of life education, oncology certification), moral action of the nurse, moral courage, moral distress, and moral residue (Corley, 2002; Elpern, Covert, & Kleinpell, 2005; Hamric, Borchers, & Epstein, 2012; Lachman, Murray, Iseminger, & Ganske, 2012; Meltzer & Huckabay, 2004; Mobley, Rady, Verheijde, Patel, & Larson, 2007; Pavlish, Brown-Saltzman, Jakel, & Fine, 2014). The oncology nurse as a moral agent is expected to incorporate professional and personal values, drawing upon the nursing code of ethics, in the decision-making process to effectively sort out what action should be taken (American Nurses Association, 2015; Hamric, 1999). Moral challenges that stem from internal or external sources can act as the catalyst to generate moral distress and moral courage (Corley, 2002; Hamric, Borchers, & Epstein, 2012; Sekerka, Bagozzi, & Charnigo, 2009). The nurse as a moral agent must manage emotions, and balance the desire to proceed with the moral action against competing threats or challenges (Sekerka,

Bagozzi, & Charnigo, 2009). Nurses who manage emotions take the morally correct action and demonstrate moral courage. Nurses who feel constrained or are unable to manage emotions and take the moral action may demonstrate moral distress (Epstein, & Hamric, 2009). The frequency and intensity of the moral challenge is associated with high levels of moral distress (Corley, 2002; Epstein, & Hamric, 2009). The cumulative or unresolved moral distress is indicative of moral distress residue (Epstein, & Hamric, 2009; Hamric, Borchers, & Epstein, 2012).

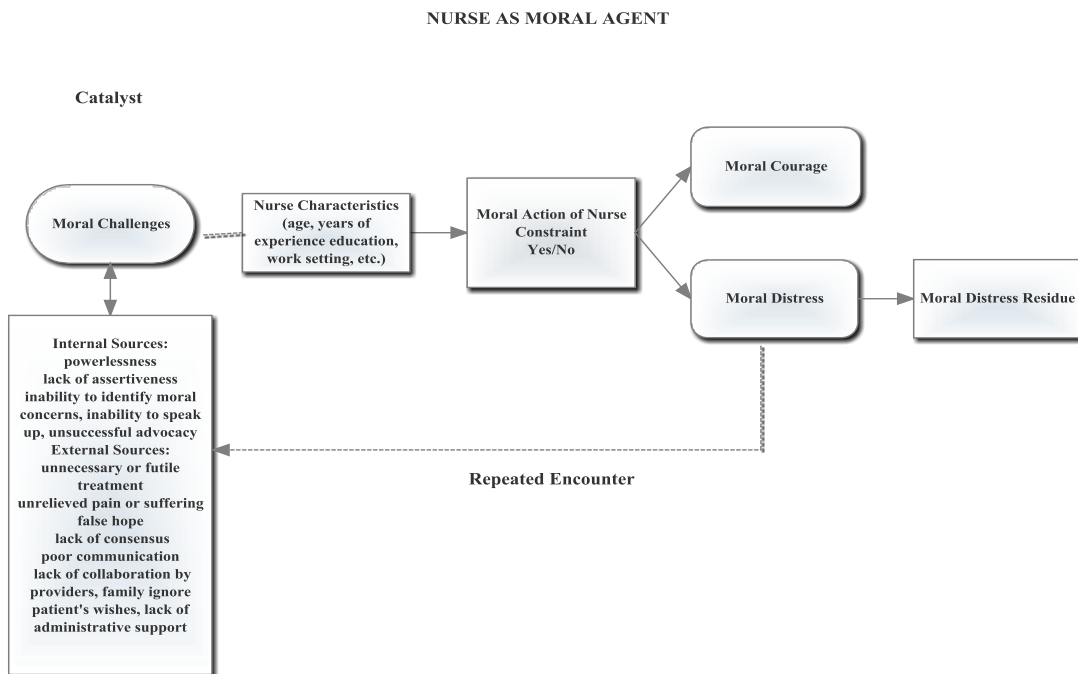


Figure 1. Integrated model of moral distress, moral distress residue and moral courage.

The moral challenges specified in Figure 1 act as the stimuli to influence the moral action of the nurse generating moral distress or moral courage. Repeated encounters with the stimuli and unresolved or cumulative moral distress are associated with moral distress residue (Epstein, & Hamric, 2009). Each of the constructs associated within the framework are discussed in the literature review section.

Definition of Key Variables

The following definitions will ensure uniformity and understanding of the terms used throughout this study:

- *Moral action* – relates to the “do” part of moral decision-making (Cox, 2008) with respect to nurses’ obligation regarding principles of beneficence or doing good; non-maleficence or doing no harm; justice or treating people fairly; reparations or making amends for harm; fidelity and respect for all persons (Code of Ethics, ANA, 2015).
- *Moral agent* - an individual or nurse with a duty to advocate for and to protect the rights of the patient whereby, the nurse articulates nursing values and maintains the integrity of the profession and its practice by striving toward moral action (American Nurses Association, 2001).
- *Moral challenges* – issues/concerns that stem from conflict between the patient, family and healthcare team. The conflict can come from internal or external sources, which can either inhibit or influence the nurse to take moral action leading to moral distress or moral courage (American Association of Critical Care Nurses, 2006; Jameton, 1993). Moral challenges have been identified as an antecedent of moral distress and moral courage (Epstein & Hamric, 2009).
- *Moral distress* – a perceived threat to one’s core values or identity that can inhibit the individual from taking the right course of action (Corley, 2002; Epstein & Hamric, 2009; Hamric, Borchers, & Epstein, 2012; Jameton, 1984).

- *Moral courage* – the capacity to overcome fear and stand up for one’s core values and willingness to speak out or take action in an assertive and principled manner (Lachman, 2007a).
- *Moral residue or moral distress residue* – the result of repeated encounters and unresolved or cumulative morally challenging situations associated with moral distress (Corley, 2002) that can lead to nurse resignation or intention to leave as a result of compromising one’s perceived moral obligation (Epstein & Hamric, 2009; Hamric, 2012; Webster & Baylis, 2000).
- *Nurse characteristics* – demographic variables measured in this study such as age, level of education, years of work experience, years of oncology nurse experience, ethics education, end-of-life education, and oncology certification.
- *Nurse resignation* – a particular situation that causes the nurse to voluntarily leave the job, not exclusive to moral distress but may be indicative of moral residue (Hamric, Borchers, & Epstein, 2012; Mohr, Burgess, & Young, 2008).
- *Oncology nurse* - a registered professional nurse or advanced practice nurse with specialty education in the care of cancer patients (Oncology Nurses Society).

Literature Review

Moral distress is a serious concern affecting nurses and other healthcare professionals (Allen, Judkins-Cohn, deVelasco, Forges, et al., 2013; Gutierrez, 2005; Hamric & Blackhall, 2007; Whitehead, Herbertson, Hamric, Epstein, & Fisher, 2015). Both qualitative and quantitative studies have identified sources of moral distress and its potential physical and emotional harms to nurses (Gutierrez, 2005; Ferrell, 2006; Meltzer & Huckabay, 2004; Sirilla,

2014; Wiegand & Funk, 2012). For example, manifestations of moral distress included anger, frustration, guilt, loss of self-worth, depression, nightmares, insomnia, suffering, resentment, sorrow, anxiety, helplessness, powerlessness and burnout (Corley, 2002; Elpern, Covert, and Kleinpell, 2005; Ferrell, 2006; Gutierrez, 2005; Meltzer & Huckabay, 2005; Wiegand & Funk, 2012). In an effort to examine the relationships between moral distress, ethical environment, collaboration, and satisfaction with the quality of care, Hamric and Blackhall (2007) recruited a convenience sample of nurses (n=196) and physicians (n=29) working in the critical care units from two hospitals in the Southeastern United States. Moral distress patterns were similar for both nurses and physicians. The most distressing situations involved feeling pressured to continue aggressive treatment when such treatment was perceived to not be beneficial (Allen et al., 2013; Hamric & Blackhall, 2007). Nurses often experience difficulties and feel ill-equipped and powerless during interactions with these patients (Blomberg, Hylander & Tornkvist, 2008; Epstein & Delgado, 2010). However, nurses perceived these situations as occurring more frequently than did physicians (Allen et al., 2013; Hamric & Blackhall, 2007).

Moral challenges can come from a variety of situations that stem from conflict between the patient, family, proxy decision makers, and healthcare team (Pavlish, Brown-Saltzman, Jakel, & Fine, 2014). Nurses are likely to respond to situations that generate suffering and conflict with patient goals and preferences, whereby the nurse either takes the moral action or is inhibited from acting in a morally congruent manner. Particularly, moral challenges and perceived powerlessness could undermine the nurses' integrity in taking action or inhibit moral courage (American Association of Critical Care Nurses, 2006; Jameton, 1993). Moral challenges have been identified as precursors of moral distress (Epstein & Hamric, 2009) and moral courage (Sekerka, Bagozzi, & Charnigo, 2009). The challenges are reinforced by internal and external

influences. Internal influences include powerlessness, lack of assertiveness or ability to speak up in a challenging situation, inability to identify moral concerns (Hamric, Borchers, & Epstein, 2012), and unsuccessful advocacy (Ferrell, 2006; Gutierrez, 2005). External sources include poor communication patterns and collaboration by healthcare providers, providing false hope (Hamric, & Blackhall, 2007; Pavlish, Brown-Saltzman, Jakel, & Fine, 2014) and treatments that do not relieve pain or suffering (Ferrell, 2006; Gutierrez, 2005; LeBaron, Beck, Black, & Palat, 2014) or treatments perceived as medically inappropriate and not in the patient's best interest, following family preferences instead of patient's wishes due to fear of litigation, and inadequate administrative support (Hamric, Borchers, & Epstein, 2012). Repeated and unresolved encounters of moral challenges are theorized to affect the frequency and intensity of moral distress, resulting in a cumulative effect or moral residue (Epstein & Hamric, 2009). Evidence of moral challenge includes disagreements about plans of care or disputes with policy, and disputes about fair patient and staff treatment (Pavlish et al., 2014). Pavlish et al. (2014) utilized an ethnographic approach to examine ethical conflicts in 30 nurses within the culture and setting of oncology. Nurses described both internal and external sources as elements of poor communication, with some providers not speaking up and others not willing to listen or consider alternative perspectives (Pavlish et al., 2014). Moral challenges were perceived as delaying or avoiding difficult conversations about poor prognoses or end-of-life care options, followed by end-of-life situations that ignored the patient's autonomy (Pavlish et al., 2014). As such, the researchers concluded that physicians and nurses did not feel supported in discussing their differences and missed opportunities to understand each other's perspectives (Pavlish et al., 2014). According to Gutierrez (2005), breaking bad news or discussing poor prognoses can be a

catalyst for strengthening moral courage rather than creating missed opportunities between patients, families, and healthcare providers.

Nurse as a Moral Agent and Nurse Characteristics

The nurse as a moral agent is derived from a fundamental belief that patients have a right to self-determination and nurses have a duty to advocate for and to protect the rights of the patient (American Nurses Association, 2015). The American Nurses Association (ANA) Code of Ethics provides standards for the nursing practice to guide moral action (ANA, 2015). As a moral agent, the nurse articulates nursing values and maintains the integrity of the profession and its practice by striving toward moral action (ANA, 2015). Nurses assist patients with care decisions about resuscitation status, withholding and withdrawing life-sustaining treatments, advanced care planning; and facilitating informed decision-making, assisting patients to ask questions and ensuring that the information is consistent with their values and preferences (ANA, 2015, pp. 6-8). Nurses must also bring forward difficult issues related to patient care and/or institutional constraints upon ethical practice for discussion and review (ANA, 2015, p. 16). Striving to take moral action requires that individuals address the moral challenge and be morally responsible for what they have a moral duty or obligation to do (Lindh, da Silva, Berg, & Severinsson, 2010; Sekerka, Bagozzi, & Charnigo 2009). Moral agents are expected to incorporate professional and personal values, drawing upon multiple values in the moral decision-making process and effectively sorting out and determining what action should be taken while holding firm to previously held values (Sekerka et al., 2009). Moral agents are also aware that their position, identity, and character may be at risk; however, they manage their emotions and balance their desire to proceed with the action against other competing threats (Sekerka et

al., 2009). Individuals who proceed with the moral action demonstrate a proactive approach to workplace ethics to achieve solutions that serve and benefit the greater good (Sekerka et al., 2009).

Moral distress results from not fulfilling one's moral duties or obligations, or in fulfilling them in a morally unacceptable way (Hare, 1981). Responses from a subset of nurses (n=20), extracted and analyzed in a secondary analysis of qualitative data, suggest that nurses' frustration with their inability to provide appropriate pain and symptom relief for a patient may turn into personal suffering leading to moral distress (Bernhofer & Sorrell, 2014). Nurses who knew what to do but encountered barriers suffered the most, which may suggest that those with more knowledge or education are at greater risk for moral distress if they cannot act on their knowledge and skills (Bernhofer & Sorrell, 2014). In a different study, Browning (2013) reported high moral distress intensity as the nurses' age increased, however, nurses participating in end-of-life nursing education (ELNEC) experienced significantly greater levels of moral distress intensity and frequency, related to treatments not in the patient's best interest or external sources (Browning, 2013). This may be explained by nurses having gained more information regarding the moral action to take in situations of delivering futile care to dying patients (Browning, 2013). There are conflicting findings with respect to key nurse demographic variables, and lacking from these studies are information pertaining to how nurses assimilate ethics education and translate it into practice. A majority of studies suggest that referrals to the ethics committees or establishing ethics rounds and moral communities may promote comfort with ethics-related conversations and ease moral distress (Pavlish, Brown-Saltzman, Jakel, & Fine, 2014; Rice, Rady, Hamrick, Verheijde, & Pendergast, 2008; Zuzelo, 2007). However, findings from one study revealed that 75% (n=75) of the nurses had never initiated an ethics

consultation related to a patient care dilemma, only 30% had completed a college level course in biomedical ethics, 70% had not completed any undergraduate ethics courses and 85% had not undertaken continuing education in ethics (Zuzelo, 2007). Some nurses had not received any formal education in the area of ethics (Gutierrez, 2005). Assessing baseline information on how ethics education is acquired and assimilated is essential to understand how this type of education is translated in practice and utilized to improve ethical work environments.

Previous studies have found that years of experience in nursing were positively correlated with Moral Distress scores (Elpern, Covert, & Kleinpell, 2005). However, another study concluded that younger nurses (age 18 to 30 years old) scored significantly higher than the older nurses; those with bachelor's degree or higher had significantly higher distress scores compared with associate's degree nurses (Meltzer & Huckabay, 2004). Predictors of moral distress intensity were greater after 34 years of age, after 3 years at current employment, and after 6 years of nursing experience (Rice et al., 2008). In contrast, Mobley and colleagues (2007) found that there were no significant associations between the moral distress intensity and age, critical care experience, and total years in nursing practice. However, moral distress frequency related to futile care (external sources) was significantly associated with nurses who were over 33 years of age, had critical care experience greater than 4 years, and had a total of years in nursing practice greater than 7 years (Mobley et al., 2007). In Sirilla's (2014) study, there was a statistically significant inverse relationship between education and Moral Distress scores. Nurses with higher education had lower moral distress scores (Sirilla, 2014). Additionally, the only predictor of Moral Distress scores was the type of nursing unit when age, education, years of nursing experience, years of experience in oncology, and years with the current employer were included in the model (Sirilla, 2014). At this time, findings on moral distress and oncology nurse

characteristics are inconclusive. Consequently, further studies are needed to determine moral distress in oncology nurses and the specific characteristics associated with moral residue and moral courage.

Moral Distress and Moral Distress Residue

Moral distress residue is described as the cumulative effect that can remain long after a morally distressing situation occurs whereby the nurse's core values become compromised (Webster & Bayliss, 2000). The frequency and intensity of a morally distressing situation is associated with moral residue. The repeated encounters and unresolved distress have a cumulative effect (Hamric, 2012). This phenomenon has been linked to emotional exhaustion, a measure of burnout (Meltzer & Huckabay, 2004). Emotionally exhausted nurses can lose their ability to be compassionate, leading to their resignation from their position (Corley et al., 2001; Hamric & Blackhall, 2007) or leaving the profession entirely (Corley, 2002). Evidence suggests that nurses with the highest levels (both frequency and intensity) of moral distress were likely to have left a previous nursing job or considered leaving their jobs (Cavaliere, Daly, Dowling, & Montgomery 2010; Corley, Elswick, Gorman, & Clor, 2001; Ferrell, 2006; Gutierrez, 2005; Lazzarin, Biondi, & DiMauro, 2012; Maningo-Salinas, 2010; Sirilla, 2014).

Corley, Elswick, Gorman and Clor's (2001) seminal research is most widely cited in studies. Corley et al. (2001) developed and evaluated the original Moral Distress Scale (MDS) to examine the effect of moral distress on previous decisions about resigning a nursing position. Nearly 74% (n=158) of the nurses responded to the item about having left a previous job because of moral distress, of which 15% (n=23) had actually left a previous job because of moral distress. Nurses who had resigned from a previous job or who were contemplating leaving their jobs were

associated with higher Moral Distress scores (Corley et al., 2001). In another study examining moral distress in five separate healthcare provider groups, moral distress was statistically significantly higher for healthcare professionals who had previously considered and actually left a position compared with those who had not considered leaving (Allen, Judkins-Cohn, deVelasco & Forges, 2013). Moral distress was also statistically significant for healthcare professionals who were currently considering leaving a position compared with those who were not (Allen et al., 2013). One large Italian study evaluating moral distress in pediatric oncology nurses (n=182) reported that Moral Distress frequency scores were highest among respondents related to following orders for pain medication even when the medication prescribed did not control the pain, and providing care that did not relieve the child's suffering because the physician feared increasing the dose of pain medication would cause death (Lazzarin, Biondi, & DiMauro, 2012). Of these respondents, 50.5% indicated that they had considered changing their jobs or work unit and 13.7% had actually changed their unit or hospital due to moral distress (Lazzarin, Biondi, & DiMauro, 2012). Although working with children with cancer is psychologically difficult, these pediatric oncology nurses identified external sources (time constraints, medical power, policy, and administration) as the main component or source of their moral challenge (Lazzarin, Biondi, & DiMauro, 2012).

According to Epstein and Hamric (2009) morally distressed individuals behave morally ineffective in part because their views have not been addressed, and their core values have been compromised. Although not directly measured, Pavlish et al. (2014) deduced that during moral conflict, the nurses' emotions intensified and some conflicts were unresolvable. This reasoning may support Epstein and Hamric's (2009) claim that providers react more strongly to repeated situations which, if unresolved, could erode moral thinking and manifest as moral residue. As

moral distress and residue accumulate, providers could become emotionally exhausted (Hamric, 2012; Meltzer, & Huckabay, 2004). Moral distress residue has been difficult to quantify; presumably it is a latent variable (Epstein & Hamric, 2009), and studies have not consistently reported outcomes pertaining to this variable.

Moral Courage

Courage is described as an inner strength or quality that is fundamental to taking moral action (Hawkins & Morse, 2014). Nurses who take a stand and act accordingly, regardless of the perceived or actual threat when moral principles are threatened demonstrate moral courage (Lachman, Murray, Iseminger, & Ganske, 2012). In general, moral courage is preceded by challenges or threats (Hawkins & Morse, 2014). A threat to the patient may include pain and suffering while challenges to the physician or nurse include delivering bad news to a patient or family with a poor prognosis or confronting unethical practice (Hawkins & Morse, 2014). Moral courage is also manifested in examples of patient advocacy in the face of fear and retribution (Lachman, 2007a). Outcomes of courage include acting in the patient's best interest by alleviating pain or suffering, communicating with patients and family openly, and collaborating with physicians effectively (Hawkins & Morse, 2014). The moral agent manages negative emotions that may accompany the challenging situation, even risking personal character and position (Sekerka, Bagozzi, & Charnigo, 2009). However, knowledge is lacking about nurses' courageous actions in their practice. Although there are vast empirical studies on nurses' moral distress in practice, studies on moral courage in nursing have been limited in the literature.

The science regarding moral courage in nurses is mostly anecdotal, conveying the experiences of others (Lachman, Murray, Iseminger, & Ganske 2012). But a handful of

qualitative studies, mainly phenomenography or hermeneutic approaches on courage in nursing appear in the literature (Gustafsson, Asp, & Fagerberg, 2009; Spence, 2004; Spence & Smythe, 2007). As such, courage was described as the capacity to overcome fear, stand up for one's core values and the willingness to speak out or take action in an assertive and principled manner (Spence, 2004). Spence and Smythe (2007) explored moral courage in nurses (n=20) and revealed that it was expressed in response to threats or challenges. The nurses reported that they became cautious and sought support which afforded them the opportunity to uphold their professional nursing standards and safeguard patients' rights and safety (Spence & Smythe, 2007). Additionally, nurses (n=7) portrayed moral courage by questioning their own and others' behavior and actions (Gustafsson et al., 2009) and as a result nurses with courage experienced personal and professional growth (Ferrell, 2006). It has been suggested that features of nursing action and moral courage include willingness to recognize and be sensitive to the suffering of others, expression of empathy and compassion, helping those in need, doing something to alleviate the suffering of others, and challenging the status quo (Lindh, da Silva, Berg, & Severinsson, 2010).

Incidental findings of courage have been detected in moral distress literature. A common barrier to taking moral action and resolving a moral conflict identified by 67% (n=8) of the nurses was disagreement about patient care goals among the physician, the patient's family and the nurse (Gutierrez, 2005). These nurses were aware of their moral obligation but were inhibited from discussing their moral differences. In this instance, the nurses may have lacked the skills or moral courage to negotiate the moral conflict. Spence and Smythe (2007) described moral courage relative to creating opportunities in a space between chance and security. Moral distress was likely a struggle against limitations between chance and security that hindered good

care. Little is known about what influences a nurse to respond to morally distressing situations with moral courage. In one study by Ferrell (2006), participants were instructed to reflect on a medically futile clinical experience or their experience with an ethical issue at end of life and to describe how the experience personally affected them. An interesting response shared by 29% (n=32) of the nurse participants was that they had become stronger advocates for respecting their patients' preferences (Ferrell, 2006). Courage is exhibited in advocacy when the nurse takes a stand on behalf of the patient regardless of the consequence (Hawkins & Morse, 2014).

Researchers Wiegand and Funk (2012) used a descriptive approach to studying clinical situations generating moral distress in critical care nurses. Data were collected using an open-ended survey to ascertain situations that caused moral distress in nurses and what the nurses would do differently. The nurses also proposed future actions (Wiegand & Funk, 2012), but whether or not those interventions have been effective and how nurses intervene in future action after experiencing moral distress remains ambiguous. It is unclear whether nurses who do not intervene have higher moral distress than those who do intervene. It is also unknown if those who do intervene manifest moral courage and incorporate strategies to be more assertive on moral issues.

Opportunities exist to develop interventions related to moral courage in nursing. To date, quantitative studies on moral courage have been conducted in the business sector (Priesemuth, 2013) and military setting (Sekerka, Bagozzi & Charnigo, 2009). For example, Sekerka et al. (2009) conducted a longitudinal study to develop ethics education, and create and test a scale to measure professional moral courage in U.S. Naval officers. Critical incident interviews and coding resulted in five themes and statements, which were tested in a different sample of officers (Sekerka et al., 2009). The themes are moral agency, multiple values, endurance of threats,

going beyond compliance, and moral goals. Findings from the study demonstrate that individuals were predisposed toward moral behavior or taking moral action because they viewed themselves as moral agents, and automatically took ownership of the challenge (Sekerka et al., 2009).

The current study adds to the literature by investigating the relationship between moral distress, moral distress residue and moral courage. Furthermore, understanding these relationships is a key aspect to designing interventions and targeting resources where they are needed most to alleviate moral distress and strengthen moral courage among nurses.

Gaps in Literature

Throughout the literature, there is evidence that moral distress is a serious concern associated with certain clinical situations and some nurses experience moral distress residue and leave their jobs. There have been intangible and incidental findings of moral courage in the literature on moral distress. Opportunities exist to develop the empirical knowledge base of moral courage and to explore nurses' experiences with moral courage; for example, identifying what characteristics promote or inhibit moral courage as well as which actions or activities exemplify moral courage will expand the knowledge base (Lachman, Murray, Iseminger, & Ganske, 2012). Accordingly, the current study expands research by providing a framework to explore the relationship between moral distress, moral distress residue, and moral courage. Furthermore, the current study examines the relationships between moral distress, moral distress residue, and moral courage in oncology nurses in both the inpatient and outpatient settings. Determining which nurse characteristics are predictors of moral distress and moral courage can target strategies that alleviate moral distress, reduce nurse resignation, and build moral courage.

Summary

As changes in health care become more complex, oncology nurses are at risk for moral distress as they carry out routine care for patients with serious and terminal cancers. Studies on moral distress have focused on nurses' weakness and suffering rather than exemplifying their strengths. One positive solution is to recognize that moral distress can be a catalyst for strengthening moral courage, opening dialogue and self-reflection, and not just be a source of suffering (Peter & Liaschenko, 2013). Little is known about the relationship between moral distress, moral distress residue, and moral courage in oncology nurses. This study uses Hamric's revised 21-item Moral Distress in Healthcare Professionals Measurement Scale (MDS-R), and Sekerka et al.'s 15-item Professional Moral Courage Scale to evaluate the relationships between oncology nurse characteristics, moral distress, moral residue and moral courage. Furthermore, a qualitative open-ended question regarding how courage is exemplified contributed to a comprehensive understanding of the results. Moral courage is needed for moral action so that nurses can carry out their moral obligations with integrity.

CHAPTER THREE: METHODOLOGY

The purpose of this study was twofold: (1) examine the relationship between moral distress, moral residue, and moral courage in oncology nurses working in the adult inpatient and outpatient settings, and (2) identify which oncology nurse characteristics are predictors of moral distress and moral courage and specifically, what oncology nurse actions illustrate moral courage. The study employed a mixed method, non-experimental, correlational design and qualitative content analysis to illuminate the quantitative data. The chapter discusses the research methodology, study design, description of the population, data collection, sampling, instrumentation, and procedures.

Research Questions

The research questions guiding this study were as follows:

- 1) Is there a difference between oncology nurses in adult inpatient and outpatient settings with respect to their moral distress and moral courage?
- 2) Among oncology nurses, to what extent, if any, are moral distress and moral courage related?
- 3) What is the level of moral distress as reported by oncology nurses who report moral distress residue described as having left a previous job, considered leaving a previous job but stayed, or considering leaving a current job now?
- 4) Which of the following nurse characteristics (education level, total number of years working as registered nurse, total number of years working as oncology nurse, oncology

- setting, oncology certification, ELNEC education, ethics education, and participation in ethics consult) are significant predictors of Moral Distress in oncology nurses?
- 5) Which of the following nurse characteristic (education level, total number of years working as registered nurse, total number of years working as oncology nurse, oncology setting, oncology certification, ELNEC education, ethics education, and participation in ethics consults) are significant predictors of Professional Moral Courage in oncology nurses?
- 6) What actions are indicative of moral courage? Specifically, if you experienced a morally challenging situation, describe how you took a stand for your patient; what influenced or inhibited your action? What was the outcome of your stand? How did that make you feel?

Design

A mixed methods cross-sectional correlation design and qualitative content analysis was used to investigate oncology nurses' characteristics and the relationships between moral residue, and scores on the Moral Distress and Moral Courage Scales. A parallel approach using one open-ended qualitative statement, collected at the same time with the demographic and quantitative data, was implemented to yield deeper explanations of findings from the quantitative analysis (Creswell, Fetters, & Ivankova, 2004). In parallel combinations the methods are used separately and the findings are integrated after the data are analyzed. This survey methodology is practical and acceptable to participants because it is anonymous, and there is no manipulation of intervention and no randomization of subjects is required (Polit & Beck, 2012). Internal threats to validity such as selection bias and external threats related to whether relationships

observed hold true over variations in people and settings are limitations and there is no possibility of exploring cause and effect (Polit & Beck, 2012).

Setting and Sample

Prior to conducting the study, approval from the University of Central Florida Institutional Review Board (Appendix A) and the Oncology Nurses Society (Appendix B) were obtained. A convenience sample of 274 nurses was drawn from a population of 2,423 oncology nurses recruited from the membership roster of the Oncology Nursing Society (ONS) in the Southeastern United States. ONS is a national association that has over 35,000 registered nurses and other healthcare professionals (ONS, 2013). Oncology nurses who are members of ONS, English reading, with work experience in the adult oncology inpatient or outpatient settings and with one or more years of work experience, currently working full-time, or retired within six months or less at time of the survey met the inclusion criteria. Licensed practical nurses (LPNs), or nurses working part time, per diem, or in pediatrics were excluded from the study. A different instrument is necessary for the pediatric oncology nurses; because of time and cost, it was not feasible to include pediatric oncology nurses in the study. A power analysis determined a minimum sample size of 159 was required to detect statistical significance. A response rate of 15-20% was expected based on similar studies (Beckstrand, Collette, Callister, & Luthy, 2012; Radzvin, 2011). The sample was assumed to be representative of the population of oncology nurses who are members of the professional organization.

Sampling

The software program G-Power 3.1.7 was used to calculate the minimum required sample size, per statistical analysis (Faul, Erdfelder, Lang, & Buchner, 2007). Power analysis was

conducted for the research questions except question six. Research question six is an open-ended question intended to gather qualitative data for the study. When estimates from pilot data or prior research is not available, a last resort is to use a small, medium or large conventions (Polit, 2010), thus a medium effect size was feasible as an estimate in order to calculate the number of subjects needed to avoid a Type II error (Polit, 2010; Sullivan & Feinn, 2012). Cohen's (1988) effect size guidelines were used to determine the effect sizes for the following research questions. According to Cohen (1988), an effect size of .20 in a two-group mean difference test is considered small, .50 is medium, and .80 is large. Research question one was addressed with an independent-samples *t* test to compare differences in respondents' mean scores for Moral Distress working in inpatient and outpatient settings. Using a medium effect size $d = .50$ a power of .80 and an alpha level of .05 for a two-tailed test, the calculated total sample size of 128 (or 64 in each group) was required.

Research question two was addressed with a Pearson Correlation. As such, the sample's coefficient *r* is used to estimate the effect size. A correlation coefficient of .10 represents a weak or small association; a correlation coefficient of .30 represents a moderate correlation; and a correlation coefficient of .50 or larger represents a strong or large correlation (Polit, 2010, p. 202). Respondents' scores for Moral Distress and Moral Courage were correlated to determine what type of relationship, if any, occurred between the scores. Using a medium effect size = .30, power of .80, and an alpha level of .05 for a two-tailed test, the calculated minimum sample size of 85 participants was required for question two.

Research question three was addressed with ANOVA to compare the Moral Distress mean scores of three groups. Cohen's (1988) conventional values for small, medium, and large effects correspond to values of eta-squared (η^2) of .01, .06, and .14 respectively (Polit, 2010, p.

159). Using an effect size $\eta^2 = .06$ and alpha = .05, 53 participants per group was needed to achieve a power of .80; or total sample size of 159 participants.

Research questions four and five were addressed with multiple regressions. A power analysis is a precise way to determine sample size for multiple regression (Polit, 2010). Cohen's (1988) guidelines for effect size, referred to as f^2 is a function of the value R^2 and considered small when $R^2 = .02$, moderate when $R^2 = .13$, and large when $R^2 = .30$ (Polit, 2010, p. 242). Given a moderate or medium effect size ($f^2 = .13$), power of .80, eight predictors (at least eight independent variables), and an alpha level of .05 for a two tailed test, the calculated minimum sample size requirement of 109 participants was required for questions four and five. The power analysis for research questions four and five assumed that each predictor was statistically significantly related to the dependent variable, and thus, the regression model proposed, at most, eight predictors. The researcher used the sample size requirement for the most stringent analysis to set the minimum sample size for this study. In the event of missing data, oversampling was done and all collected surveys were analyzed resulting in 187 subjects in the study.

Instrumentation

Moral Distress Scale-Revised (MDS-R)

The Moral Distress in Healthcare Professionals Measurement Scale (MDS-R) is a 21-item, 0-4 point scale with two closed-ended variables. The scale measures an individual's perception to a situation based on two dimensions (frequency of the encountered situation and the intensity of distress) and moral residue described as having left a previous job when moral distress was not resolved (Appendix C). The scale represents the dependent variable and measures both continuous and dichotomous data. All 21 items were scored by participants in

terms of how often the situations arose, or frequency, and the level of disturbance on the scale, or intensity (Hamric, Borchers, & Epstein, 2012). The scale for frequency ranges from 0 = never to 4 = very frequently, while intensity ranges from 0 = none to 4 = great. Composite scores were calculated using SPSS. The scores for the 21 items have a range of 0 to 336 for a total score. The scale contains a definition of moral distress and instructions for completing it. Respondents could also write up to two statements specific to their practice environment in which they had experienced moral distress and indicate the level of frequency and intensity. However, these items are not calculated in the total score. Instead, descriptive statistics were used to discuss the findings.

Content validity was evaluated by four experts familiar with the research on moral distress by independent review of the 21 items, coding of primary and secondary sources of moral distress in the revised items, and evaluating clarity and concision of the items for a multidisciplinary provider (Hamric, Borchers & Epstein, 2012). This tool demonstrated good internal consistency (Cronbach $\alpha = 0.89$) and an 88% inter-rater agreement on both primary and secondary sources of moral distress situations (Hamric et al, 2012). Full agreement was reached for 19 of 21 items, resulting in one item being replaced and another item reworded substantially (Hamric et al, 2012).

Hamric et al (2012) evaluated construct validity by testing hypothesis regarding the relationships between moral distress and other variables identified in previous research. Each of the three hypotheses was supported for the nurse population. Nurses with more experience in their current positions demonstrated higher moral distress ($r = .22, p = .005$); moral distress was negatively correlated with ethical climate ($r = -.402, p < .001$) and MDS-R scores were

significantly higher for those considering leaving their positions now ($p < .001$) (Hamric, Borchers & Epstein, 2012).

Moral Distress Residue

The final section of the MDS-R scale contained two questions developed by the researchers of the instrument (Hamric, Borchers, & Epstein, 2012). The first question evaluates moral distress residue as described by respondents who had left a previous job or considered quitting a previous job. The second question evaluates current levels of moral distress as described by respondents considering quitting a current job now due to moral distress (Hamric, Borchers, & Epstein, 2012). The two questions were:

1. Have you ever left or considered quitting a clinical position because of your moral distress with the way patient care was managed at your institution?
 - a. No, I've never considered quitting or left a position.
 - b. Yes, I considered quitting but did not leave.
 - c. Yes, I left a position.
2. Are you considering leaving your position now? Yes, No.

Responses to these questions captured the latent or proxy variable for moral residue within the study. The developer found that higher moral distress scores were reported in nurses who had left a previous position, followed by those who considered leaving a previous position but stayed; nurses who never left or considered quitting had lower moral distress scores (Hamric, Borchers, & Epstein, 2012).

Professional Moral Courage Scale

Sekerka, Bagozzi and Charnigo (2009) Professional Moral Courage Scale (PMCS) is a 15-item, 7-point unipolar scale (Appendix D) that measures a respondent's response from 1 = never true to 7 = always true, with 4 = sometimes true as a midpoint. The PMCS has five themes or dimensions which include 1) moral agency, 2) multiple values, 3) threat endurance, 4) beyond compliance, and 5) moral goal. *Moral agency* pertains to qualities or characteristics of the moral agent. *Multiple values* pertain to the application of personal and professional codes of conduct in making decisions. *Threat endurance* pertains to taking the moral action in the face of challenges or social pressures. *Beyond compliance* relates to striving to achieve the moral standard. *Moral goal* is actualization or attainment of the moral standard. Each dimension contains three items. The items measuring moral courage were obtained by two different researchers and derived from analysis of the literature and qualitative analysis of critical incidents (Sekerka, Bagozzi, & Charnigo, 2009).

Construct validity was examined by confirmatory factor analysis (CFA) (Sekerka, Bagozzi, & Charnigo, 2009). The factor loadings were all high in value and statistically significant. The true-score or trait variances for the five moral courage dimensions were substantial except for one measure, the measure beyond compliance (Sekerka, Bagozzi, & Charnigo, 2009). The trait variances ranged from 52% to 77%. The minimum standard is acknowledged to be 50%; the measure of beyond compliance achieved a trait variance of 37% (Sekerka, Bagozzi & Charnigo, 2009). The authors did not report a Cronbach alpha.

Moral Courage Examined Qualitatively

The open-ended question ascertained how the nurse demonstrated moral courage (specifically, if they experienced a morally challenging situation, how they took a stand for their patient and what was the outcome of their stand? How did that make them feel?).

Demographic Data and Survey

The demographic data and survey contained 13 demographic variables and one additional variable addressed through an open-ended question represented the independent variables (Appendix E). The demographic data and pertinent open-ended question were derived from the literature review and believed to be relevant to this study. The demographic data were comprised of continuous and categorical data (age, gender, education level, total number of years working as nurse, total number of years working as oncology nurse, work setting (inpatient/outpatient, other), oncology certification, ELNEC education, ethics course work/continuing education, participation in ethics consultation).

Procedures

Recruitment

The Principal Investigator (PI) sent a written proposal to ONS to obtain permission to recruit member oncology nurses residing in two states within the Southeastern United States. Prior to conducting the study, approval was obtained from the University of Central Florida Institutional Review Board and the Oncology Nursing Society (ONS). The PI did not have direct access to the membership email. The study was disseminated on February 27, 2015 by ONS through email to 2,400 oncology nurse members in the targeted study population. An abbreviated email (Appendix F) served as a cover letter announced the study and invited

prospective participants to join the study. The abbreviated email described the study purpose, value of the investigation, instructions for completing the survey, risks, benefits, and process to ensure confidentiality, and who to contact for questions or assistance. Interested prospective participants accessed the study using the embedded link to the Qualtrics™ online survey. Completion of the survey was deemed an informed consent. The total study time required was 15-20 minutes.

Data Collection

Qualtrics™, the online survey software, was used to generate the electronic demographic data and survey, MDS-R which measures Moral Distress and Moral Residue, the Professional Moral Courage Scale, and the open-ended question on Moral Courage for the data collection. First, explanation of the study (describing the study purpose, what the participants would be asked to do in the study, time required, risks/benefits, anonymity, and how to contact to principal investigator) was provided to the participants. Next, participants completed the Demographic Data Sheet which also contained 13 brief response items and one open-ended question on Moral Courage, followed by the 21-item Moral Distress Scale-Revised (MDS-R), containing also the Moral Residue items, and the 15-item Professional Moral Courage Scale. Enrollment lasted for one month with one email reminder generated after week two. Data collection ended on March 31, 2015.

Confidentiality

The online survey was anonymous and no personal identifying information such as name or special coding was used in the study data. Participation in the study was voluntary and participants were given directions to contact the PI if they had any questions during the survey or

after the survey was completed. There were no known risks, penalties or costs for participation in the study. The returned surveys were kept in a password-protected computer. Only the PI and research advisors had access to the online survey and study data. The study data will also be shared with the developer of the MDS-R. The study results will be reported in the aggregate and will be published.

Operationalizing Variables

Moral Distress Scale-Revised (MDS-R)

The Moral Distress Scale represents the dependent and independent variables, and items on the scale contain continuous data.

Moral Distress Residue

Moral distress residue is a measure of nominal data and was coded, no = 0, and yes = 1. Individuals reporting having left a position or considered leaving a position but stayed were coded '1,' reflecting the fact that they have experienced moral residue. Respondents reporting never left were coded '0.' Respondents who are currently considering leaving their positions were coded '1' to reflect current levels of moral distress. Respondents not leaving a current position were coded '0'

Professional Moral Courage Scale and open-ended question

The moral courage scale represents the dependent variables, and items on the scale are continuous data. The open-ended question was coded into themes using a preliminary set of codes and the five sub themes from the Professional Moral Courage Scale.

Demographic Data and Survey Questions

The demographic data and survey questions represent the independent variables. These variables contain both continuous and categorical data. For example, age is continuous, level of education was coded as 0 = BSN or lower and 1 = MSN or higher. To examine the categorical data, dummy coding was used for dichotomous variables with two categories and effects coding was applied to more than two categories (k-1 dummy variables for k categories).

CHAPTER FOUR: RESULTS

Analysis of Data

The purpose of this study was to determine the relationship between moral distress, moral residue, and moral courage; whether oncology nurse characteristics were predictors of moral distress and moral courage; and specifically what actions were indicative of moral courage. A convenience sample of oncology nurses, working in oncology adult inpatient and outpatient settings were recruited for this study. The participants who were English-speaking, registered nurses, working full time, or retired within six months or less met the inclusion criteria. A mixed method, non-experimental, correlation design was used to answer the research questions. Data were analyzed using the Statistical Package for the Social Science (SPSS) version 22.0 software for Windows. Descriptive and inferential statistical analysis and findings of the qualitative content analysis that describe the participants' moral courage are presented in this chapter. First, the preliminary data examination and descriptive statistics conducted on the data collected in this study are presented. Next, results of the statistical analyses related to the research questions one to five are presented. Last, the qualitative content analysis is presented for question six. Finally, the links between qualitative and quantitative findings are explored.

Description of Sample

Quantitative data were entered into SPSS version 22 for Windows to perform data examination and analysis. Of the 2,400 eligible oncology nurse participants, the raw data set consisted of 274 respondents representing a response rate of 11.4%. A total of 76 (27.7)

respondents had missing data of which 9.2% (n=7) accessed the study and dropped out without completing the demographic information and study survey. Of the 76 respondents, 91% (n=69) completed the demographic information, but did not complete the moral distress or professional moral courage scales. Therefore, 76 cases were removed from the study leaving 198 for analyses. The remainder of missing data for the MDS-R and PMCS scales were imputed wherever possible. Specifically, for the MDS-R, missing frequency and intensity scores were imputed using the sample mean (Mertler & Vannatta, 2010). Intensity scores could not be imputed for seven respondents who did not provide any intensity scores, these respondents were removed from the analysis leaving 191 subjects. For the PMCS, missing scores were imputed using the sample mean. One respondent did not provide any PMCS scores, so this respondent was removed from the study retaining 190 participants for analysis. The presence of outliers was assessed using box plots. Outliers are values below $Q1 - 1.5(Q3 - Q1)$ or above $Q3 + 1.5(Q3 - Q1)$ or equivalently, values below $Q1 - 1.5 \text{ IQR}$ or above $Q3 + 1.5 \text{ IQR}$ (Mertler & Vannatta, 2010). The interquartile range was defined as the difference between the third quartile (Q3) and the first quartile (Q1) (Mertler & Vannatta, 2010). The box plot in Figure 2 showed two outliers for the MDS-R (high value of 224 and 264). These respondents did not provide a response to the open-ended question. The outliers were inspected and removed one at a time and Figures 3 shows box plot after extreme outliers were removed for MDS-R. One outlier for the PMCS (low value of 3.93) was identified and removed (see Figures 4 and 5). After the removal of dropouts, missing data, and outliers, a total of 187 participants were retained for this study and reported in the findings.



Figure 2. MDS-R with outlier

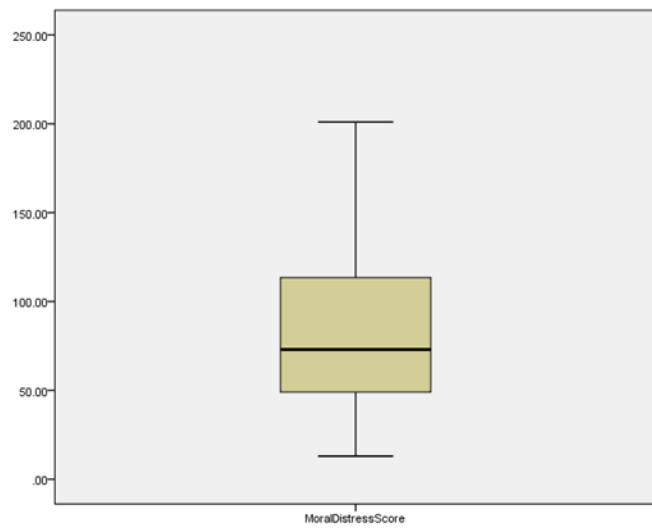


Figure 3. MDS-R after outliers removed

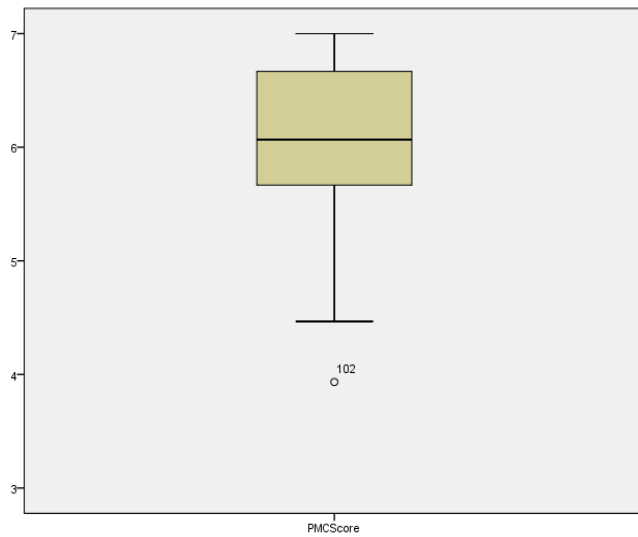


Figure 4. PMCS with outlier

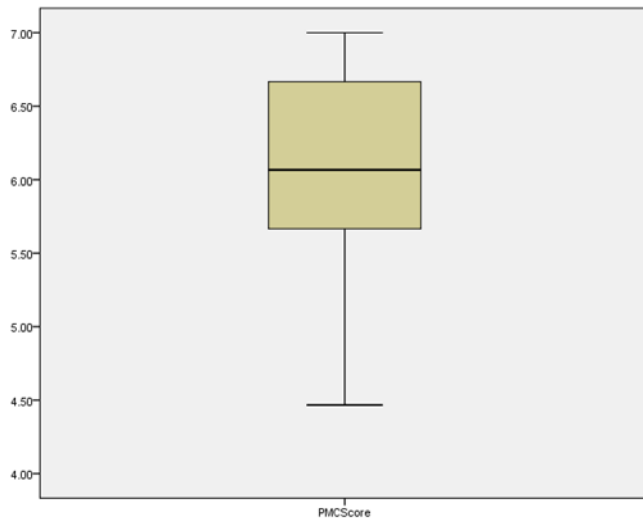


Figure 5. PMCS after outlier removed

The demographics for this sample are presented in Table 1. The participants had a mean age of 52 years ($SD = 10.3$). The mean number of years of experience working as a nurse was reported as 24 ($SD = 11.7$, Range = 3 - 50 years). The mean number of years working as an oncology nurse was 17 ($SD = 9.9$, Range = 1 - 45 years), of which 59 (32%) had 1-10 years of oncology work experience; 67 (36%) had 1-20 years of oncology work experience; 39 (21%) had

21-30 years of oncology work experience; 18 (10%) had 31-40 years of oncology work experience; and 2 (1%) had 41-45 years of oncology work experience. Thirty six percent of the respondents (n=68) worked with inpatients, 61% (n=114) worked with outpatients, and 3% (n=5) worked in ‘Other’ work setting, such as academic, research, and home health. Eighty-two percent (n=154) of the respondents had specialty certification in oncology and 41% (n=77) had attended an end of life and palliative care education provided by the End of Life Nursing Education Consortium (ELNEC).

Descriptive Statistics of Demographic Variables

Table 1

Demographic Characteristics of the Sample N= 187

| Variables | N (%) |
|--------------------------------|---------------------|
| Age | (M = 52, SD = 10.3) |
| Range | |
| 25-30 | 8(4.0) |
| 31-40 | 20 (11) |
| 41-50- | 52 (20) |
| 51-60 | 73 (39) |
| 61-70 | 33 (18) |
| 71-80 | 1(1.0) |
| Gender | |
| Female | 180 (96) |
| Male | 7(4.0) |
| Race/Ethnicity | |
| White/Caucasian | 132 (76) |
| African-American/Black | 25 (13) |
| Asian | 8(4.0) |
| Hispanic/Latino | 4(2.0) |
| Other | 8(4.0) |
| Employment | |
| Full time (36+ hours per week) | 157 (84) |
| Part Time | 12(6.0) |
| Per Diem | 8(4.0) |

| Variables | N (%) |
|--|--------------|
| Retired, 3 months or less | 6(3.0) |
| Education (highest degree) | |
| Diploma | 8(4.0) |
| Associate's Degree | 43(23) |
| Bachelor's Degree | 78(42) |
| Master's Degree | 45(24) |
| DNP | 3(2.0) |
| PhD/DNSc | 9(5.0) |
| Current Work Setting | |
| Inpatient Unit | 68(36) |
| Outpatient Clinic | 114(61) |
| Other | 5 (3) |
| Oncology Nurse Certification | |
| Yes | 154(82) |
| No | 33(18) |
| ELNEC Course | |
| Yes | 77(41) |
| No | 110(59) |
| Basic Health Care Ethics | |
| Ethics content integrated into program | 130(70) |
| Separate ethics course | 39(21) |
| No ethics content | 18(10) |
| Additional Courses or Ethics CEU | |
| Yes | 112(80) |
| No | 74(40) |
| Participated in Ethics Consult | |
| Yes | 49(26) |
| No | 136(74) |
| Moral Residue | |
| Intent to quit current job now | 31(17) |
| Left or considered leaving previous job /no intent to quit current job | 80(44) |
| Never considered quitting or left previous job/no intent to quit now | 73(39) |

Reliability Analysis

Internal consistency for each of the composite variables and subscales was assessed with Cronbach's alpha reliability analysis. In this study, MDS-R reliability was supported with a Cronbach α of .90. This finding was consistent with previous results (Allen et al, 2013; Hamric,

Borchers, & Epstein, 2012; Whitehead et al, 2015). In this study, PMCS had a Cronbach α of .93. Results of the reliability testing are presented in Table 2. Reliability values for all subscales were acceptable.

Table 2

Cronbach's Alpha Reliability Testing Results for Moral Distress Scale-Revised and Professional Moral Courage Scale and Subscales

| Scale | α | No. of items | Items |
|---|----------------------------|---------------------|--------------|
| Moral Distress Scale-Revised (MDS-R) | .90 | 21 | 1-21 |
| Professional Moral Courage Scale (PMCS) | .93 | 15 | 1-15 |
| PMCS subscales | | | |
| Moral Agency | .84 | 3 | 1, 2, 3 |
| Multiple Values | .80 | 3 | 4, 5, 6 |
| Endures Threat | .84 | 3 | 7, 8, 9 |
| Goes Beyond Compliance | .79 | 3 | 10, 11, 12 |
| Moral Goal | .81 | 3 | 13, 14, 15 |

Descriptive Statistics of Instrument (MDS-R and PMCS Scores)

Moral Distress Scale

Moral Distress Scale-Revised (MDS-R Score) is defined as the sum of the individual frequency x intensity of all 21 responses in the MDS-R instrument. After imputation using the sample mean, the MDS-R Score was summarized in Table 3. This score ranged from 13 to 201 points (higher scores indicate greater moral distress), with mean = 81.5 and standard deviation = 37.2. The skewness of MDS-R Score was 0.67 (Std Error = 0.18) indicating that the score was skewed to the right. The kurtosis of MDS-R Score was 0.69 (Std Error = 0.35). The histogram is presented in Figure 6.

Table 3

Descriptive Statistics Moral Distress Scale-Revised (MDS-R)

| | N | Range | Minimum | Maximum | Mean | Std. Dev | Skewness | | Kurtosis | |
|-------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|------------|-----------|------------|
| | Statistic | Statistic | Statistic | Statistic | Statistic | Statistic | Statistic | Std. Error | Statistic | Std. Error |
| MDS-R Score | 187 | 188.0 | 13.00 | 201.00 | 81.5036 | 37.24784 | .670 | .178 | .690 | .354 |

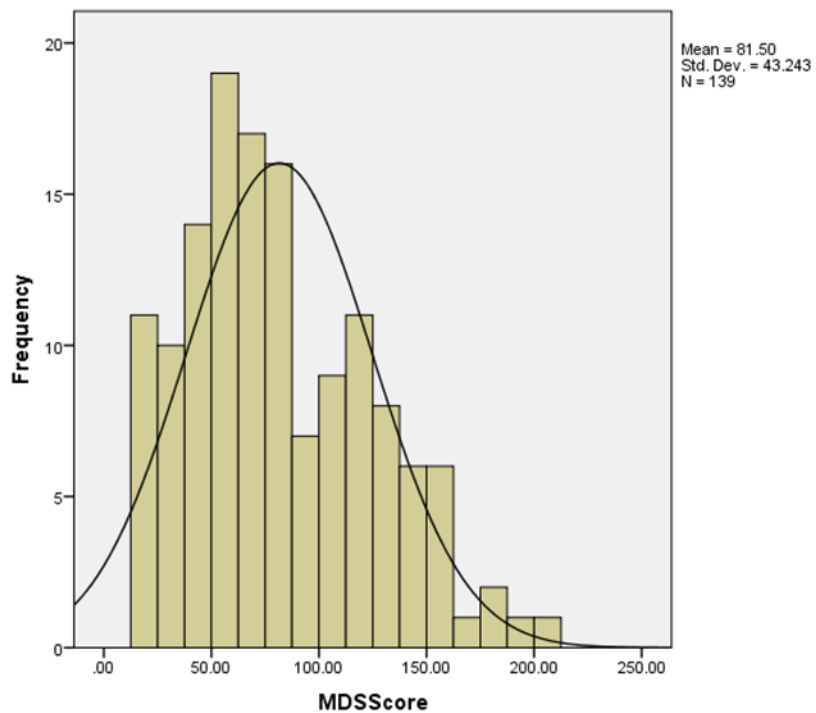


Figure 6. Histogram of the MDS-R Score further illustrates the skewness of the score distribution.

The moral distress frequency x intensity (*fxi*) scores for each of the 21 items was also calculated to obtain the *fxi* mean score for each item with a mean score ranging from low 1.20 (*SD*= 2.52) to high 6.10 (*SD*=4.72). For example items less distressing had low *fxi* mean scores, such as: #15 *Take no action about an observed ethical issue because the involved staff member*

or someone in a position of authority requested that I do nothing ($M=1.20$, $SD=2.57$); and #14 Increase the dose of sedatives/opiates for an unconscious patient that I believe could hasten the patient's death ($M=1.31$, $SD=2.498$). The most morally distressing event associated with the highest mean score in this study was #2, *Witness healthcare providers giving false hope to a patient or family*. The top three (by rank order) most morally distressing events differed by work setting. For example nurses in the inpatient setting reported #3 *Following the family's wishes to continue life support even though I believe it is not in the best interest of the patient*, #2 *witness healthcare providers giving false hop to a patient or family*, and #4 *initiate extensive lifesaving actions when I think they only prolong death*. Nurses in the outpatient setting reported #2 *Witness healthcare providers giving false hope to a patient or family*, #18 *witness diminished patient care due to poor team communication*, and #17 *work with nurses or other healthcare providers who are not as competent as patient care requires*. Table 4 represents the total sample 21-item Moral Distress *fxi* mean scores and standard deviations in rank order.

Table 4
21-item Moral Distress Scale-R Frequency times Intensity Scores (fxi) Mean Scores and Standard Deviations in Rank Order.

| Moral Distress Item (fxi) | Mean | SD | Rank |
|---|-------------|-----------|-------------|
| 2. Witness healthcare providers giving “false hope” to a patient or family. | 6.10 | 4.72 | 1 |
| 18. Witness diminished patient care quality due to poor team communication. | 5.72 | 4.62 | 2 |
| 3. Follow the family's wishes to continue life support even though I believe it is not in the best interest of the patient. | 5.62 | 4.61 | 3 |
| 20. Watch patient care suffer because of a lack of provider continuity. | 5.58 | 4.68 | 4 |
| 4. Initiate extensive life-saving actions when I think they only prolong death. | 5.45 | 4.59 | 5 |

| Moral Distress Item (fxi) | Mean | SD | Rank |
|--|-------------|-----------|-------------|
| 21. Work with levels of nurse or other care provider staffing that I consider unsafe. | 5.42 | 5.00 | 6 |
| 17. Work with nurses or other healthcare providers who are not as competent as the patient care requires. | 5.34 | 4.56 | 7 |
| 6. Carry out the physician's orders for what I consider to be unnecessary tests and treatments. | 5.10 | 4.28 | 8 |
| 1. Provide less than optimal care due to pressures from administrators or insurers to reduce costs. | 4.72 | 4.40 | 9 |
| 5. Follow the family's request not to discuss death with a dying patient who asks about dying. | 4.66 | 4.29 | 10 |
| 12. Provide care that does not relieve the patient's suffering because the physician fears that increasing the dose of pain medication will cause death. | 3.95 | 4.51 | 11 |
| 9. Assist a physician who, in my opinion, is providing incompetent care. | 2.73 | 3.54 | 12 |
| 16. Follow the family's wishes for the patient's care when I do not agree with them, but do so because of fears of a lawsuit. | 2.51 | 3.70 | 13 |
| 7. Continue to participate in care for a hopelessly ill person who is being sustained on a ventilator, when no one will make a decision to withdraw support. | 2.49 | 3.90 | 14 |
| 19. Ignore situations in which patients have not been given adequate information to insure informed consent. | 2.37 | 3.67 | 15 |
| 13. Follow the physician's request not to discuss the patient's prognosis with the patient or family. | 2.29 | 3.62 | 16 |
| 10. Be required to care for patients I don't feel qualified to care for. | 2.26 | 3.10 | 17 |
| 8. Avoid taking action when I learn that a physician or nurse colleague has made a medical error and does not report it. | 1.71 | 3.06 | 18 |
| 11. Witness medical students perform painful procedures on patients solely to increase their skill. | 1.63 | 2.95 | 19 |
| 14. Increase the dose of sedatives/opiates for an unconscious patient that I believe could hasten the patient's death. | 1.31 | 2.50 | 20 |
| 15. Take no action about an observed ethical issue because the involved staff member or someone in a position of authority requested that I do nothing. | 1.20 | 2.57 | 21 |

Professional Moral Courage Scale (PMCS)

The Professional Moral Courage Scale (PMCS) total score was defined by the average of Moral Agency Score, Multiple Values Score, Endures Threat Score, Goes Beyond Compliance Score, and Moral Goal Score. Each subscale score was defined by the average of the three items within the category with a range of 1, ‘never true’ to 7, ‘always true’ with 4, ‘sometimes true’ as a midpoint (Sekerka et al., 2009). In this study, PMCS subscale scores ranged from a low 2.67 to high 7.00 points, with mean scores varying from 5.8 (SD=1.04) to 6.37 (SD=0.63) indicating an ability to respond to challenges with courage sometimes to nearly always true. For example, *Moral Agency* was the highest (M=6.37, SD=0.63) indicating that on average nurses nearly always had a predisposition toward the moral behavior and possessed a persistent willingness to engage as a moral agent. The *Multiple Value* was the lowest score (M=5.8, SD =1.04) suggesting that nurses felt less capable in their ability to draw on multiple value sets in moral decision making and to effectively sort out and determine what needs to be exercised, and to hold firm to beliefs despite external concerns or demands.

Table 5 shows the descriptive statistics of PMCS Score as well as its five subscales. PMCS Score ranges from 4.47 to 7.00 points, with mean = 6.10 and standard deviation =0.60 (indicating sometimes to nearly always responding to challenges with courage). The skewness of PMCS Score is -0.38 (Std Error = 0.18), which means the score is skewed to the left. The kurtosis of PMCS Score is -0.58 (Std Error = 0.35).

Table 5

Descriptive Statistics for Professional Moral Courage Scale (PMCS) and Subscale

| | N | Range | Minimum | Maximum | Mean | Std. Dev | Skewness | | Kurtosis | |
|--|---|-------|---------|---------|------|----------|-----------|------------|-----------|------------|
| | | | | | | | Statistic | Std. Error | Statistic | Std. Error |
| | | | | | | | | | | |

| | | | | | | | | | | |
|--------------------|-----|------|------|------|--------|---------|--------|------|-------|------|
| Moral Agency | 187 | 2.67 | 4.33 | 7.00 | 6.3658 | .62612 | -.885 | .178 | .193 | .354 |
| Multiple Values | 187 | 4.33 | 2.67 | 7.00 | 5.7989 | 1.04236 | -.999 | .178 | .542 | .354 |
| Endures Threat | 187 | 4.00 | 3.00 | 7.00 | 5.8944 | .86653 | -.526 | .178 | -.047 | .354 |
| Goes Beyond | 187 | 2.67 | 4.33 | 7.00 | 6.1130 | .68798 | -.383 | .178 | -.515 | .354 |
| Moral Goal | 187 | 4.00 | 3.00 | 7.00 | 6.3297 | .65033 | -1.367 | .178 | 3.569 | .354 |
| PMCS Total Score | 187 | 2.53 | 4.47 | 7.00 | 6.1003 | .59524 | -.375 | .178 | -.581 | .354 |
| Valid N (listwise) | 187 | | | | | | | | | |

The chart below is the Histogram of the PMCS Score.

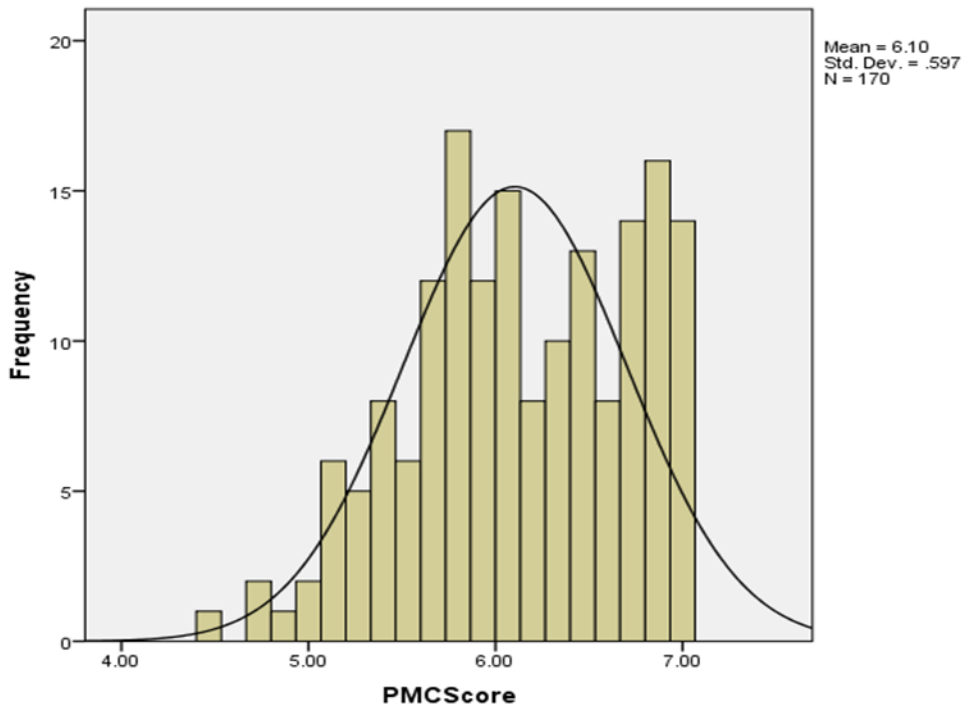


Figure 7. Histogram of PMCS scores shows a negative skewness of the distribution

Major Study Variables

A Pearson correlation coefficient was calculated for the relationships between the dependent variables and independent variables. Age was positively correlated with total years working as a registered nurse (YRSNRSG) ($r = 0.759, p < 0.01$) and total years working as an oncology nurse (YRSONC) ($r = 0.533, p < 0.01$). YRSNRSG was positively correlated with YRSONC ($r = 0.630, p < 0.01$).

All five subscales of PMCS Score were positively correlated with each other and with PMCS score itself at a significant level of 0.01 ($p < 0.01$). *Endures Threat* was a weak positive correlation with total years in nursing (YRSNURSG) ($r = 0.207, p < 0.01$) indicating a significant linear relationship between the two variables. Nurses with more years of nursing experience

tended to respond with moral courage when facing an ethical or moral challenge, both perceived threats and real danger with endurance. PMCS Score was a weak positive correlation with total years of oncology experience (YRSONC) ($r = 0.149, p < 0.05$). Nurses with more years of oncology work experience tended to respond to moral challenges with moral courage. MDS-R Score was not correlated with any of the listed variables in Table 6 at a 0.05 significance level.

Table 6

Correlation Matrix for Dependent Variables and Key Independent Variables

| Variable | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|------------------------------|--------|--------|-------|--------|--------|--------|--------|--------|-------|----|
| 1.Age | - | | | | | | | | | |
| 2.YrsNursg ^a | .759** | - | | | | | | | | |
| 3.YrsOnc ^b | .533** | .630** | - | | | | | | | |
| 4.MoralAgency ^c | .010 | .011 | .097 | - | | | | | | |
| 5.MoralValues ^d | .107 | .063 | .111 | .474** | - | | | | | |
| 6.EnduresThreat ^e | .139 | .207** | .125 | .421** | .351** | - | | | | |
| 7.GoesBeyond ^f | .111 | .082 | .132 | .550** | .482** | .593** | - | | | |
| 8.MoralGoal ^g | .092 | .109 | .102 | .546** | .499** | .453** | .580** | - | | |
| 9.PMCS ^h | .125 | .127 | .149* | .745** | .773** | .739** | .815** | .774** | - | |
| 10.MDS-R ⁱ | -.056 | .017 | .036 | -.031 | -.098 | .032 | -.091 | -.011 | -.055 | - |

Note: ^aTotal years nursing experience, ^bTotal years oncology experience, ^cMoral Agency, ^dMoral Values, ^eEndures Threat, ^fGoes Beyond Compliance, ^gMoral Goal, ^hProfessional Moral Courage Scale, ⁱMoral Distress Scale-Revised
* $p < .05$; ** $p < .01$. (2-tailed)

Education level was divided into two groups, ‘BSN and below’ (EDUC_binary =0) and ‘Above BSN’ (EDUC_binary =1). The average of MDS-R score for ‘BSN and below’ is 83.71 (SD = 36.88), indicating higher moral distress and 7.21 points higher than that of the ‘Above BSN’. However, an independent samples t -test comparing the mean score of education level of the two groups indicated that such a difference was not statistically significant ($t(184) = 1.216, p = 0.226$). See the Tables 7 and 8.

Table 7

MDS-R Mean Scores and Standard Deviations for Education Level.

| | EDUC_Binary | N | Mean | Std. Deviation | Std. Error Mean |
|--------------|-------------|-----|---------|----------------|-----------------|
| MEAN (MDS-R) | .00 | 129 | 83.7140 | 36.88034 | 3.24713 |
| | 1.00 | 57 | 76.5011 | 38.24256 | 5.06535 |

Table 8

Independent Samples T-test for MDS-R and Education Level

| Education | Levene's Test for Equality of Variances | | t-test for Equality of Means | | | | | | |
|---|---|------|------------------------------|---------|-----------------|-----------------|-----------------------|---|----------|
| | F | Sig. | t | df | Sig. (2-tailed) | Mean Difference | Std. Error Difference | 95% Confidence Interval of the Difference | |
| | | | | | | | | Lower | Upper |
| MEAN (MDS-R) Equal Variances assumed | .644 | .423 | 1.216 | 184 | .226 | 7.21294 | 5.93247 | -4.49146 | 18.91735 |
| Equal variances not assumed | | | 1.199 | 103.813 | .233 | 7.21294 | 6.01678 | -4.71881 | 19.14470 |

The average of PMCS score for 'BSN and below' was 6.09 (SD = 0.62), which was very close to that of the 'Above BSN' as shown in Tables 9 and 10. The latter had a mean of 6.11 (SD = 0.55). The *t*-test indicated that there was no statistically significant difference of PMCS score between the two Education groups ($t(184) = -.287, p = 0.774$).

Table 9

PMCS Mean Scores and Standard Deviations for Education Level

| | EDUC_Binary | N | Mean | Std. Deviation | Std. Error Mean |
|-------------------|-------------|-----|--------|----------------|-----------------|
| MEAN (PMCS Score) | .00 | 129 | 6.0911 | .61855 | .05446 |
| | 1.00 | 57 | 6.1184 | .54889 | .07270 |

Table 10

Independent Samples T-test for PMCS and Education level

| Education | Levene's Test for Equality of Variances | | t-test for Equality of Means | | | | | | |
|-----------------------------|---|------|------------------------------|---------|-----------------|-----------------|-----------------------|---|--------|
| | F | Sig. | t | df | Sig. (2-tailed) | Mean Difference | Std. Error Difference | 95% Confidence Interval of the Difference | |
| | | | | | | | | Lower | Upper |
| MEAN (PMCS Score) | | | | | | | | | |
| Equal Variances assumed | 1.527 | .218 | -.287 | 184 | .774 | -.02734 | .09514 | -.21505 | .16037 |
| Equal variances not assumed | | | -.301 | 119.955 | .764 | -.02734 | .09084 | -.20720 | .15251 |

The average of MDS-R score for the nurses with certification in oncology (ONCCERT =1) was 83.12 (SD = 37.11), indicating more moral distress or about 10 points higher than the nurses without certification in oncology ($M = 73.94$, $SD = 37.51$). The t -test indicated that there was no statistically significant difference of MDS-R score between the two groups ($t(185) = -1.288$, $p = 0.199$). See Tables 11 and 12.

Table 11

MDS-R Mean Scores and Standard Deviations for Oncology Certification

| | ONCCERT | N | Mean | Std. Deviation | Std. Error Mean |
|--------------|---------|-----|---------|----------------|-----------------|
| MEAN (MDS-R) | 0 | 33 | 73.9400 | 37.51029 | 6.52970 |
| | 1 | 154 | 83.1244 | 37.11312 | 2.99066 |

Table 12

Independent Samples T-test for MDS-R and Oncology Certification

| ONCCERT | Levene's Test for Equality of Variances | | t-test for Equality of Means | | | | | | |
|---|---|------|------------------------------|--------|-----------------|-----------------|-----------------------|---|---------|
| | F | Sig. | t | df | Sig. (2-tailed) | Mean Difference | Std. Error Difference | 95% Confidence Interval of the Difference | |
| | | | | | | | | Lower | Upper |
| MEAN (MDS-R) Equal Variances assumed | .538 | .464 | -1.288 | 185 | .199 | -9.18431 | 7.13243 | -23.25567 | 4.88705 |
| Equal variances not assumed | | | -1.279 | 46.406 | .207 | -9.18431 | 7.18200 | -23.63750 | 5.26888 |

The average of PMCS score for the nurses with certification in oncology (ONCCERT =1) was 6.11 (SD =0.58), about 0.06 points higher than the nurses without certification in oncology ($M = 6.05$, $SD = 0.66$). The t -test indicated that there was no statistically significant difference of PMCS score between the two groups ($t(185) = -.557$, $p = 0.578$) as shown in Tables 13 and 14.

Table 13

PMCS Mean Scores and Standard Deviations for Oncology Certification

| | ONCCERT | N | Mean | Std. Deviation | Std. Error Mean |
|-------------------|---------|-----|--------|----------------|-----------------|
| MEAN (PMCS Score) | 0 | 33 | 6.0478 | .65849 | .11463 |
| | 1 | 154 | 6.1116 | .58251 | .04694 |

Table 14

Independent Samples T-test for PMCS and Oncology Certification

| ONCCERT | Levene's Test for Equality of Variances | | t-test for Equality of Means | | | | | | |
|-----------------------------|---|------|------------------------------|--------|-----------------|-----------------|-----------------------|---|--------|
| | F | Sig. | t | df | Sig. (2-tailed) | Mean Difference | Std. Error Difference | 95% Confidence Interval of the Difference | |
| | | | | | | | | Lower | Upper |
| MEAN (PMCS Score) | .996 | .320 | -.557 | 185 | | -.06376 | .11439 | -.28944 | .16192 |
| Equal Variances assumed | | | -.515 | 43.377 | .609 | -.06376 | .12387 | -.31350 | .18598 |
| Equal variances not assumed | | | | | | | | | |

The average MDS-R score for the oncology nurses who work in an inpatient work setting (Inpatient_binary=1) is 90.96 (SD = 39.62) or 14 points higher than nurses in an outpatient work setting (Inpatient_binary=0). The latter had an average MDS-R score of 77.04 (SD = 34.88). The *t*-test indicated a statistically significant difference of MDS-R score between the two groups ($t(180) = -2.475, p = 0.014$). See Tables 15 and 16.

Table 15

MDS-R Mean Scores and Standard Deviations for Inpatient and Outpatient Worksetting

| | Inpatient_binary | N | Mean | Std. Deviation | Std. Error Mean |
|---------------|------------------|-----|---------|----------------|-----------------|
| MEAN (MDS-R) | .00 | 114 | 77.0404 | 34.88312 | 3.26710 |
| | 1.00 | 68 | 90.9641 | 39.61644 | 4.80420 |

Table 16

Independent Samples T-test for MDS-R and Inpatient/Outpatient Work setting

| Inpatient/Outpatient | Levene's Test for Equality of Variances | | t-test for Equality of Means | | | | | | |
|-----------------------------|---|------|------------------------------|---------|-----------------|-----------------|-----------------------|---|-----------|
| | F | Sig. | t | df | Sig. (2-tailed) | Mean Difference | Std. Error Difference | 95% Confidence Interval of the Difference | |
| | | | | | | | | Lower | Upper |
| MEAN (MDS-R) | | | | | | | | | |
| Equal Variances assumed | 1.039 | .309 | -2.475 | 180 | .014 | -13.92375 | 5.62585 | -25.02484 | -.2.82265 |
| Equal variances not assumed | | | -2.397 | 127.174 | .018 | -13.92375 | 5.80984 | -25.42023 | -2.42726 |

The average of PMCS score for the nurses with inpatient work setting (Inpatient_binary=1) was 6.08 (SD = 0.63), about 0.03 points lower than the nurses in outpatient or other work settings in oncology (Inpatient_binary=0). The latter had an average PMCS score of 6.11 (SD = 0.57). The t-test indicated that there was no statistically significant difference of PMCS score between the two groups ($t(180) = .333, p = 0.740$). See Tables 17 and 18.

Table 17

PMCS Mean Scores and Standard Deviations for Inpatient and Outpatient Work setting

| | Inpatient_binary | N | Mean | Std. Deviation | Std. Error Mean |
|--------------|------------------|-----|--------|----------------|-----------------|
| MEAN (PMCS) | .00 | 114 | 6.1093 | .57433 | .05379 |
| | 1.00 | 68 | 6.0790 | .62904 | .07628 |

Table 18

Independent Samples T-test for PMCS and Inpatient/Outpatient Work setting

| Inpatient/Outpatient | Levene's Test for Equality of Variances | | t-test for Equality of Means | | | | | | |
|--|---|------|------------------------------|---------|-----------------|-----------------|-----------------------|---|--------|
| | F | Sig. | t | df | Sig. (2-tailed) | Mean Difference | Std. Error Difference | 95% Confidence Interval of the Difference | |
| | | | | | | | | Lower | Upper |
| MEAN (PMCS) Equal Variances assumed | .693 | .406 | .333 | 180 | .740 | .03033 | .09121 | -.14965 | .21031 |
| Equal variances not assumed | | | .325 | 130.994 | .746 | .03033 | .09334 | -.15432 | .21498 |

The average of MDS-R score for nurses with End-of-Life Nursing Education Consortium (ELNEC) course (ELNEC = 1) was 84.3 (SD = 38.90) or 4.77 points higher than nurses with no ELNEC course (ELNEC = 0). Those with no ELNEC course had an average MDS-R score of 79.54 (SD = 36.09) as shown in Table 19. The *t*-test indicated that there was no statistically significant differences between the two groups ($t(185) = -.862, p = 0.390$). See Table 20.

Table 19

MDS-R Mean Scores and Standard Deviations for End of Life Nursing Education (ELNEC)

| | ELNEC | N | Mean | Std. Deviation | Std. Error Mean |
|---------------|-------|-----|---------|----------------|-----------------|
| MEAN (MDS-R) | 0 | 110 | 79.5371 | 36.09546 | 3.44157 |
| | 1 | 77 | 84.3129 | 38.90094 | 4.43317 |

Table 20

Independent Samples T-test for MDS-R and End of Life Nursing Education (ELNEC)

| ELNEC | Levene's Test for Equality of Variances | | t-test for Equality of Means | | | | | | |
|---|---|------|------------------------------|---------|-----------------|-----------------|-----------------------|---|---------|
| | F | Sig. | t | df | Sig. (2-tailed) | Mean Difference | Std. Error Difference | 95% Confidence Interval of the Difference | |
| | | | | | | | | Lower | Upper |
| MEAN (MDS-R) Equal Variances assumed | .103 | .748 | -.862 | 185 | .390 | -4.77582 | 5.53834 | -15.70225 | 6.15061 |
| Equal variances not assumed | | | -.851 | 155.764 | .396 | -4.77582 | 5.61226 | -15.86177 | 6.31013 |

The average of PMCS score for nurses with ELNEC course (ELNEC = 1) was 6.13 (SD = 0.60) or 0.05 points higher than nurses with no ELNEC course (ELNEC = 0). Those with no ELNEC course had an average PMCS score of 6.08 (SD = 0.59). The *t*-test indicated that there was no statistically significant differences between the two groups ($t(185) = -.538, p = 0.591$). See Tables 21 and 22.

Table 21

PMCS Mean Scores and Standard Deviations for End of Life Nursing Education (ELNEC)

| | ELNEC | N | Mean | Std. Deviation | Std. Error Mean |
|-------------|-------|-----|--------|----------------|-----------------|
| MEAN (PMCS) | 0 | 110 | 6.0807 | .59161 | .05641 |
| | 1 | 77 | 6.1284 | .60316 | .06874 |

Table 22

Independent Samples T-test for PMCS and End of Life Nursing Education

| ELNEC | Levene's Test for Equality of Variances | | t-test for Equality of Means | | | | | | |
|-----------------------------|---|------|------------------------------|---------|-----------------|-----------------|-----------------------|---|--------|
| | F | Sig. | t | df | Sig. (2-tailed) | Mean Difference | Std. Error Difference | 95% Confidence Interval of the Difference | |
| | | | | | | | | Lower | Upper |
| MEAN (PMCS) | | | | | | | | | |
| Equal Variances assumed | .120 | .730 | -.538 | 185 | .591 | -.04769 | .08861 | -.22251 | .12714 |
| Equal variances not assumed | | | -.536 | 161.700 | .592 | -.04769 | .08892 | -.22328 | .12791 |

The average MDS-R score for the group of nurses who had integrated Basic Ethics Education into their nursing program was 79.07 (SD=35.71). The average MDS-R score for the group of nurses who had a Separate Ethics Course was 93.40 (SD=36.73), which was the highest group. The average MDS-R score for the group of nurses who had No Ethics content in their nursing program was 73.33 (SD=45.35). See Table 23.

Table 23

MDS-R Mean Scores and Standard Deviations for Basic Ethics Education

| | N | Mean | Std. Deviation | Std. Error | 95% Confidence Interval for Mean | | Minimum | Maximum |
|--------------|-----|---------|----------------|------------|----------------------------------|-------------|---------|---------|
| | | | | | Lower Bound | Upper Bound | | |
| 1-integrated | 130 | 79.0664 | 35.70897 | 3.13188 | 72.8698 | 85.2629 | 14.00 | 185.00 |
| 2- separate | 39 | 93.3983 | 36.72742 | 5.88109 | 81.4926 | 105.3039 | 13.00 | 201.00 |
| 3- none | 18 | 73.3341 | 45.25434 | 10.66655 | 50.8297 | 95.8386 | 16.00 | 197.00 |
| Total | 187 | 81.5036 | 37.24784 | 2.72383 | 76.1300 | 86.8772 | 13.00 | 201.00 |

The ANOVA test results indicate that there was no significant difference of the MDS-R score among the nurses with different Basic Ethics Education background ($F(2,184) = 2.75, p = .067$). The ANOVA results are displayed in Table 24.

Table 24

ANOVA for MDS-R Scores and Basic Ethics Education

| MDS-R | Sum of Squares | df | Mean Square | F | Sig. |
|----------------|----------------|-----|-------------|-------|------|
| Between Groups | 7491.386 | 2 | 3745.693 | 2.751 | .067 |
| Within Groups | 250565.362 | 184 | 1361.768 | | |
| Total | 258056.748 | 186 | | | |

The ANOVA test results indicated that there was no significant difference of the PMCS score among the nurses with different Basic Ethics Education background ($F(2,184) = 0.252, p = 0.777$) as displayed in Tables 25 and 26.

Table 25

PMCS Mean Scores and Standard Deviations for Basic Ethics Education

| PMCS | N | Mean | Std. Deviation | Std. Error | 95% Confidence Interval for Mean | | Minimum | Maximum |
|--------------|-----|--------|----------------|------------|----------------------------------|-------------|---------|---------|
| | | | | | Lower Bound | Upper Bound | | |
| 1-integrated | 130 | 6.0826 | .62496 | .05481 | 5.9742 | 6.1911 | 4.47 | 7.00 |
| 2- separate | 39 | 6.1601 | .56919 | .09114 | 5.9756 | 6.3447 | 4.67 | 7.00 |
| 3- none | 18 | 6.0988 | .42190 | .09944 | 5.8890 | 6.3086 | 5.29 | 6.67 |
| Total | 187 | 6.1003 | .59524 | .04353 | 6.0145 | 6.1862 | 4.47 | 7.00 |

Table 26

ANOVA for PMCS and Basic Ethics Education

| PMCS | Sum of Squares | df | Mean Square | F | Sig. |
|----------------|----------------|-----|-------------|------|------|
| Between Groups | .180 | 2 | .090 | .252 | .777 |
| Within Groups | 65.721 | 184 | .357 | | |
| Total | 65.902 | 186 | | | |

An independent *t*-test was calculated comparing the mean score for MDS-R and PMCS of participants who identified themselves as taking continuing ethics education (ETHICSCEU = 1) to the mean score of participants who did not take continuing ethics education (ETHICSCEU = 0). The results indicated that there was no impact on MDS-R and PMCS scores and whether the participants had taken continuing education courses in bioethics or not. The results are shown below in Tables 27, 28, 29, and 30.

Table 27

MDS-R Mean Scores and Standard Deviations for Ethics Continuing Education Units (CEU)

| | ETHICCEU | N | Mean | Std. Deviation | Std. Error Mean |
|--------------|----------|-----|---------|----------------|-----------------|
| MEAN (MDS-R) | 0 | 74 | 81.9603 | 39.39340 | 4.57939 |
| | 1 | 112 | 81.2018 | 36.11129 | 3.41220 |

Table 28

Independent Samples T-test for MDS-R Scores and Ethics Continuing Education Units (CEU)

| ETHICCEU | Levene's Test for Equality of Variances | | t-test for Equality of Means | | | | | | |
|---|---|------|------------------------------|---------|-----------------|-----------------|-----------------------|---|----------|
| | F | Sig. | t | df | Sig. (2-tailed) | Mean Difference | Std. Error Difference | 95% Confidence Interval of the Difference | |
| | | | | | | | | Lower | Upper |
| MEAN (MDS-R) Equal Variances assumed | 1.526 | .218 | .135 | 184 | .893 | .75851 | 5.60995 | -10.30958 | 11.82660 |
| Equal variances not assumed | | | .133 | 146.802 | .895 | .75851 | 5.71086 | -10.52760 | 12.04462 |

Table 29

PMCS Mean Scores and Standard Deviations for Ethics Continuing Education Units (CEU)

| | ETHICCEU | N | Mean | Std. Deviation | Std. Error Mean |
|-------------|----------|-----|--------|----------------|-----------------|
| MEAN (PMCS) | 0 | 74 | 6.0189 | .57581 | .06694 |
| | 1 | 112 | 6.1515 | .60645 | .05730 |

Table 30

Independent Samples T-test for PMCS Score and Ethics Continuing Education Units (CEU)

| ETHICCEU | Levene's Test for Equality of Variances | | t-test for Equality of Means | | | | | | |
|--|---|------|------------------------------|---------|-----------------|-----------------|-----------------------|---|--------|
| | F | Sig. | t | df | Sig. (2-tailed) | Mean Difference | Std. Error Difference | 95% Confidence Interval of the Difference | |
| | | | | | | | | Lower | Upper |
| MEAN (PMCS) Equal Variances assumed | 1.069 | .303 | -1.489 | 184 | .138 | -.13263 | .08906 | -.30834 | .04308 |
| Equal variances not assumed | | | -1.505 | 161.992 | .134 | -.13263 | .08812 | -.30663 | .04137 |

An independent samples t-test was calculated comparing the mean score of participants who requested or took part in an ethics consult (ETHICSCON=1) to the mean score of participants who did not request or participate in an ethics consult (ETHICSCON =0). The results indicated that there was no impact on MDS-R (Tables 31 and 32) and PMCS scores (Tables 33 and 34) and whether the participants requested or participated in ethics consult or not ($t(183) = -1.239, p = .217$) and ($t(183) = -.723, p = .471$) respectively.

Table 31

MDS-R Mean Score and Standard Deviation for Participated or Requested Ethics Consult

| ETHICSCON | N | Mean | Std. Deviation | Std. Error Mean |
|-----------|-----|---------|----------------|-----------------|
| 0 | 136 | 79.1663 | 37.37156 | 3.20459 |
| 1 | 49 | 86.8379 | 36.56674 | 5.22382 |

Table 32

Independent Samples T-test for MDS-R Score and Ethics Consult

| ETHICSCON | Levene's Test for Equality of Variances | | t-test for Equality of Means | | | | | | |
|---|---|------|------------------------------|--------|-----------------|-----------------|-----------------------|---|---------|
| | F | Sig. | t | df | Sig. (2-tailed) | Mean Difference | Std. Error Difference | 95% Confidence Interval of the Difference | |
| | | | | | | | | Lower | Upper |
| MEAN (MDS-R) Equal Variances assumed | 1.275 | .260 | -1.239 | 183 | .217 | -7.67165 | 6.19183 | -19.88821 | 4.54491 |
| Equal variances not assumed | | | -1.252 | 86.566 | .214 | -7.67165 | 6.12843 | -19.85343 | 4.51013 |

Table 33

PMCS Mean Scores and Standard Deviations for Participated or Requested Ethics Consult

| ETHICSCON | N | Mean | Std. Deviation | Std. Error Mean |
|---------------|-----|--------|----------------|-----------------|
| MEAN (PMCS) 0 | 136 | 6.0820 | .60725 | .05207 |
| 1 | 49 | 6.1541 | .57399 | .08200 |

Table 34

Independent Samples T-test for PMCS Score and Ethics Consult

| ETHICSCON | Levene's Test for Equality of Variances | | t-test for Equality of Means | | | | | | |
|--|---|------|------------------------------|--------|-----------------|-----------------|-----------------------|---|--------|
| | F | Sig. | t | df | Sig. (2-tailed) | Mean Difference | Std. Error Difference | 95% Confidence Interval of the Difference | |
| | | | | | | | | Lower | Upper |
| MEAN (PMCS) Equal Variances assumed | .190 | .663 | -.723 | 183 | .471 | -.07210 | .09975 | -.26892 | .12472 |
| Equal variances not assumed | | | -.742 | 89.353 | .460 | -.07210 | .09714 | -.26509 | .12089 |

Quantitative Analysis for Main Research Questions

The five quantitative research questions (RQ) posited for this study and analyses are discussed below.

RQ1

Is there a difference between oncology nurses in adult inpatient and outpatient settings with respect to their moral distress and moral courage?

To address research question one, independent sample *t*- tests were conducted for MDS-R scores and PMCS scores relative to inpatient (inpatient_binary = 1) and outpatient (inpatient_binary = 0) settings. The results indicate that oncology nurses working in adult inpatient setting had significantly higher Moral Distress than oncology nurses in outpatient setting. These results were presented previously in Table 15 and Table 16.

RQ2

Among oncology nurses, to what extent, if any, are moral distress and moral courage related?

Research question two was assessed using correlation analysis. A Pearson correlation matrix was obtained to examine the relationships between Moral Distress Scores, Professional Moral Courage Scores, and Professional Moral Courage Subscales. The correlation matrix was presented already in Table 5. No significant correlation was found between the Moral Distress score and Professional Moral Courage Score and PMCS Subscales. The Pearson's correlation between MDS-R score and PMCS score was $r = -0.06$, ($p = 0.45$). The Pearson's correlations between MDS-R score and PMCS subscales are all weak and not statistically significant ($-0.1 < r < 0.1$ and $p > 0.05$).

A Pearson's correlation was calculated by inpatient setting examining the relationship between participants' MDS-R scores and PMCS scores. A weak correlation that was not significant was found ($r = .129, p = .386$). A Pearson's correlation was calculated by outpatient setting examining the relationship between participants' MDS-R scores and PMCS score. A weak correlation that was not significant was found ($r = -.165, p = .147$). There is no relationship between levels of Moral Distress and scores on the Professional Moral Courage Scale regardless of work settings. Even though not significant, the MDS-R scores for inpatient group were positively correlated and the outpatient group was negatively correlated.

RQ3

What is the level of moral distress as reported by oncology nurses who report moral distress residue described as having left a previous job, considered leaving a previous job but stayed, or considering leaving a current job now?

To address this question, first, the participants were split into three groups as shown below in Table 35 based on their responses to the following two survey questions:

1. Have you ever left or considered quitting a clinical position because of your moral distress with the way patient care was handled?
2. Are you considering leaving your position now?

Table 35

Description of the Three Groups for Moral Distress Residue

| | CURRENTQUIT = 1 | CURRENTQUIT = 0 |
|----------------|--|--|
| QUITCONSID = 1 | Intent to quit current job now (Group 1) | Participants who left a previous job Participants who considered leaving previous job but stayed No intent to quit current job now (Group 2) |
| QUITCONSID = 0 | | Participants who never considered leaving or left a previous job No intent to quit current job now (Group 3) |

The average MDS-R scores for Group 1 was 94.28 (SD=38.88), Group 2 was 85.26 (SD=40.03), Group 3 was s 72.11 (SD 31.93) as shown in Table 36. Group 1 had the highest average MDS-R score (M=94.28, SD=38.88) suggesting that both previous levels and repeated encounters of moral distress are associated with moral distress residue.

Table 36

Descriptive Statistics of MDS-R by Group Defined in Table 35

| MEAN (MDS-R) | N | Mean | Std. Deviation | Std. Error | 95% Confidence Interval for Mean | | Minimum | Maximum |
|------------------|-----|---------|----------------|------------|----------------------------------|-------------|---------|---------|
| | | | | | Lower Bound | Upper Bound | | |
| 1-intent to quit | 31 | 94.2750 | 38.88221 | 6.98345 | 80.0129 | 108.5371 | 14.00 | 185.00 |
| 2- left/consider | 80 | 85.2570 | 40.02761 | 4.47522 | 76.3493 | 94.1647 | 13.00 | 201.00 |
| 3- never left | 73 | 72.1107 | 31.92724 | 3.73680 | 64.6615 | 79.5598 | 14.00 | 163.00 |
| Total | 184 | 81.5607 | 37.54384 | 2.76777 | 76.0998 | 87.0215 | 13.00 | 201.00 |

The ANOVA test showed that there was a significant difference of the mean MDS-R scores among the three different groups ($F(2,181) = 4.66, p = 0.011$) as shown in Table 37.

Table 37

ANOVA Results for Comparing MDS-R among the Three Groups

| MEAN (MDS-R) | Sum of Squares | df | Mean Square | F | Sig. |
|----------------|----------------|-----|-------------|-------|------|
| Between Groups | 12623.400 | 2 | 6311.700 | 4.657 | .011 |
| Within Groups | 245322.424 | 181 | 1355.373 | | |
| Total | 257945.823 | 183 | | | |

The analyses indicate a statistically significant difference between the moral distress levels among the three groups of oncology nurses. The oncology nurses in group one who had intent to quit their current job had the highest level of moral distress (94 points), about 9 points higher than those in group two who had either left a previous job or those that considered leaving a previous job but stayed (85 points). Those who left and considered leaving a previous job but stayed scored 13 points higher than group three who neither considered quitting nor left a previous job and had no intent to quit a current job now (72 points).

RQ4a

Which nurse characteristics are significant predictors of moral distress in oncology nurses?

To examine the categorical predictors in research questions 4 and 5, dummy coding was used for dichotomous variables with two categories and effects coding was applied to more than two categories (k-1 dummy variables for k categories). A stepwise multiple linear regression was conducted to determine whether the following characteristics (education level, total number of years working as registered nurse, total number of years working as oncology nurse, oncology setting, oncology certification, ELNEC education, ethics education, and participation in ethics consult) were predictors of moral distress score. Total number of years in nursing (Yrsnursg) and total number of years working in oncology (Yrsonc) were treated as continuous variables.

All other variables were treated as categorical variables. Multiple regression approach was identified as an appropriate tool to analyze the data gathered for this research question. Multiple regression methods were used to explore the best fits. In the stepwise regression, the significance level for variable entry is set to be 0.05; the significance level for variable removal is set to be 0.10. (An entry level significance level was also set at 0.10 with a removal significance level at 0.15, however no additional predictors were found). All of the relevant independent variables were set as inputs for the auto selection and removal. The regression was first conducted on the original MDS-R score without any transformation.

The researcher then conducted the regression on the natural logarithm of the MDS-R scores (LOGNMDS). Both regression results yielded the same conclusion that the oncology setting (Inpatient or Outpatient) was a significant predictor of the Moral Distress Score in oncology nurses. The Inpatient group had a significantly higher moral distress level than the Outpatient group. The results are presented in Tables 38 and 39.

Table 38

Stepwise Multiple Regression on MDS-R (without Transformation)

| Model | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|------------------|-----------------------------|------------|---------------------------|--------|------|
| | B | Std. Error | Beta | | |
| 1 (Constant) | 74.521 | 4.600 | | 16.201 | .000 |
| Inpatient_binary | 18.689 | 7.530 | .210 | 2.482 | .014 |

Dependent Variable: MDS-R

Table 39

Stepwise Multiple Regression on LOGNMDS (transformed MDS-R)

| Model | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|------------------|-----------------------------|------------|---------------------------|--------|------|
| | B | Std. Error | Beta | | |
| 1 (Constant) | 4.133 | .066 | | 62.840 | .000 |
| Inpatient_binary | .274 | .108 | .215 | 2.549 | .012 |

Dependent Variable: LogNMDS

Though the difference of the moral distress level between the Inpatient and Outpatient groups was statistically significant ($F(1,134) = 6.161, p = .014$), with an R^2 of .044. The small R^2 values (0.044 for original MDS-R in Table 40, and 0.046 for the transformed LogNMDS in Table 41) yielded from the regression models indicated that only a trivial percentage of the moral distress score variance could be accounted for by the nurse’s oncology setting. This suggests that other variables could have been significant but data were not collected.

Table 40

Regression Model Summary with the Original MDS-R (without Transformation)

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Change Statistics | | | | |
|-------|-------------------|----------|-------------------|----------------------------|-------------------|----------|-----|-----|---------------|
| | | | | | R Square Change | F Change | df1 | df2 | Sig. F Change |
| 1 | .210 ^a | .044 | .037 | 42.43964 | .044 | 6.161 | 1 | 134 | .014 |

a. Predictors: (Constant), Inpatient_binary

Table 41

Regression Model Summary with Transformed MDS-R (LogNMDS)

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Change Statistics | | | | |
|-------|-------------------|----------|-------------------|----------------------------|-------------------|----------|-----|-----|---------------|
| | | | | | R Square Change | F Change | df1 | df2 | Sig. F Change |
| 1 | .215 ^a | .046 | .039 | .60687 | .046 | 6.499 | 1 | 134 | .012 |

a. Predictors: (Constant), Inpatient_binary

Normality was assessed through examination of the histogram. The histogram in Figure 8 shows that the unstandardized residuals are asymmetrical and somewhat skewed to the left (negatively skewed distribution).

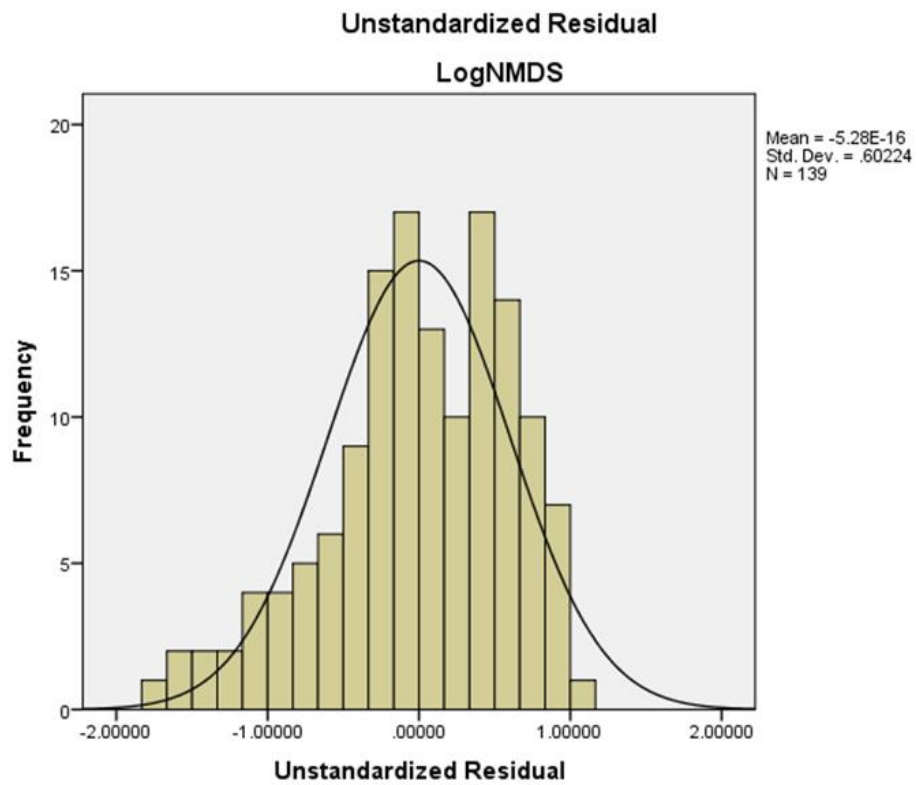


Figure 8. Histogram unstandardized residuals LogNMDs

The assumption of linearity was assessed by examining the residual scatterplot. The scatterplot in Figure 9 show the points are somewhat evenly distributed. The findings contain minimal violations of linearity which may weaken the regression analysis; however it does not invalidate the results (Tabachnick & Fidell, 2007). It is also reasonable to expect some slight departures from the ideal situation due to sampling fluctuations (Tate, 1992).

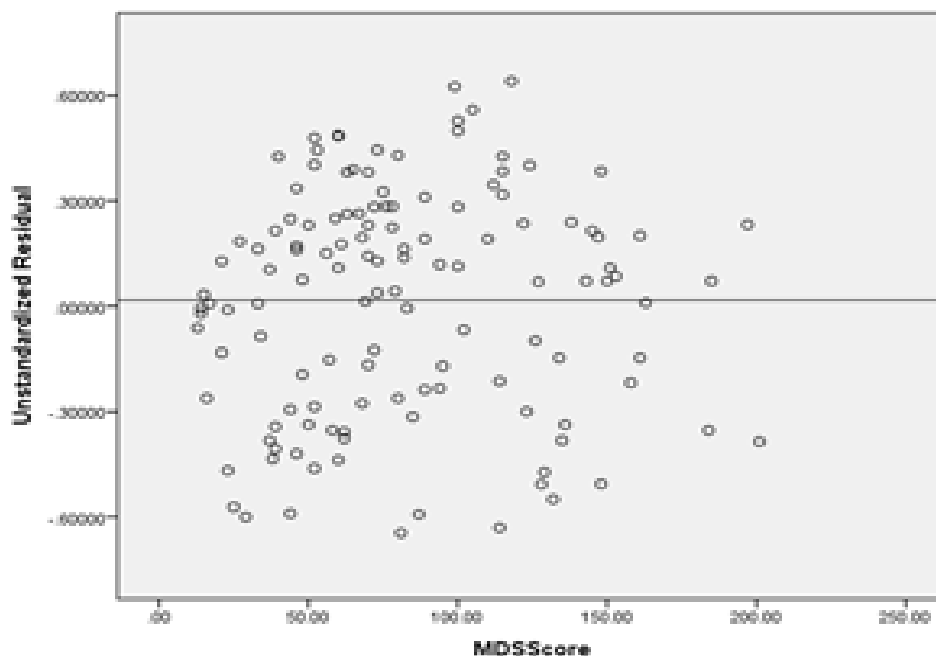


Figure 9. Scatterplot unstandardized residual for MDS-R scores. The residuals are somewhat evenly dispersed

Research question four was modified post hoc to add Moral Distress Residue as reported by nurses who left a previous job/or considered leaving but stayed (QUITCONSID) to assess if a better predictive model of MDS-R score could be established.

RQ4b

Which of the following characteristics (education level, total number of years working as registered nurse, total number of years working as oncology nurse, oncology setting, oncology

certification, ELNEC education, ethics education, participating in ethics consult, Left or intent to leave previous job, and intent to leave the current job) are significant predictors of moral distress in oncology nurses?

The total numbers of years in nursing and total numbers of years working in oncology are continuous variables. All other variables were treated as categorical variables. Multiple regression approach was identified as an appropriate tool to analyze the data gathered for this research question. The stepwise multiple linear regression yielded a more predictive model for MDS-R score with two predictors: (1) QUITCONSID (Left a previous job or considered leaving but stayed); and (2) Inpatient_binary (the inpatient work setting). With this regression model with two predictors, $R^2 = 0.116$ as shown in Table 42 and 43. This model accounted for 11.6% of the moral distress score variance ($p = .013$) compared with 4.4% using the single predictor ($p = .014$) shown in the original research question and model in Table 40.

Table 42

Multiple Regression Model Summary MDS-R with Predictors Moral Residue and Work Setting

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Change Statistics | | | | |
|-------|-------------------|----------|-------------------|----------------------------|-------------------|----------|-----|-----|---------------|
| | | | | | R Square Change | F Change | df1 | df2 | Sig. F Change |
| 1 | .272 ^a | .074 | .067 | 41.76283 | .074 | 10.740 | 1 | 134 | .001 |
| 2 | .341 ^b | .116 | .103 | 40.95140 | .042 | 6.363 | 1 | 133 | .013 |

a. Predictors: (Constant), QUITCONSID

b. Predictors: (Constant), QUITCONSID, Inpatient_binary

Table 43

Stepwise Multiple Regression on MDS-R with predictors Moral Residue and Work Setting

| Model | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|------------------|-----------------------------|------------|---------------------------|--------|------|
| | B | Std. Error | Beta | | |
| 1 (Constant) | 67.616 | 5.548 | | 12.187 | .000 |
| QUITCONSID | 23.826 | 7.270 | .272 | 3.277 | .001 |
| 2 (Constant) | 60.925 | 6.053 | | 10.066 | .000 |
| QUITCONSID | 23.556 | 7.130 | .269 | 3.304 | .001 |
| Inpatient_binary | 18.329 | 7.266 | .206 | 2.522 | .013 |

RQ5

Which of the following nurse characteristic (education level, total number of years working as registered nurse, total number of years working as oncology nurse, oncology setting, oncology certification, ELNEC education, ethics education, and participating in ethics consults) are significant predictors of professional moral courage in oncology nurses?

The independent variables, total numbers of years in nursing and total numbers of years working in oncology are continuous variables. All other independent variables were treated as categorical variables. Multiple regression approach was identified as an appropriate tool to analyze the data gathered for this research question. Several approaches were tested to explore the best fit. In the stepwise regression, the significance level for variable entry is set to be 0.05; the significance level for variable removal is set to be 0.10. (An entry level significance level was also set at 0.10 with a removal significance level of 0.15; however no additional predictors were found). All the relevant independent variables were set as inputs for the auto selection and removal. The regression was first conducted on the original PMCS score without any transformation. The researcher then conducted the regression on the natural logarithm of the

PMCS scores, (LOGNPMC). The regression result for LOGNPMC was quite similar to those yielded in the PMCS regression.

The regression model for PMCS and total years working in oncology in Table 44 show that a significant regression equation was found ($F(1, 163) = 4.171, p = .043$), with an R^2 of .025. Participants' predicted PMCS score is equal to $5.943 + .010$ (total years working in oncology) when total years working in oncology is measured in years. The participants PMCS score increased .010 points for each year working in oncology.

Table 44

Regression Model for PMCS and Total Years Oncology

| Model | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|--------------|-----------------------------|------------|---------------------------|--------|------|
| | B | Std. Error | Beta | | |
| 1 (Constant) | 5.943 | .091 | | 65.236 | .000 |
| YRSONC | .010 | .005 | .158 | 2.042 | .043 |

With this model $R^2 = .025$ accounted for 2.5% or an inconsequential amount of the variance in oncology nurse professional moral courage as shown in Table 45.

Table 45

Regression Model Summary for PMCS and Years of Oncology Experience

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Change Statistics | | | | |
|-------|-------------------|----------|-------------------|----------------------------|-------------------|----------|-----|-----|---------------|
| | | | | | R Square Change | F Change | df1 | df2 | Sig. F Change |
| 1 | .158 ^a | .025 | .019 | .59165 | .025 | 4.171 | 1 | 163 | .043 |

a. Predictors: (Constant), YRSONC

The regression unstandardized residuals of LogNPMC shown in Figure 10 Histogram indicates a fairly normal distribution. The assumption of linearity was assessed with the residual

scatterplot (Figure 11). The findings contain minimal violations of linearity which may weaken the regression analysis; however it does not invalidate the results (Tabachnick & Fidell, 2007). It is reasonable to expect some slight departures from the ideal situation due to sampling fluctuations (Tate, 1992).

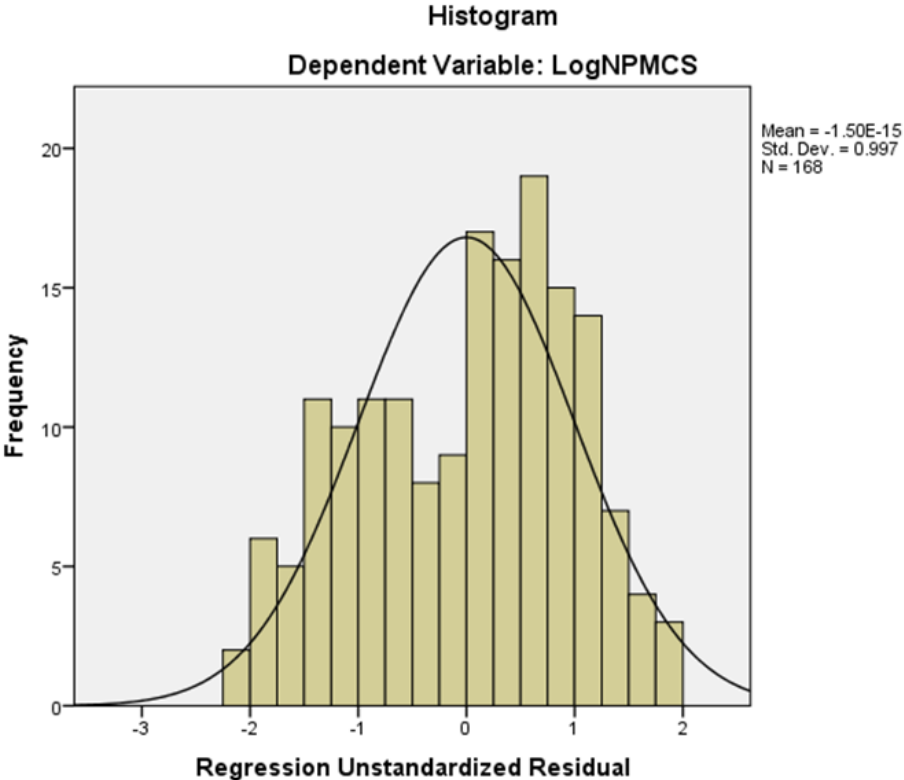


Figure 10. Histogram of unstandardized residuals LogNPMCS is fairly normally distributed

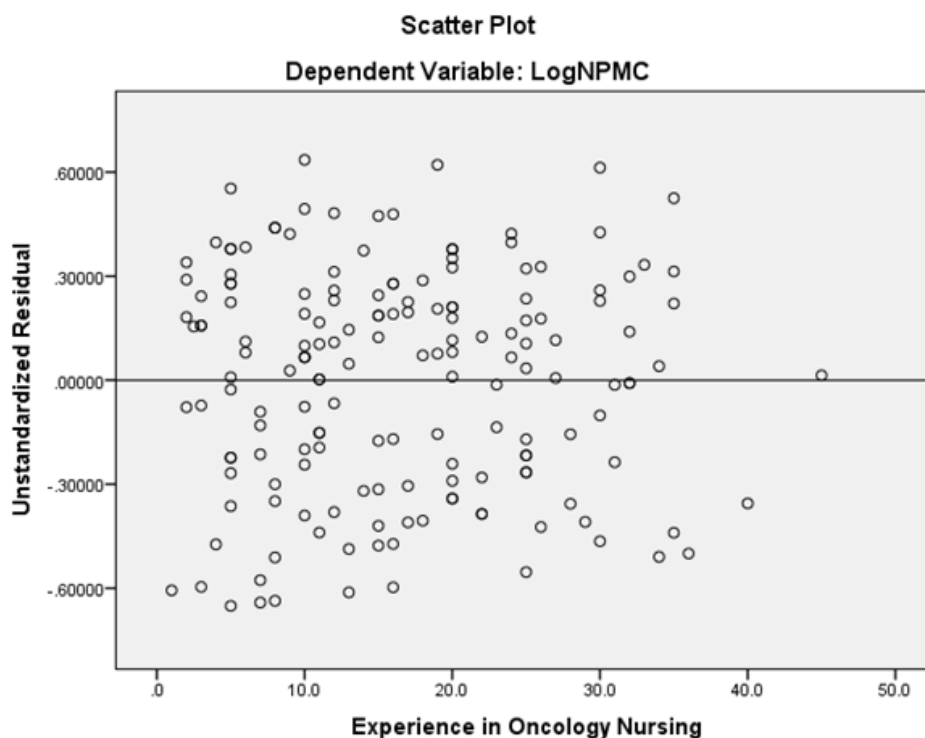


Figure 11. Scatter plot of the unstandardized residuals LogNPMCS show points evenly above and below the line.

Other Morally Distressing Situations

The Moral Distress Scale –Revised permits respondents to add at least two other situations in which they experienced moral distress and score them. Fifty-six respondents added a total of 60 items that were morally distressing as shown in Table 46. Of these additional items, a majority corresponded to existing categories on the MDS-R. These categories were futile or medically inappropriate treatments, poor communication, inappropriate pain management, and staffing and safety concerns. There were seven additional items that potentially address new categories of moral distress. For example, lack of care due to patient health illiteracy, not providing best care to a dying patient when no family present, patient and family lacking

spiritual sensitivity, failure to consult palliative care or hospice, not enough time to spend with patients due to computer charting, and inadequate equipment or supplies to ensure safe patient care. Due to the variability of responses, frequency and intensity scores could not be computed for these results.

Table 46

Other Morally Distressing Situations (N= 60)

| Number of Responses | Other Morally Distressing Situations | Corresponding MDS-R |
|---------------------|---|---------------------|
| 2 | Transporting imminently dying patients to free up a critical care bed | 1 |
| 2 | Medicaid patients sent to another outpatient center | 1 |
| 2 | Insurance companies dictating patient treatment based on cost | 1 |
| 2 | Poor care to cancer patient incarcerated | 1 |
| 1 | Clinical trial not being offered due to time constraint/enrollment | 1 |
| 1 | Insurance issues uninsured or underinsured | 1 |
| 1 | Too many patients not enough time | 1 |
| 1 | Indigent patients not receiving standard care | 1 |
| 1 | Valuing speed over accuracy/patient safety | 1 |
| 1 | Supervisors put their own interest above the staff and patients | 1 |
| 1 | Physician unable to communicate severity of illness/afraid to tell the family the truth | 2 |
| 6 | Patients want to continue chemotherapy when treatment is futile | 3 |
| 1 | Failure of family to recognize dying patient/disagree on EOL decisions | 3 |
| 5 | Performing CPR on patient at end of life | 4 |
| 2 | Providers refuse to order appropriate intervention | 9 |
| 1 | Failure to diagnose and refer patient early for treatment | 9 |
| 3 | Inadequate pain medication or comfort to dying patient | 12 |
| 1 | Punished by leadership for reporting ethical issue | 15 |
| 1 | Not following NCCN guidelines | 15 |
| 2 | Family has false hope despite being told patient was terminal | 16 |
| 1 | Discontinuing feeding tube to let patient die | 16 |
| 2 | Family expecting a miracle | 16 |
| 2 | Delivering grave news without compassion or answering questions | 18 |
| 6 | Inadequate staffing/assigned too many patients for safe care | 21 |
| 1 | Inadequate staff training and orientation to new technology | 21 |
| 1 | Impaired colleague (drugs and alcohol) | 21 |

| Number of Responses | Other Morally Distressing Situations | Corresponding MDS-R |
|---------------------|---|---------------------|
| 3 | Failure to consult palliative care or hospice for pain control | 0 |
| 2 | Not enough time to spend with patient due to computer charting | 0 |
| 1 | Lack of care due to low health illiteracy | 0 |
| 1 | Not providing best care to a dying patient when no family present | 0 |
| 1 | Patient and family lack spiritual sensitivity | 0 |
| 1 | Misuse of federal grant | 0 |
| 1 | Inadequate equipment/supplies | 0 |
| N=60 | Items corresponding to MDS-R 1-21. Items not corresponding = 0 | |

Qualitative Data Analysis

RQ6

What actions are indicative of moral courage?

To examine this qualitative question, respondents were asked specifically, “If you experienced a morally challenging situation, describe how you took a stand for your patient; what was the outcome of your stand; how did that make you feel?” Seventy-six (41%) of the participants provided responses, ranging from very short to detailed, poignant descriptions. A pragmatic qualitative approach was used for content analysis and described as an “approach of empirical, methodological controlled analysis of text within its context of communication, following content analytic rules and step by step models without rash quantification” (Mayring, 2000, p.5). Pragmatic knowledge in this context can be understood as established principles, heuristics, and rules guiding the actions and decisions of the researcher during different steps of the assessment process (Schilling, 2006). In Figure 12, the pragmatic qualitative content analysis procedure moves in an analytical sequence from one level to the next (Schilling, 2006).

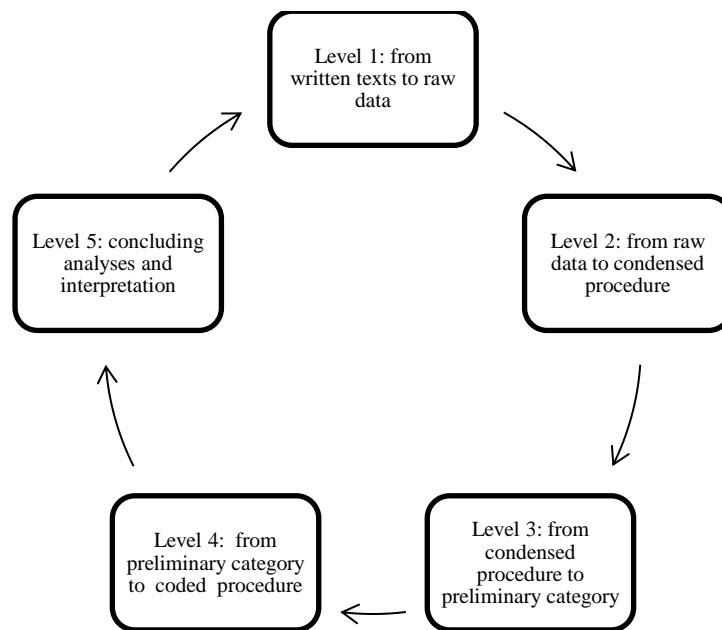


Figure 12. Qualitative content analysis.

Level 1. From written texts to raw data. The written texts were downloaded from the Qualtrics database into an Excel spreadsheet table, then sorted and organized around five headings (raw data, moral challenge, moral courage/stand, feelings, and outcomes) to align with existing categories of moral distress and moral courage frameworks guiding this study. In this context, the raw data were examined and content was extracted and matched to one of the four remaining headings. The researcher did not use open coding to uncover new concepts given the scope of specific responses to the research question. All texts were anonymous and no attempts were made to link opinions of participants toward a certain region or institution or to a response to the questionnaire portion of the instruments.

Level 2. From raw data to the condensed procedure. The main dimensions for categorizing data from the research question were reduced to a meaningful element or segment of text comprehensible by itself, containing one idea, and episode or piece of information (Tesch,

1990 as cited in Schilling, 2006) to enable an answer-focusing strategy (Schilling, 2006). Statements that were not important to answering the question were set aside. Next, the text was paraphrased, deleting all words not necessary to understand the statement, transforming the sentences into a short form. For example, “it was important to support patient autonomy” was categorized as “supporting patient’s decision; respecting autonomy.” An independent control check was done by the research adviser (independent researcher) who has qualitative experience.

Level 3. From condensed to structured procedures and preliminary categories.

Structuring permits each statement to be attached to one of the defined preliminary category (moral challenge, moral courage/taking a stand, feelings, and outcomes of taking a stand). In this example, “supporting patient’s decision” was a category aligning with moral courage/taking a stand. Interrater reliability was checked by the research adviser who made recommendations and reorganized content to form new categories that emerged from the data to ensure that each statement represented a single idea. Any case in doubt was checked against the original data resulting in 100% agreement.

Level 4. From a preliminary category to coded procedures. The five dimensions of Professional Moral Courage (Sekerka, Bagozzi and Charnigo, 2009) were used as the framework to provide the preliminary set of codes and formal definitions for the content category. The definitions were derived from theory and prior research to build the content category labels and themes or subcategories. Themes and subcategories derived from the condensed statements in level three were aligned with the five dimensions of Professional Moral Courage (*Moral Agency, Multiple Values, Endures Threat, Goes Beyond Compliance, and Moral Goal*). For example, the subcategory and emerging theme “supporting” and “risk taking” were aligned with *Moral Agency*. Nurses who support, advocate for, and risk consequences to ensure patients’

preferences and choices are followed demonstrate moral agency. If a statement implied or demonstrated empowerment, it was classified as *Multiple Values*. Nurses who empowered their patients demonstrated an ability to draw on multiple value sets such as sharing information, sharing power, or problem solving in moral decision making and effectively sorting out and applying strategies while holding firm to beliefs despite external concerns or demands (Sekerka et al., 2009).

When additional concepts emerged from the data related to the five elements of the Professional Moral Courage scale, they were linked to the most appropriate large category and further expanded to develop the conceptualization of the category. This extended the subcategories/themes corresponding to the segment of text resulting in 12 themes, thus supporting the data. The researcher and research adviser agreed 100% with the final categories and themes. A summary of the coding category is presented in Table 47 in Appendix I. Statements that could not be categorized “misfit analysis” were analyzed. The misfit analysis (n=10, 7.6%) did not exemplify moral courage or could not be categorized because no response was provided. Nevertheless, a moral challenge or situational factor that affects the nurse’s ability to act was identified by one participant who stated, “Due to being employed at that time by a six-physician Medical Oncology office I was not able to address my concerns”. In this example, lack of administrative support was associated with the moral challenge and inhibited the nurse from taking the moral stand.

Level 5: Concluding analyses and interpretation. Finally, data were used to develop an enhanced view of the five categories used for the Professional Moral Courage Scale (Sekerka et al., 2009). These concepts and a view of the larger experience of Moral Courage are presented in the findings section.

Qualitative Findings

In this study, moral courage was preceded by a morally challenging situation. When asked to describe a morally challenging situation that led to moral courage, the top four most frequent responses clustered under patients' perspectives or wishes not being heard, futile treatment, poor pain control and poor provider collaboration/communication. A unifying principle demonstrated by the oncology nurses was respect for the inherent dignity of patients and respect for their decisions which was captured within the context of their statements. Moral distress was triggered by the threat or violation to the fundamental principle that underlies nursing practice. In these circumstances, nurses were aware of their duty to preserve, protect, and support the rights of the patient. A unique finding from the perspectives of the nurses was that patients' wishes and preferences to stop or forgo treatment were not honored by the family or provider. One nurse was distressed about following the family wishes instead of the patient's, and family putting pressure on the patient to take treatment even though the patient did not want the treatment. Another patient wanted to stop treatment, but the spouse did not want the patient to stop treatment and was pressuring the patient to continue treatments. A different patient confided in the nurse outside the presence of the family that did not want to go through the proposed chemotherapy, yet the family pressured the patient to go through with it. The nurse revealed that working on the oncology floor it had become not at all unusual, if not common, to

see families making decisions that met their needs rather than the needs of the patient. The qualitative data revealed that different situations of moral distress were encountered by oncology nurses in outpatient settings. Nurses in the outpatient setting reported ethical concerns around informed consent and continuing with chemotherapy against the patient’s wishes.

The final themes are illustrated in the concept map in Figure 13. The five dimensions of moral courage or taking a stand were expanded into twelve recurring themes that exemplified moral courage in oncology nurses. These themes can be used to expand items on the Professional Moral Courage Scale or develop a new scale.

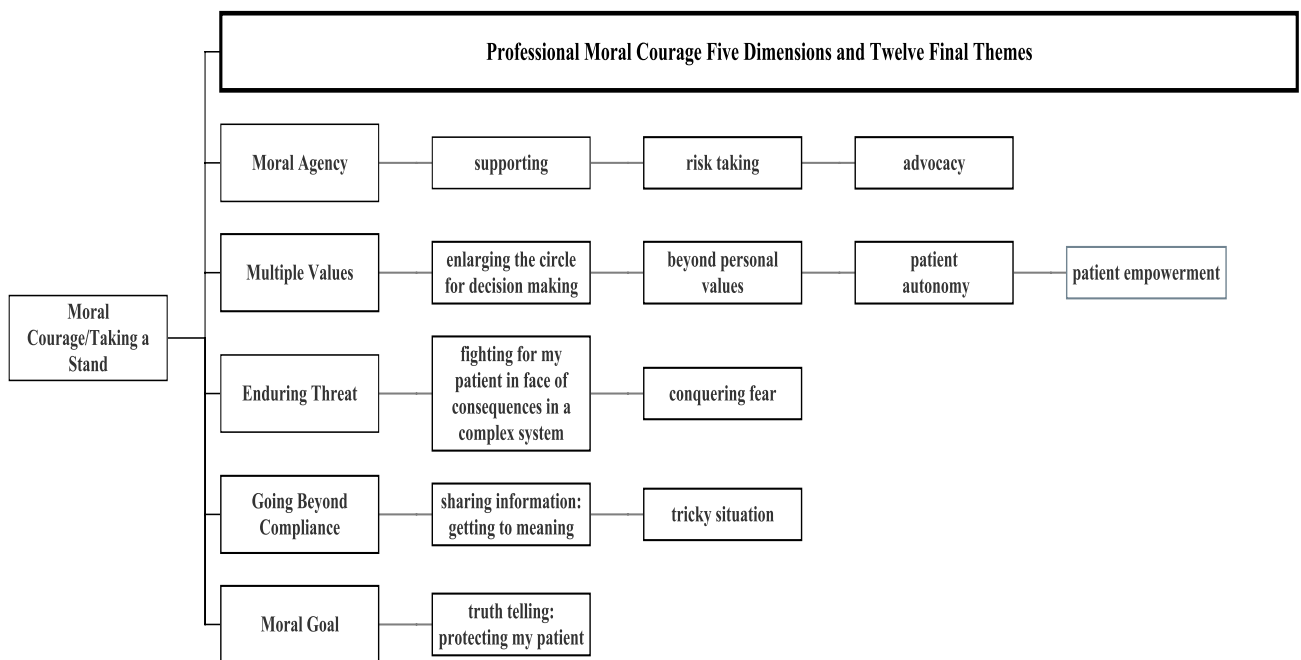


Figure 13. Concept map of moral courage in oncology nurses.

Moral Agency was defined as a predisposition toward the moral behavior and possessing a persistent will to engage as a moral agent (Sekerka Bagozzi, & Charnigo, 2009). The final

themes were supporting, risk taking, and advocacy were recurring examples of courage demonstrated by nurses in the current study.

Supporting. In displaying moral courage and standing up for the patient, several nurses championed and reinforced behaviors that promoted patients' autonomy. Ensuring that the "patient received the very best care possible" was a strategy that bolstered the patient and nurse relationship. Nurses considered the individual's needs and established trust to ensure that the patient's voice was heard. One nurse stated, "It did not seem like much, but it was all I could do." The nurse validated the patient's concerns and encouraged the patient to express her own feelings by "explaining each physician's role in her treatment and reassuring her that I had heard everything the doctors had said" in order to help the patient make a decision. The nurse also helped other staff appreciate that this was the patient's will and right.

Risk taking. A few nurses demonstrated risk taking behaviors such as confronting the physician responsible for providing unwanted continuing care at end-of-life. Being willing to act and taking responsibility is risky. A nurse revealed that although the physician was upset, it was rewarding to stand up for the patient and to see that his needs were met, supporting the patient's end-of-life decisions and stopping the treatment.

Advocacy. Oncology nurses demonstrated advocacy by representing and preserving their patient's best interest and upholding their patients' wishes and preferences informing family about current status and level of discomfort, listening to the patient, obtaining the information needed by the patient to make decisions, and assessing the patient's current status to communicate openly to the physician(s). One nurse explained to the patient it was her right to dictate the care she wanted and she did not have to take it. The patient did not want it "I walked her back to the physician's side so she could talk to him."

Moral courage was shown in nurses who incorporated supporting, risk taking, and advocacy interventions to assure the patient's voice was heard and acted upon to promote responsible and appropriate decision making including minimizing unwanted or unnecessary treatment and suffering.

Multiple Values was described as the ability to draw on multiple value sets in moral decision making while effectively sorting out and determining what needs to be done, holding firm to beliefs despite external concerns or demands (Sekerka et al., 2009). Despite having moral distress, oncology nurses were resourceful and driven to do the right thing. Four recurring themes were observed.

Enlarging the circle for decision-making. Oncology nurses demonstrated a guiding set of principles through communication and collaboration to enlarge the circle of decision-making. For example, moral courage was displayed by one nurse who contacted the patient's medical doctor who agreed to take over the patient's end-of-life care from the oncologist. Another nurse consulted a physician who was of the patient's nationality to speak with the family, then with the patient to ensure that the patient received informed consent for treatment with a full understanding of the cancer diagnosis and prognosis. Several nurses requested and consulted with the ethics committee. One nurse corralled the various medical staff and nursing staff caring for the patient, including social worker and requested an ethics committee meeting.

Beyond personal values. Nurses who showed courage recognized their own emotions and put their personal beliefs aside during the conflict to encourage the patient and family to communicate. One nurse said she respected the patient's decision to continue treatment, even though "I did not agree." Another nurse spent additional time with the patient to educate her on the disease type and all possible treatment options and potential side effects in order to make an

educated decision even though the nurse personally did not agree with the patient, “it was her right to make this decision.”

Patient autonomy. Moral courage was revealed by the nurse promoting patient autonomy and encouraging the patient “to talk to her family and doctor about what she wanted.” The nurse emphasized, “I talked with her about it first because she brought it up, she seemed frail, tired, and scared; and I sensed that she might not have made her own feelings clear to her family. She ended up going through treatment.” Nurses preserve and protect patients’ rights by assessing their understanding of information and explaining the implications (ANA, 2015).

Patient empowerment. Oncology nurses demonstrated moral courage by empowering their patients to make decisions. One nurse reflected on the dying process and asked the family to put themselves in their loved one’s shoes and to consider dying in pain and suffering as death was imminent and it was a choice to die with or without pain. The nurse recognized that respect for human dignity begins with patients taking responsibility and being empowered to make decisions without the control of others and enhancing the patient’s ability to act autonomously (ANA, 2015; Anderson et al., 1995).

Enlarging the circle for decision making, beyond personal values, patient autonomy, and patient empowerment were approaches used by nurses that demonstrate moral courage. Moral courage in this example arises from an understanding that integrity preserving compromise around patient decision-making involves multiple individuals to assure fair and transparent conflict resolution (ANA, 2015).

Enduring Threat was defined as facing an ethical and moral difficulty, including both perceived and real danger with endurance (Sekerka et al., 2009). Oncology nurses endured

threats for their patients by standing up to power in the face of consequences in a complex system and by conquering their fears.

Fighting for my patient in face of consequences in a complex system. In this example a few nurses exemplified moral courage. After reading the package insert the nurse was uncomfortable giving the medication in the outpatient setting because the risk for reaction was great and discussed the concern with the manager who felt it was safe and therefore “we” were going to give it. The nurse refused to give the therapy and did not obtain the patient’s consent. However, the other nurses moved forward and gave the drug. Within 30 minutes the patient had a reaction and was sent to the hospital. In a different scenario, the nurse called the physician and refused to give the drug. The physician called administration but the nurse was supported by her manager and administration. In another example, the threat escalated to a real danger when the nurse called the legal department to support the written and verbal wishes for care communicated by the patient and spouse as healthcare surrogate. The physician was instructed to abide by the patient wishes. However, the physician was upset and physically knocked the office door off the hinges looking for the nurse.

Conquering fear. In addition to assessing the ethical principle at stake (autonomy, beneficence, non-maleficence, fidelity and justice), nurses frequently draw on inner strength and prayer to conquer fear before taking a stand. While experiencing a morally challenging situation, “I decide to take or not take action.” Before deciding, the nurse took a deep breath, prayed and answered according to the patient’s conditions and needs, “she [the patient] had terminal metastatic colon cancer and was suffering intractable pain without relief.” “The children had a meeting with their mother and later that day they chose comfort measures only. The patient received alleviation and died with dignity surrounded by her family members.” Doing the right

thing for the patient was balanced by the nurses' obligation and awareness of the moral and ethical rights of the individual.

Going Beyond Compliance was defined as one who not only considers the rules, but also reflects on their purpose, goes beyond compliance-based measures to consider what is right just, and appropriate (Sekerka et al., 2009). Sharing information: getting to the meaning was an approach demonstrated by nurses who went beyond compliance.

Sharing information: getting to the meaning. Moral courage was exemplified in nurses who collaborated with the social worker, other nurses, and members of the palliative care team to gain insight or perspective in dealing with family members when handling delicate issues. In general, nurses demonstrate resourcefulness while considering what is right in a tricky situation. One nurse revealed such skill by talking honestly about the patient's wishes and feelings about going to the in-patient hospice facility. "We talked and laughed and cried that afternoon/evening. Finally I asked her frankly, what do you want to do? Do you have any desire to try chemotherapy again?" This nurse set in motion "a lot of very upset administrators, nurses and supervisors" because she interrupted what was "their plan to transfer the patient to hospice."

Tricky situation. Handling tricky situations involved diplomacy or ruffling feathers. One nurse told the physician as nicely as possible that "I had his number and I knew he was on call the weekend. I was working all weekend and I would be calling on an hourly basis to advocate for the patient who was moaning and writhing in the bed but not awake enough to give me a pain level." This showed that the nurse was acting within her responsibility and authority but was doing so in a way to force change in approach to pain control by a physician.

Moral Goal was defined as a drive for task accomplishment that includes the use of virtues (e.g., prudence, honesty and justice) throughout the decision making process to achieve a

virtuous outcome (Sekerka et al., 2009). Working toward a goal becomes more important than the activities themselves.

Truth telling: protecting the patient. Truth telling was a positive and common approach employed by the nurse signifying the moral goal. One nurse who had cared for several terminally ill and actively dying patients revealed that she was able to discuss with patients their thoughts on what they wanted for their care if they suddenly stopped breathing. The nurse took a stand for her patients by explaining the CPR protocol for a patient that becomes unresponsive in addition to helping them by discussing end of life wishes. Another nurse stated, “Before starting chemotherapy, I sat down with the patient, and asked him why he wanted to continue with therapy and what he expected to achieve by doing so. The patient had the understanding that he could be cured. I gently explained that the goal of therapy in his condition was palliation but if receiving therapy caused him more distress and decreased quality of life, he may want to consider forgoing therapy.” In a different scenario, the nurse was honest and candid and suggested some questions for them to ask the physician team. Promoting advanced care planning conversation is within the scope of nursing practice. Nurses and physicians have an ethical and moral responsibility to ensure that patients and their healthcare surrogates receive appropriate decision-making support and communication (Melhado & Byers, 2011). The advanced care planning process assures treatment options are discussed including benefits and burdens. The goal is to understand the patient’s values about treatment outcomes and assure informed decision-making. The oncology nurses in this study normalized the experience of moral courage by promoting informed decision-making in a caring manner to achieve the moral goal.

Oncology nurses showed moral courage in dealing with members of the healthcare team and the family to voice patients' perspectives. Raising questions about the direction of care requires courage. A common theme expressed by these nurses was valuing patients' right-to-decide what kind of care they receive and wanting patients' wishes to be met, not the family's or physician's desires. In a few cases, taking the moral action angered the physician and did not accomplish the desired effect from the nurse's perspective. Patients sometimes recognize nurses' courage, but that was not required for the nurse to show moral courage. One patient thanked the nurse for her honesty and bravery for going against the physician, "He said to me," "I know you put yourself in a tricky situation but I really appreciate what you have done for me [sic]."

Expression of Feelings and Reflections

One nurse in an outpatient setting was distressed administering chemotherapy to a patient with advanced Alzheimer's but could not address her concerns due to repercussions and working in a small oncology practice. Another nurse shared that despite undergoing several chemotherapies and procedures for terminal metastatic colon cancer, "the patient suffered intractable pain unrelieved by the palliative treatments". In that scenario, the children were distressed by the patient's pain and suffering and asked the nurse, "what they should do" and whether or not the nurse would continue treatment. Although oncology nurses in this study empowered their patients and engaged other members of the team to help in communication, some nurses have perceived emotional threats as they took moral action. Nurses who took a stand but could not complete the transaction or morally correct action expressed a sense of failed advocacy, fear, anger, frustration, guilt, insomnia, discomfort, and emotional pain. One nurse who did not speak up about a patient's perceived futile treatment felt angry, "because it appeared

that the physician let ego play a part in the ability to defeat this disease and no one spoke at all about quality of life, and that was wrong.” Another nurse reported that the experience was emotionally painful to watch a patient suffer from persistent pain, watch nursing staff suffer emotionally from watching a patient suffer, and dealing with personal feelings of not advocating more for the patient.

Nurses who took a stand for the patient had a different reaction. These nurses reflected on their experiences in a positive manner and felt relief, satisfaction, less stress, pride, and happiness. One nurse reported that it was easier and less draining for the staff when everyone was on the same page. Another summed up courage as the importance of nurses’ role in patient care, taking action, and honoring patients by taking the right action. Taking a moral stand requires ethical competence and a supportive ethical climate whereby nurses can carry out their principled obligations to the patient.

While no attempt was made to match the qualitative responses to the quantitative responses on the Professional Moral Courage Scale, these findings support that oncology nurses do strive to take moral action and practice moral courage. The multifaceted question posed specifically, “if you experienced a morally challenging situation, describe how you took a stand for your patient; what was the outcome of your stand? How did that make you feel?” identified morally challenging situations in which nurses took a stand by supporting patients’ decisions, empowering patients to ask questions to ensure their voices were heard, risk taking and fighting for their patients in the face of consequences, respecting patients’ autonomy, truth telling and conquering fear. The underlying catalyst for the moral distress was not following the patients’ wishes and inadequate pain control. One nurse working in a small oncology practice acknowledged distressing clinical situations but did not take a stand because of fear of

retribution. Nurses who demonstrated moral courage also experienced satisfaction, relief, and personal growth. Further exploration of the consequences of taking morally courageous stands is needed.

CHAPTER FIVE: DISCUSSION

Discussion of Findings

Being a full partner in healthcare requires that nurses recognize moral distress and act courageously and professionally in addressing morally distressing clinical situations (Institute of Medicine, 2011; Pavlish, Brown-Saltzman, Jakel, & Fine, 2014; Pendry, 2007). Studies on moral distress have shown light on nurses' suffering, yet how these nurses take a stand or practice moral courage during times of distress was not clear. Moral distress can arise when nurses' core values to support, advocate for and protect the health, safety, and rights of the patient are threatened (American Nurses Association, 2015; Cohen & Erickson, 2006). This study examined the factors that influenced moral distress and the relationships between moral distress, moral courage, and moral distress residue among oncology nurses working in adult inpatient and outpatient settings. It also described actions of moral courage as reported by oncology nurses. Although the model tested was not a good predictor of moral distress or moral courage, it underscores the presence of moral distress and moral distress residue among oncology nurses and the importance of finding ways to lessen moral distress and strengthen moral courage. Findings from the qualitative data provide insight about how nurses act courageously in the face of morally distressing clinical situations to ensure patients' voices are heard.

Moral Distress

This study highlighted that oncology nurses encounter moral distress when patients do not receive honest and ample information about their cancer diagnosis that influence patients'

right to make choices about treatment options. The three top ranked morally distressing responses on the MDS-R provided by oncology nurses capture their sentiments and include 1) witnessing healthcare providers giving false hope to a patient or family, 2) witnessing diminished patient care quality due to poor team communication, and 3) following the family wishes to continue life support even though it was not in the best interest of the patient.

The independent-samples *t* test comparing the Moral Distress mean scores of oncology nurses in inpatient and outpatient settings found a significant difference between the means of the two groups. Oncology nurses working in inpatient settings had higher levels of moral distress than their counterparts in outpatient settings. Although, the difference in moral distress levels between work settings was statistically significant when entered into the regression model, it was a weak predictor of moral distress. This finding may suggest that the MDS-R instrument did not encompass all of the sources of moral distress encountered by oncology nurses as evidenced by the specific examples reported by the nurses in the study. Another possible explanation is that outpatient oncology nurses may have alleviated moral distress by changing from an inpatient setting to a less stressful setting. Nurses in an inpatient setting tend to encounter patients with higher comorbid conditions and poorer outcomes than those achieved in an outpatient setting (Lubell, 2012). Poorer outcomes in hospitalized patients were associated with insufficient resources, including inadequately trained personnel (Robinson & Beyer, 2010). Even though most chemotherapy is administered in the outpatient setting, patients who experience severe side effects often end up in the emergency room or admitted to the hospital. For example, many patients experience prolonged hospitalizations and recurrent admissions associated with treatment side effects (Fitch & Pyenson, 2010). Still the work setting accounted

for a minuscule portion of the variance suggesting that other factors and personality of the nurse need to be considered.

Though previous studies found significant differences in levels of moral distress between professions and work units in which nurses and other direct care providers (physicians, case managers, social workers, respiratory therapists) had the highest level of moral distress, work unit was not a predictor of moral distress (Allen et al., 2013; Whitehead et al., 2015). Allen et al (2013) reported differences in moral distress across disciplines associated with responsibilities of each discipline and work dynamics. Similar patterns across disciplines were also reported by Whitehead et al. (2015) suggesting that levels of moral distress were related to the ethical culture and work environment. Additional studies found high levels of moral distress for nurses associated with following the family's wishes to continue life support even though it was not in the patient's best interest (Allen et al., 2013; Winland-Brown, Chiarenza, & Dobrin, 2010). Winland-Brown et al. (2010) reported a significant finding for following the physician's order not to tell the patient the truth when he/she asked for it. Researchers examining truth telling and how physicians inform patients with serious illness of their diagnoses and how much information patients want, found that the vast majority of patients responded that they had a right to know their condition and to be informed by the provider of a life threatening illness and prognosis (Punjani, 2013; Sullivan, Menapace, & White, 2001). Nurses also believed that patients had a right to be told the truth about their illness by the physician (Sullivan, Menapace, & White, 2001). Not abiding by patients' wishes can perpetuate a culture of false hope, power inequality and moral distress rather than promote team collaboration and honest communication around the patients' goals and preferences (ANA, 2015; Pavlish, Brown-Saltzman, Fine, & Jakel, 2015).

No statistically significant differences were found between nurses' characteristics (age, education level, certification, ELNEC training) and moral distress in this study. Though nurses with a bachelor's degree had higher Moral Distress scores compared with other levels of education, neither education, RN experience, nor oncology certification were found to be predictors of moral distress in this study. Other researchers found significant relationships between end-of-life education and moral distress (Whitehead et al., 2015), and level of education and moral distress (Sirilla, 2013) but none were predictors of moral distress. Sirilla (2013) reported a negative but significant relationship between moral distress and education level and work units, concluding that the addition of separate ethics courses at higher education levels yielded greater confidence in decision-making for these nurses.

In this current study, while oncology nurses who took a separate ethics course had an overall higher mean moral distress score than nurses who did not, the ANOVA test results in Table 23 indicated that such a difference was not significant. The post hoc $\eta^2 = .03$ was small indicating that a larger sample size or a minimum of 53 participants per group was needed to achieve statistical significance. With the convenience of online nursing programs, it is speculated that nurses who take separate ethics courses as a requirement of a bachelor or graduate degree likely learn within an interdisciplinary environment where sharing of work-related experiences can provide an opportunity for reflection, feedback, and problem solving. Another study examining relationships between ethics education, moral action, and confidence found a significant relationship between the variables, suggesting that ethics education positively influenced nurses' confidence in ethical decisions and moral action (Grady, Danis, Soeken, O'Donnell, et al. 2008).

With ethics education, nurses are aware of their role and responsibility and become more distressed when those values do not align with the moral action (Winland-Brown et al., 2010). A similar relationship between moral distress and having taken a prior ethics course was also found by Winland-Brown et al. (2010); respondents had a significantly higher amount of moral distress compared with those who had not taken any ethics' courses. Winland-Brown et al (2010) concluded that nurses were likely able to react with the skill set and knowledge when dealing with morally distressing situations rather than becoming frustrated or quitting their jobs. Those who take ethics courses are alerted to situations that are unethical and learn conflict resolution and how to work through an ethical dilemma or to request an ethics consult. The type of ethics' education and how the content is assimilated into the work setting raise additional questions. For example abstract concepts and practical applications must be integrated in the practicum and clinical rotation so that nursing students and nurses advancing their education have an opportunity to discuss ethical situations in the work setting and develop conflict resolution.

In the current study oncology nurses identified several situations in the work setting that were morally distressing by writing in a total of 60 items at the end of the MDS-R scale (see Table 46). Seven items potentially represent and address new categories of moral distress in the oncology setting. These items include: lack of care due to low health literacy; not providing best care to a dying patient when no family present; patient and family lacking spiritual sensitivity; failure to consult palliative care or hospice; not enough time to spend with patients due to computer charting; and inadequate equipment or supplies to ensure safe patient care.

Additionally, nurses who provided qualitative responses and recounted morally distressing situations confirmed previous findings in the literature. Oncology nurses' qualitative experiences enriched the quantitative findings. For example, nurses reported a majority of

situations in which the patient was pressured by the family or physician to continue chemotherapy treatment even though the patient had voiced a desire to stop treatment. Some patients' wishes and preferences to stop or forgo chemotherapy treatment were not honored by the family or physician. An oncology nurse said, "An elderly woman diagnosed with breast cancer felt pressured by the physician to have treatment she did not want." Oncology nurses also described several situations involving patients that did not want life support at end-of-life but, the patient's wishes or health care surrogate was ignored, prolonging medically inappropriate treatments, inadequate pain control, poor provider communication and collaboration, delays in discussing prognosis and Do Not Resuscitate orders (DNR), giving false hope, patient safety and confidentiality concerns, and improper consent. Other studies have reported similar perspectives whereby the family member minimized patients' concerns and parents directed all the care decisions and either threatened to discontinue insurance or forced the older child to sign over decision making rights (Pavlish, Brown-Saltzman, Jakel, & Fine, 2014).

In this current study, the ethical challenge was the catalyst that activated the moral action. Although ethical challenges can provide opportunities to have dynamic and positive conversations around patient goals, the presence of moral distress indicates insufficient conflict resolution (Epstein & Delgado, 2010). Nurses have a moral obligation to be familiar with and understand the moral and legal rights of patients (ANA, 2015) and to uphold the nursing code of ethics

Moral Courage

This current study provided a primary focus on moral courage in oncology nurses. Both the quantitative and qualitative findings as experienced by nurses in oncology settings expand the science of moral courage and suggest areas to revisit on Sekerka's et al. (2009) Professional Moral Courage Scale [PMCS]. The results show a weak positive significant correlation between total years working in oncology and PMCS. Total years' working in oncology predicted a small amount of the Professional Moral Courage score. Nurses with more years of oncology work experience tend to act with professional moral courage. One logical inference is that as nurses become more experienced and comfortable with administration of chemo drugs and side effects they can anticipate what orders are needed and communicate with the physician efficiently. Although oncology nurses working in inpatient setting had higher moral distress scores, there were no significant differences in PMCS scores related to work settings, which may suggest that nurses are aware of their moral obligations regardless of work setting but cannot always take the correct moral action. Inpatient nurses were slightly younger in age ($M = 49.6, SD = 10.82, R = 25-68$) compared to those in the outpatient setting ($M = 52.7, SD = 9.92, R = 29-79$) which may suggest that the more mature nurses prefer a shorter work day or over a period of time were less concerned about the ramification and risk of standing up with courage. It is also conceivable that inpatient oncology units have a greater turnover of patients and readmissions rates whereby greater numbers of morally distressing situations are likely to take place. Regardless, these are complex issues. No doubt other factors or variables such as leadership support and training in moral courage may explain and predict professional moral courage. How these skills are cultivated in the work setting needs further investigation.

Raising questions about the direction of care requires courage. Nurses are frequently in a “catch 22” or difficult situation where they witness the emotions of the patient and family for which there is no easy solution. Yet, observing patients suffer because of poorly controlled pain became the catalyst for moral action by oncology nurses in this current study. These nurses accepted their moral obligation to advocate for the patient, both educating the family and persuading the physician that the patient’s voice needed to be heard. In this scenario, the nurse was assertive and told the physician she would continue to call until the patient’s pain was relieved. As nurses develop a more active voice in collaboration with physicians, assertiveness training among nurses might decrease moral distress and enhance moral courage.

Palliative chemotherapy treatment is unable to cure cancer but intended to decrease symptoms, tumor burden, control pain, and prolong life (Houlihan, 2015). Previous studies reported that inadequate pain control for the patient was associated with emotional suffering for nurses who were angered and frustrated (Bernhofer & Sorrell, 2015; Pavlish et al., 2014) by the physician’s refusal to increase the pain medication. When patients continue to suffer despite nurses’ best efforts to get the right medication and appropriate dose to alleviate pain, studies reported that nurses may feel powerless or experience a threat to their own moral integrity (Epstein & Delgado, 2010). Nurse barriers have also been associated with difficulty communicating with or obtaining orders from the provider (Bernhofer & Sorrell, 2014). Nevertheless, patients have a moral and legal right to have their pain managed and to determine what will be done including a choice of no treatment and to be given support through the decision making process (ANA, 2015). Such considerations must respect the patient’s decisions and does not require the nurse to agree with or support all choices made by the patient (ANA, 2015).

Even so, findings in this study reveal that oncology nurses who displayed moral courage and took a stand also expressed feelings of relief, satisfaction, pride, less stress and personal growth. A fundamental principle demonstrated by oncology nurses in the study was that they valued patients' rights to decide what kind of care they receive and they strived to adhere to the patients' preferences. A significant finding, total years in nursing experience was a weak positive correlation with Endures Threats (subscale) on the PMCS. This finding may suggest or support the idea that nurses with more years of nursing experience may take on the responsibility for breaking the bad news. The oncology nurses who responded to the qualitative question in this study provided insight about their moral courage. These nurses displayed moral virtue and had an active role by means of supporting the patient, risk taking, advocacy, enlarging the circle for decision-making, putting aside personal beliefs, respecting patient autonomy, empowering the patient, fighting for the patient in face of consequences in a complex system, sharing information, getting to the meaning, handling tricky situations, protecting the patient and truth-telling (see Table 47). This study also revealed that nurses sometimes express justifiable anger at physicians who failed to communicate the severity of illness or tell the family the truth. One nurse was honest and candid and suggested some questions for the patient and family to ask the physician. Truth-telling was done in a sensitive and compassionate manner while supporting the patient and family. If the nurse judges that the patient should have information that is the physician's primary responsibility to communicate, and the physician fails to disclose the information, the nurse has a moral responsibility either to communicate that information or see that the information is communicated to the patient (Jameton, 1984, p. 175). In addition to assessing the ethical principle at stake, the nurse frequently draws on inner strength and prayer or the use of spirituality for moral courage, conquering fear before taking a stand. Doing the right

thing for the patient was balanced by the nurses' obligation and awareness of the moral and ethical rights of the individual (ANA, 2015).

Participants in this study demonstrated moral courage in dealing with members of the healthcare team and the patient's family to give voice to the patient's perspective. Nurses practice with moral courage when they confront situations that pose a direct threat to patient care (LaSala, & Bjarnson, 2010). Oncology nurses used risk-taking tactics to take a stand. Such action was taken by the nurse who confronted the physician responsible for providing unwanted ongoing care at end of life. Being willing to act and taking responsibility is risky. One nurse revealed that the physician was upset, but it was rewarding to stand up for the patient and to see that the needs were met, supporting the patient's end of life decisions and stopping the treatment. Wiegand and Funk (2012) did not measure moral courage, but observed a similar phenomenon when some nurses tried to intervene to ensure that patients' preferences were followed however, their voices were not heard. Though a few nurses were successful in their intervention and influenced the patient outcome, a majority said they would not intervene in the future (Wiegand & Funk, 2012). Still, moral distress can be the catalyst for positive change and help nurses achieve moral courage.

There was a weak negative but not significant relationship between the Moral Distress and Professional Moral Courage scores, indicating that higher Moral Courage scores were not related to lower Moral Distress scores. Fundamental to the moral distress argument is the perceived inability to act on one's moral obligations and values (Whitehead et al., 2015). However, an important finding in this study was that nurses were able to take the moral action and set aside their own differences. Sekerka et al (2009) suggested that moral agents or individuals who adhere to moral values are aware that their position, identity, and character may

be at risk. However, moral agents manage their emotions and balance their desire to proceed with the action against other competing threats (Sekerka et al., 2009). Moral courage was also manifested in examples of patient advocacy in the face of fear and retribution (Lachman, 2007a).

In this study, a nurse in the outpatient setting refused to give the chemotherapy after reading the package insert because the risk for reaction was high in that patient but was not supported by the manager. In a different case, the nurse called the legal department to support the written and verbal wishes for care that was communicated by the patient and healthcare surrogate. However, the case escalated to a real danger, “the physician was upset and used physical force to communicate disapproval with the nurse.” Outcomes of courage also include acting in the patient’s best interest by alleviating pain or suffering, communicating with patients and family openly, and collaborating with physicians effectively (Hawkins & Morse, 2014).

Regardless of the actual or perceived threat, nurses who stand up and act accordingly when their moral principles are threatened demonstrate moral courage (Lachman, Murray, Iseminger, & Ganske, 2012). Handling a delicate situation was described by the nurse who informed the attending physician of the patient's expressed wishes but the physician persisted in starting treatment. “I initiated a consult to the Ethics Committee as I was acting as my patient's advocate. I knew it was my role as a nurse to take the actions that I did. For that, I am grateful that I was able to be this patient’s advocate.”

Despite experiencing levels of moral distress, the nurse demonstrated support and respect for the patient’s decision-making and autonomy. Patient autonomy was exemplified by one nurse who said, “it did not seem like much, but it was all I could do, explaining each physician’s role in her treatment and reassuring her that I had heard everything the doctors had said and could help her explain to family members due to arrive that evening, encouraging her to write

down questions as she thought of them so that she could be ready for the doctors when they came in the next morning.” In this example, the nurse took an active role to ensure that the patient was well-informed to decide on a plan of care from a realistic set of options that aligned with the patient’s goals and preferences (Sherner, 2016). Only one nurse reported that she was not able to take a moral stand due to the ethical climate in her office and fear of ramification. Previous studies found a negative correlation between moral distress and ethical climate. The ethical climate is defined as the organizational culture and processes that support open discussion and resolution of ethical decisions (Hamric & Blackhall, 2007). The more ethically supportive the work environment the lower the moral distress, suggesting that the quality of the ethical climate, conflict resolution and support for staff are influenced by other factors that do not necessarily explain the differences in moral distress (Hamric, Borchers, & Epstein, 2012; Whitehead et al., 2015).

The uncertainty in prognostication often makes it difficult for physicians to discuss end of life options and to stop treatment (Barclay & Maher, 2010). This view supports the current assumption that dynamics beyond nurses’ control were associated with the most moral distress. However, qualitative responses provided by several nurses in this study were reflective and they did not perceive themselves as passive bystanders. A few respondents reported that the morally distressing experience gave them an opportunity to re-evaluate their own values and beliefs. Nurses practicing with moral courage know that addressing these issues is leadership in action (LaSala, & Bjarnason, 2010) and these qualities must be cultivated to show effectiveness. This data will lead to instrument development that will better measure the issues for oncology nurses.

Moral Distress Residue

In this study, moral distress residue manifested as guilt, anger, fear, emotional pain, and frustration. For example, one nurse said it was difficult not to internalize anger and frustration toward the “decision-makers.” A different nurse shared, “for me it was emotionally painful to watch a patient suffer from persistent pain, watch nursing staff suffer emotionally from watching a patient suffer and dealing with my own feelings of not advocating more for the patient.” These remarks may support the idea that cumulative effects of unresolved moral distress result in moral distress residue (Webster & Baylis, 2000) which can negatively impact emotional responses and nurses’ practice. These findings were similar and support previous studies that moral distress has negative consequences such as anger, suffering, sadness, grief, guilt, and stress (Gutierrez, 2005; Wiegand & Funk, 2012).

The quantitative results demonstrate that oncology nurses experienced moral distress residue. Nurses who left a previous job (26%) and those who considered leaving (28%) reported statistically significantly higher mean Moral Distress levels than those who had not considered leaving. The intent to leave a current job has important implications for nursing leadership. In this study, oncology nurses (17%) who are currently considering leaving their jobs due to the way patient care is handled at their institutions have the highest Moral Distress mean scores and the lowest Professional Moral Courage scores. Having left or considered leaving a past job was an indirect or proxy indicator of moral residue, but intent to leave a current position was more about current levels of moral distress (A. B. Hamric, personal communication, November 9, 2014). These findings were similar to and support those of previous studies (Allen et al., 2013; Cavaliere, Daly, Dowling, & Montgomery 2010; Corley, Elswick, Gorman, & Clor, 2001; Lazzarin, Biondi, & DiMauro, 2012; Maningo-Salinas, 2010; Sirilla, 2014). As such, when

nurses experience unresolved moral distress, healthcare systems are impacted by the negative consequences, because nurses leave the profession or seek less stressful jobs (Ritenmeyer & Huffnan, 2009). Regardless, attention must be given to job-related conditions in which moral distress occurs with a focus on interventions that support moral courage and lessen moral distress.

Moral Agent Conceptual Framework

The conceptual framework tested in this study confirmed that morally challenging situations (patients' wishes not being heard, medically inappropriate or futile treatments, inadequate pain control, poor provider collaboration and communication, disregard or delays in discussing prognosis and DNR, false hope, time constraints, confidentiality, and inappropriate informed consent) preceded experiences of moral distress and moral courage. The most challenging situation experienced by these nurses was associated with the patients' wishes not being heard by the family and providers. In general, work setting was a weak predictor of moral distress and total years working in oncology was a weak predictor of moral courage. Nurse characteristics as predictors of moral distress and moral courage (such as education level, professional certification, End of Life Nursing Education) were not supported in the model and had no influence on Moral Distress and Professional Moral Courage scores, which suggests that other variables contribute to this phenomenon.

Nurses with the highest levels of moral distress were more likely to experience moral distress residue with unresolved or repeated encounters of moral distress and leave a current job. It is not known whether an activity directed at building moral courage skills will improve moral courage or impact moral distress residue. A pre-test, post-test design using the Professional

Moral Courage Scale could measure the impact of a moral courage training activity on moral courage over time. The qualitative responses from this study can to refine the conceptual model and Professional Moral Courage Scale to use in future studies to evaluate moral courage in oncology nurses. The qualitative question in this study did not address barriers to moral courage which should be identified and included in the model.

Policy Implications

Oncology nurses are important members of the interdisciplinary team. Open communication and collaboration between physicians and other members of the team, including patients and their family members are fundamental to quality care and patient safety. Emphasis on high quality care and delivery models that are patient-centered and adheres to the patient's preferences must be grounded in moral courage and professionalism that recognizes and supports high standards of practice (Fasoli, 2010). Nurses and healthcare administrators must align professional practice models with changes in system level processes that support and encourage a collaborative decision-making environment, rather than a paternalistic process that favors one-sided decision-making and ignores concerns (Pavlish et al., 2015).

Given rising healthcare costs and evidence about the financial burdens experienced by cancer patients (Donley & Danis, 2011), it is reasonable to balance healthcare costs with thoughtful considerations that respect patients' choices. Offering patients the choice of less expensive palliative care rather than unwanted treatments may also help to reduce morally incongruent care. Discussing personal care preferences with cancer patients will ensure that these patients receive the type of care they desire (Mack, Weeks, Wright, Block, & Prigerson, 2010).

Furthermore, nurses are ready to leave their job when situations contributing to moral distress do not get resolved and they cannot act on their professional judgement. The link between moral distress and leaving a job supports the need to minimize moral distress to improve nurse retention (Whitehead et al 2015).

Oncology nurses who do exhibit moral courage also need support from nursing leadership. Nurse educators and nurse leaders must begin to cultivate moral courage and educate nurses and future nurses the competencies to recognize and effectively deal with moral distress in the work setting without negative ramifications. Moral distress does not have to be an occupational hazard of healthcare. Healthcare leaders must create an interdisciplinary bioethics competency-based curriculum for nurses, physicians, and other healthcare professionals to assure a stable work force and safe ethical environment that supports open dialog, moral courage, and problem resolution.

Nursing Implications and Research Recommendations

Few nurses in this study activated a consult to the ethics committee. Nurses' stories concerning their experiences with ethics consultations or committees may suggest that the process was unfamiliar to them and some nurses had a negative experience (Pelton, Bohnenkamp, Reed, & Rishel, 2015). Nurses who have taken ethics content in their nursing programs correctly identify morally troubling situations but may feel unsupported in their work settings, which adds to the moral distress. Validate that nurses are familiar with the ANA Nurses Code of Ethics (ANA, 2015). Establish that nurses know and understand the process for obtaining an ethics referral to ensure timely referrals. Ensure that the Ethics Group is represented by staff nurses and visible on oncology units where these situations are likely to

occur. Create a proactive process to identify and discuss difficult cases on the unit to normalize the experience and show support for both nurses and providers.

Train physician-nurse champions in conflict resolution in both the inpatient and outpatient settings to address ethical concerns toward improving the ethical climate. This dyad could launch a weekly or monthly journal club using current articles from the oncology and bioethics literature to stimulate open discussion, integrate evidence based practice and promote positive change. Create a support group or one-on-one mentoring program where more experienced nurses in the outpatient setting can provide newer nurses a safe environment to learn leadership and moral courage skills to ensure that patients' preferences and voices are heard. Identifying barriers to moral courage and testing the predictive ability is needed so that strategies and interventions can test moral courage outcomes. The model could be used in other care settings as a framework to test different interventions and relationships. For example, the box representing nurse characteristics in the framework could be replaced with an educational intervention using control and experimental groups to test the intervention and relationship or influence on moral distress and moral courage. The model and recommendations discussed in these finding should be tested in future studies.

Nurse leaders, quality and safety councils, risk managers, and administrators must acknowledge that moral distress is present in the work setting and be proactive by including training and skilled conversations regarding end of life care, code status and advance care planning into the nurses' orientation to the unit and annual competencies. Nurses must also be aware of their actions and preserve, protect, and support rights of the patients even if they disagree (ANA, 2015). Further efforts are needed to educate the public about appropriate care to

safeguard the patient from harmful or undesired treatments that may not be medically appropriate in advance stages of illness and increase suffering at end of life.

Studies are needed to test different approaches that mitigate moral distress and bolster moral courage. Certain situations contributing to moral distress, such as lack of time to discuss patient goals, violation of patient confidentiality, and inappropriate informed consent are problematic and require immediate attention and resolution. Being honest without taking away hope (Pavlish, Brown-Saltzman, Jakel & Fine, 2014) requires skill. Regardless, nurses should expect to have goals of care conversations with patients about their values and preferences, which then need to be conveyed to and respected by members of the healthcare team. To start, develop quarterly ethics case reviews and presentations derived from practice that focus on recognizing, analyzing, and taking action. The case reviews and presentations must include practical and interactive bioethics, utilizing role playing and problem-solving strategies. Edmonson (2015) tested a pretest-posttest intervention to develop moral courage in 16 nurse leaders using the Balance Experiential Inquiry (BEI) framework and past experiences for reflective learning to gain an understanding of what promoted or curtailed participants' ability to respond to ethical issues. BEI incorporates an andragogic philosophy of adult learning, in which participants who experienced an ethical dilemma reflected on the experience, reasoned abstractly about the experience, and then acted and experimented with newly acquired behaviors (Edmonson, 2015; Sekerka, Godwin, & Charnigo, 2012).

Another strategy is monthly journal club activities using literature and evidence based approaches that can be incorporated into the unit or outpatient learning activities to encourage interdisciplinary team participation and collaboration between nurses and providers that nurture moral courage. Nurse leaders and nurse educators will need to develop expertise in the concepts

of moral literacy and best practices for teaching moral courage so that current and future nurses are able to contribute to their ethical climate in a confident and healthy manner (Edmonson, 2015).

Although healthcare organizations have begun to undertake changes in policies and practices to empower healthcare professionals with the goal of improving communication and collaboration (Browning, 2013), role-playing morally challenging clinical situations and moral courage in health care settings will provide greater opportunities to practice effective team communication and interdisciplinary education on these topics to enhance the learning experience for staff and students that build team collaboration and moral courage. Assertiveness training to improve nurse-physician communication (Curtis, Tzannes, & Rudge, 2011) and role playing interventions are likely to normalize levels of moral distress and could be tested using an experimental design. Work settings that focus on improving the ethical climate are likely to lessen the experience of moral distress and help to maintain a stable workforce and nurse retention. In addition, this study should be replicated and the moral courage scale should be tested in a different population of nurses. Further study or improved measurement is needed to uncover the relationships among such variables. Thus, future work should go beyond this. For example, there are likely personality traits that predispose individuals to experience distress (like neuroticism) and also to show moral courage (conscientiousness).

Limitations

Threats to validity affect the generalizability of the findings to other samples, settings and practice (Polit & Beck, 2012). This study has limitations to both internal and external validity. The convenience sample recruited for this study was drawn from the Oncology Nursing Society

national membership, representing two regions and was not a random sample. Although the online survey was electronically mailed to over 2,400 members, the response rate was 11%, which could suggest that the topic was divisive or not relevant to the recipient. Additionally, self-selection raises potential for bias. A higher number of nurses with more than an Associate's degree participated in the study and may suggest that nurses with professional affiliation in ONS tend to have advanced degrees which was higher than similar studies. Nevertheless, e-mail and online survey response rates varied from 8% to 11% (Hunter, 2012) and often fall far below 30% (Sheehan, 2008). A disadvantage of this recruitment method is that only members of the national organization are invited to participate, therefore, generalizability to other settings is a limitation.

Another limitation is that the MDS-R instrument has not been tested in the outpatient specialty clinical areas, such as outpatient oncology (Hamric et al., 2012) and may not have captured the essence of situations relevant to participants in that environment. However, context-specific situations of moral distress found in this study could be used to develop an appropriate measure for clinicians in the outpatient oncology setting. At the time of this study, no studies were found that included use of the PMCS in an oncology nursing sample. Although the instrument demonstrated good internal consistency with a Cronbach alpha of .89, the PMCS scores ranged from 4.47 to 7.0 points with a mean score of 6.10 which may suggest that the scale has a high social desirability bias. Respondents may have answered questions in a manner that was viewed favorably by others. The PMCS scores in the study are also very high which may indicate a ceiling effect which makes discrimination among subjects at the top end of the scale difficult. The study should be replicated in a different sample of oncology nurses. Additionally,

the self-reported moral courage in the qualitative portion was not matched to the same participant's moral distress, which could be evaluated in a future study.

Gender and diversity of the sample were also limitations, representing 3% males, 2% Asian, 4% Hispanic, and 13% African Americans. Because of the small group sizes, differences between the groups could not be determined. More males and higher participation among diverse ethnic groups are needed to be more in line with population diversity in future studies as their perspectives on moral distress and moral courage are missing in the literature. According to a 2014 survey by the Health Resources and Services Administration (HRSA), the nursing workforce for males represents 9%, reflecting a 12.5% increase since 2000 (American Nurses Association, 2014).

Another limitation was that the qualitative question did not elicit barriers to moral courage, which would have been important to assess. It was just by chance that one person answered in a way that addressed this. Additionally, Schilling's pragmatic method used in the qualitative data analysis does not as much encourage expansion of conceptual development it is more confirmatory.

Conclusion

The current study reveals that moral distress among nurses is present in the oncology setting. Nurses in inpatient settings had higher moral distress levels than in outpatient settings. However, nurses in outpatient settings identified situations that are pertinent to the outpatient setting such as insufficient informed consent and pressuring patients to start or continue therapies that warrant future investigation. Despite levels of moral distress, oncology nurses displayed moral courage by supporting the patient, risk taking, advocacy, enlarging the circle for decision

making, empowering the patient, fighting for the patient in the face of consequences in a complex system, sharing information and truth telling. Moral courage is a learned quality of moral character that influences individuals to do the right thing (American Nurses Association, 2015). Therefore, ongoing education in ethics derived from clinical practice provides a foundation for nurses to create, maintain, and contribute to morally acceptable environments that enable nurses to be morally courageous (ANA, 2015). Nonetheless, for moral courage to flourish, nurses must be supported by a moral environment that enables open communication, collaboration, respect, and transparency (American Association Nurses, 2015). Nurses are important contributors to their work environment, and transformation of the practice environment not only requires safe quality care, but must assure that the patients' voices are heard. Nurses should expect to participate in honest dialog with patients, families and members of the healthcare team in order to align with the patient's preferences, realistic treatment goals, and outcomes.

APPENDIX A: APPROVAL OF EXEMPT HUMAN RESEARCH



University of Central Florida Institutional Review Board
Office of Research & Commercialization
12201 Research Parkway, Suite 501
Orlando, Florida 32826-3246
Telephone: 407-823-2901 or 407-882-2276
www.research.ucf.edu/compliance/irb.html

Approval of Exempt Human Research

From: **UCF Institutional Review Board #1**
FWA0000351, IRB00001138

To: **Lolita W. Melhado**

Date: **February 23, 2015**

Dear Researcher:

On 02/23/2015, the IRB approved the following activity as human participant research that is exempt from regulation:

Type of Review: Exempt Determination
Project Title: Evaluating Moral Distress, Moral Residue, and Moral Courage in the Oncology Nurses
Investigator: Lolita W. Melhado
IRB Number: SBE-15-11055
Funding Agency:
Grant Title:
Research ID: N/A

This determination applies only to the activities described in the IRB submission and does not apply should any changes be made. If changes are made and there are questions about whether these changes affect the exempt status of the human research, please contact the IRB. When you have completed your research, please submit a Study Closure request in iRIS so that IRB records will be accurate.

In the conduct of this research, you are responsible to follow the requirements of the [Investigator Manual](#).

On behalf of Sophia Dziegielewski, Ph.D., L.C.S.W., UCF IRB Chair, this letter is signed by:

Signature applied by Joanne Muratori on 02/23/2015 10:13:22 AM EST

IRB Coordinator

APPENDIX B: ONCOLOGY NURSING SOCIETY APPROVAL



February 25, 2015

Hi Lolita,

Your list rental has been approved by the ONS Research team. When would you like to send this out? You say you'd like to send this to members in FL and GA- how many would you like to send? I'll also need a subject line for the email, and a survey link. Finally, I'll need payment. I can take a credit card or check.

Thanks! Kristina

Kristina Gantner
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**APPENDIX C: MORAL DISTRESS SCALE-R (MDS-R)
NURSE QUESTIONNAIRE (ADULT)**

Moral Distress Scale Revised – Adult

Moral distress occurs when professionals cannot carry out what they believe to be ethically appropriate actions because of internal or external constraints. The following situations occur in clinical practice. If you have experienced these situations they may or may not have been morally distressing to you. Please indicate how frequently you experience each item described and how disturbing the experience is for you. If you have never experienced a particular situation, select “0” (never) for frequency. Even if you have not experienced a situation, please indicate how disturbed you would be if it occurred in your practice. Note that you will respond to each item by checking the appropriate column for two dimensions: *Frequency* and *Level of Disturbance*.

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| | Frequency | | | | | Level of Disturbance | | | | |
|--|-----------|--|-----------------|--|--|----------------------|--|--------------|--|--|
| | Never | | Very frequently | | | None | | Great extent | | |
| | | | | | | | | | | |
| 1. Provide less than optimal care due to pressures from administrators or insurers to reduce costs. | | | | | | | | | | |
| 2. Witness healthcare providers giving “false hope” to a patient or family. | | | | | | | | | | |
| 3. Follow the family’s wishes to continue life support even though I believe it is not in the best interest of the patient. | | | | | | | | | | |
| 4. Initiate extensive life-saving actions when I think they only prolong death. | | | | | | | | | | |
| 5. Follow the family’s request not to discuss death with a dying patient who asks about dying. | | | | | | | | | | |
| 6. Carry out the physician’s orders for what I consider to be unnecessary tests and treatments. | | | | | | | | | | |
| 7. Continue to participate in care for a hopelessly ill person who is being sustained on a ventilator, when no one will make a decision to withdraw support. | | | | | | | | | | |
| 8. Avoid taking action when I learn that a physician or nurse colleague has made a medical error and does not report it. | | | | | | | | | | |
| 9. Assist a physician who, in my opinion, is providing incompetent care. | | | | | | | | | | |
| 10. Be required to care for patients I don’t feel qualified to care for. | | | | | | | | | | |
| 11. Witness medical students perform painful procedures on patients solely to increase their skill. | | | | | | | | | | |

| | Frequency | | | | | Level of Disturbance | | | | |
|--|-----------|-----------------|--|--|--|----------------------|--------------|--|--|--|
| | Never | Very frequently | | | | None | Great extent | | | |
| | | | | | | | | | | |
| 12. Provide care that does not relieve the patient's suffering because the physician fears that increasing the dose of pain medication will cause death. | | | | | | | | | | |
| 13. Follow the physician's request not to discuss the patient's prognosis with the patient or family. | | | | | | | | | | |
| 14. Increase the dose of sedatives/opiates for an unconscious patient that I believe could hasten the patient's death. | | | | | | | | | | |
| 15. Take no action about an observed ethical issue because the involved staff member or someone in a position of authority requested that I do nothing. | | | | | | | | | | |
| 16. Follow the family's wishes for the patient's care when I do not agree with them, but do so because of fears of a lawsuit. | | | | | | | | | | |
| 17. Work with nurses or other healthcare providers who are not as competent as the patient care requires. | | | | | | | | | | |
| 18. Witness diminished patient care quality due to poor team communication. | | | | | | | | | | |
| 19. Ignore situations in which patients have not been given adequate information to insure informed consent. | | | | | | | | | | |
| 20. Watch patient care suffer because of a lack of provider continuity. | | | | | | | | | | |
| 21. Work with levels of nurse or other care provider staffing that I consider unsafe. | | | | | | | | | | |
| If there are other situations in which you have felt moral distress, please write them and score them here: | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |

Have you ever left or considered quitting a clinical position because of your moral distress with the way patient care was handled at your institution?

No, I've never considered quitting or left a position _____

Yes, I considered quitting but did not leave _____

Yes, I left a position _____

Are you considering leaving your position now? Yes ___ No ___

APPENDIX D: PROFESSIONAL MORAL COURAGE SCALE (PMCS)

Sekerka et al. Professional Moral Courage Scale

Evaluate the statements as they pertain to you at work, on a scale from 1 (never true) to 7 (always true).

Never

Sometimes

Always

1

4

7

Theme 1

- _____ 1. I am the type of person who is unfailing when it comes to doing the right thing at work.
- _____ 2. When I do my job I regularly take additional measures to ensure my actions reduce harms to others.
- _____ 3. My work associates would describe me as someone who is always working to achieve ethical performance, making every effort to be honorable in all my actions.

Theme 2

- _____ 4. I am the type of person who uses a guiding set of principles from the organization as when I make ethical decisions on the job.
- _____ 5. No matter what, I consider how both my organization's values and my personal values apply to the situation before making decisions.
- _____ 6. When making decisions I often consider how my role in the organization, my boss (supervisor or leader), and my upbringing must be applied to any final action.

Theme 3

- _____ 7. When I encounter an ethical challenge I take it on with moral action, regardless of how it may pose a negative impact on how others see me.
- _____ 8. I hold my ground on moral matters, even if there are opposing social pressures.*
- _____ 9. I act morally even if it puts me in an uncomfortable position with my superiors.*

Theme 4

- _____ 10. My coworkers would say that when I do my job I do more than follow the regulations, I do everything I can to ensure actions are morally sound.
- _____ 11. When I go about my daily tasks I make sure to comply with the rules, but also look to understand their intent, to ensure that this is being accomplished as well.
- _____ 12. It is important that I go beyond the legal requirements but seek to accomplish tasks with ethical action as well.

Theme 5

- _____ 13. It is important for me to use prudential judgment in making decisions at work.
- _____ 14. I think about my motives when achieving the mission, to ensure they are based upon moral ends.
- _____ 15. I act morally because it is the right thing to do.*

APPENDIX E: NURSE DEMOGRAPHIC DATA AND QUESTIONNAIRE

Nurse Demographic and Characteristics

To help me interpret your responses, please provide the following information. As with your answers to the other portions of this survey, your responses will be kept confidential.

- 1) What is your age? _____ Years
- 2) Gender: _____
- 3) What is your racial or ethnic background? _____
- 4) What is your highest education level in nursing?
Diploma in nursing __
Associate degree in nursing __
Bachelor degree in nursing __
Master's degree in nursing __
Doctoral degree in nursing __
- 5) What is your current employment status?
Full-time (36+ hrs/week) _____
Part-time _____
Per Diem nurse _____
Agency nurse _____
Traveler nurse _____
Retired (more than 3 months) Yes _____ No _____
- 6) What is your current work setting?
Inpatient oncology unit _____
Outpatient oncology unit _____
Other _____
- 7) Total number of years working as a registered nurse. _____years
- 8) Total number of years working as an *oncology nurse*. _____years
- 9) Are you certified in oncology nursing?
Yes _____ No _____
- 10) Have you taken End of Life and Palliative Nursing Education (ELNEC) course?
Yes _____ No _____
- 11) Which of the following statements best describes your highest basic education in health care ethics?
Ethics content integrated throughout nursing program of study _____
Separate Ethics Course _____
No ethics content _____
- 12) Have you taken any continuing education courses in health care ethics?
Yes _____ No _____
- 13) Have you ever requested or participated in a consultation with the ethics committee to deal with a morally distressing clinical situation?
Yes _____ No _____
- 14) If you experienced a morally challenging situation describe how you took a stand for your patient; what was the outcome of your stand; how did that make you feel?

**APPENDIX F: ABBREVIATED E-MAIL ANNOUNCEMENT TO
PROSPECTIVE STUDY PARTICIPANTS**

Abbreviated Email Announcement

I am asking you to assist in an online survey, being conducted as part of a research project under the supervision of Dr. Norma Conner and Dr. Susan Chase at the University of Central Florida in fulfillment of my doctoral degree (PhD) requirements. You are being requested to contribute because you have been identified as an oncology nurse with adult patient oncology experience.

The purpose of the study is to obtain information regarding Oncology Nurses' perceived distress and identify what actions are taken by nurses in clinical situations when caring for patients with serious illness and terminal conditions. By participating, you will be helping to provide insight into this essential undertaking. The results will be presented at nursing conferences and submitted for publication in oncology journals.

The survey is anonymous; no names or personal identifying data is necessary, and we will not divulge information that will distinguish you as a participant. If you choose to participate, approximately 15 minutes of your time is required. Involvement is voluntary and responses are confidential. You should try to answer all the questions. However, you do not have to answer a question you are unsure about or that makes you feel uncomfortable. To complete the online survey please use this link <https://ucf.qualtrics.com/ControlPanel/?ClientAction=ChangePage&s=MySurveysSection&ss=&sss=> or copy and paste the URL into your internet browser. Completion of the survey will serve as consent.

Sincerely,

Lolita Melhado, MSN, ARNP, FNP-BC
University of Central Florida

APPENDIX G: EXPLANATION OF RESEARCH



EXPLANATION OF RESEARCH

Title of Project: Evaluating Moral Distress, Moral Residue, and Moral Courage in the Oncology Nurses

Principal Investigator: Lolita Melhado, MSN, ARNP, FNP-BC

Other Investigators: N/A

Faculty Supervisor: Susan K. Chase, EdD, RN, FNP-BC and Norma E. Conner, PhD, RN

You are being invited to take part in a research study because you have been identified as an oncology nurse with adult patient oncology experience. ONS did not contribute to the development of this survey or research study. Sharing of this request does not imply ONS's involvement or endorsement of the survey or research study. All research on human volunteers has been reviewed by an Institutional Review Board. Participation in this survey constitutes your informed consent. Whether you take part is up to you.

The purpose of this study is twofold: (1) the researcher will examine the relationship between moral distress, moral residue, and moral courage in oncology nurses working in the adult inpatient and outpatient settings, and (2) the researcher will identify which oncology nurse characteristics are predictors of moral distress and moral courage; and specifically what oncology nurse actions indicate moral courage.

Participants who choose to participate in this anonymous on-line survey will access the study link to the Qualtrics on-line Survey. The participant may access the on-line survey from his or her individual computer or smart phone and will be prompted to read and accept this consent. No names or identifying coding will link the subject to the survey. Completion of the on-line survey will serve as written consent.

The on-line survey consists of three parts. The first part of the survey consists of demographic data. You will complete 13 demographic items consisting of brief questions (i.e., age, gender, level of education, total years education, etc) and one open-ended question intended to ascertain what action were taken by the nurse to demonstrate moral courage. Next, you will read the instructions for the Moral Distress Scale-R (MDS-R) and respond to 21 items indicating the level of frequency and level of disturbance experienced in each clinical situation. The items are measured on

two dimensions as 0 – 4 (none to very frequent) and 0-4 (no disturbance to great disturbance). You may also write in two additional clinical situations if they choose and rate the level of frequency and disturbance. Additionally the scale contains two closed ended questions (yes or no responses) to evaluate moral residue. The final scale, Moral Courage Scale is a 15-item 7 point scale. Respondents are instructed to read the instructions and respond to each item ranging from 1 (never) to 7 (always).

The time needed to complete the Qualtrics on-line Survey is 15 minutes. Data is collected a single time. The time in the study ends when the survey is completed.

You must be 18 years of age or older to take part in this research study.

Study contact for questions about the study or to report a problem: If you have questions, concerns, or complaints: Lolita Melhado at 239-314-4126 or lolita.melhado@knights.ucf.edu. You may also contact my faculty supervisors: Dr. Susan chase (407-823-6274; susan.chase@ucf.edu) or Dr. Norma Conner (407-823-2630; norma.conner@ucf.edu).

IRB contact about your rights in the study or to report a complaint: Research at the University of Central Florida involving human participants is carried out under the oversight of the Institutional Review Board (UCF IRB). This research has been reviewed and approved by the IRB. For information about the rights of people who take part in research, please contact: Institutional Review Board, University of Central Florida, Office of Research & Commercialization, 12201 Research Parkway, Suite 501, Orlando, FL 32826-3246 or by telephone at (407) 823-2901.

APPENDIX H: PERMISSION TO USE HAMRIC'S MORAL DISTRESS SCALE-R

From: Ann B Hamric [mailto:abhamric@vcu.edu]
Sent: Tuesday, February 26, 2013 11:03 PM
To: Melhado, Lolita
Cc: Alison Crehore
Subject: Re: Permission to use MDS-R

Dear Ms. Melhado,

Thank you for your interest in the Moral Distress Scale – Revised (MDS-R). There are six versions of this scale: nurse, physician and other healthcare professional versions for adult settings (including ICUs and other inpatient units), and parallel versions for healthcare providers in pediatric settings.

I am happy to grant permission to use any of the MDS-R scales, but require agreement to the following condition: **Individuals wishing to use the MDS-R must agree to share their data with Drs. Hamric and Corley in an SPSS file in order to further the psychometric testing of the instrument.**

If you agree to adhere to this condition for use, I am happy to give you permission to use the scales. I have attached the adult nurse version. Let me know if you are interested in the nurse pediatric version as well. If you decide to change items for particular specialty purposes, Dr. Corley and I request that you keep us informed of the changes you make and the results you obtain.

Best wishes for success with your research!

Ann Hamric

Ann B. Hamric, PhD, RN, FAAN
Associate Dean of Academic Programs
Professor, School of Nursing
Virginia Commonwealth University
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APPENDIX I: TABLE 47
CODING CATEGORY FINAL CATEGORIES AND PROCESS OF ANALYSIS

Table 47

Coding Category Final Categories and Process of Analysis

| Content category | Themes | Taking a Stand/Moral Courage Example |
|---|-------------|---|
| Moral agency – a predisposition toward moral behavior and possessing a persistence of will to engage as a moral agent (Sekerka, Bagozzi, & Charnigo 2009) | Supporting | <ul style="list-style-type: none"> • Importance of advocating; supporting patient autonomy. Supporting the patient was the right thing to do. The patient was my first concern. • Ensuring she received the very best care possible; to help the other staff appreciate that this was her will and her right. • Supporting patient's decision. • Advocating and supporting patient autonomy. • It did not seem like much, but it was all I could do. Explaining each physician's role in her treatment and reassuring her that I had heard everything the doctors had said and could help her explain to family members due to arrive that evening. Encouraging her to write down questions as she thought of them so she could be ready for the doctors when they came in the next morning. • Although this was a very tragic situation and very stressful for the staff caring for the mother (unresponsive) as the clinical specialist it was my job to ensure she received the very best care possible and help the other staff appreciate that this was her will and her right. • Allowing the patient to express his feelings and make a decision by himself. Respecting the decision. |
| | Risk-taking | <ul style="list-style-type: none"> • Confronting physician responsible for providing unwanted continuing care at end of life; I was influenced by my role as patient advocate and my refusal to participate in unethical treatment • Confronting a physician for not making a patient a no code • Reporting the concern to IRB. • Supporting patient's end of life decisions, stopping treatment although family was completely against this decision |
| | Advocacy | <ul style="list-style-type: none"> • Fighting for my patient's best. Informing family of current status, level of discomfort, providing excellent care and comfort to the patients. • Allowing the patient to participate in decisions; listening to their voice; working my best to communicate to the physician(s) current status; assessment. Doing everything possible for my patients in caring and respectful manner. • Explaining to the patient that she has a right to dictate her care, if she didn't want this |

| Content category | Themes | Taking a Stand/Moral Courage Example |
|---|--|---|
| Multiple values – the ability to draw on multiple value sets in moral decision making and to effectively sort out and determine what needs to be exercised, and to hold firm to beliefs despite external concerns or demands (Sekerka et al., 2009) | Enlarging the Circle for Decision Making | <p>type of treatment, she didn't have to take it. The patient didn't want it; walked her back to the physician side so she can talk to him. I believe patients have a right to decide what kind of care they receive. That is what made me take action with this patient, or any patient.</p> <ul style="list-style-type: none"> • Advocating for my patient is my number one priority. • Supporting the patient decision. I contacted the patient’s medical doctor who agreed to take over the patient’s end of life care. • We ended up consulting a physician who was of the patient's nationality to speak with family, then with patient, and the patient gave informed consent/ received the treatment that he needed with full understanding • Requesting an ethics consult and we were able to get an oncologist on board who ordered appropriate pain medication for the patient • Recommending that the family get a 2nd opinion from another Med Oncologist. They agreed----they simply needed affirmation that what they suspected was true. • Spending my own time researching where he had been who he had been with and over a period of days was able to identify significant others for him. They were able to come see him and contact his children before he was taken off life support. I chose to give it my best effort so he wasn't alone and then lost. • Recommending ethics committee involvement and tried to persuade family that patient's pain was real and required analgesics that would be given cautiously. Educated family on addiction and on negative impact of uncontrolled pain on patients. • Informing the Attending MD of patient's expressed wishes. MD insisted on starting treatment. I initiated a consult to Ethics Committee as I was acting as my patient's advocate. I knew it was my role as a nurse to take the actions that I did. For that, I am grateful that I was able to be this man's advocate • Meeting with the physician; supporting the patient’s choice to decline treatment. Stopping the chemotherapy authorization until this was resolved • Having a care conference with social worker, case manager, medical doctor, sisters, husband and the patient. Supporting the patient by sharing her story, her dreams of spending time with her girls/husband at home and not in a hospital • Corraling the various medical staff and nursing staff caring for him, plus social service and requested an Ethics Committee meeting. The recommendation was to keep him in the US in a facility that could safely care for him and attempt to get a visa for his mother or a sibling. • Putting my personal beliefs aside and encouraging the family to communicate. |
| | Beyond Personal Values | |

| Content category | Themes | Taking a Stand/Moral Courage Example |
|--|---|--|
| | | <ul style="list-style-type: none"> • Respecting the patients' decision even if I don't agree. • Spending time with patient, educating her on disease type and all possible treatment options and possible side effects. Felt she was making an educated decision and although I personally did not agree with her, I felt it was her right to make this decision |
| | Patient Autonomy | <ul style="list-style-type: none"> • Wanting the patient's wishes to be met not family's wishes • Encouraging her to talk to her family and her doctor about what she wanted, and reminded her it was her choice as to how much she wanted to undertake. I talked with her about it first because she brought it up, she seemed frail and tired and scared, and I sensed she might not have made her own feelings clear to her family. She ended up going through treatment |
| | Patient Empowerment | <ul style="list-style-type: none"> • Agreeing and participating in a family conference with the patient, explaining there were no treatments available that could provide cure for this disease in the setting of failing a bone marrow transplant. I believed I empowered the patient to make the decision he desired. • Asking "which of you want to see your loved one die in pain and suffering" This after days of explaining the dying process. I told them that death was imminent and it was not a matter of the choice for stratification or full code, it was a choice of how she should die, with or without pain. After days of cajoling, I could no longer feel for the family because it was my responsibility to advocate for the pt |
| Endures threat – facing an ethical and moral difficulty, both perceived and real danger or threat, with endurance (Sekerka et al., 2009) | Fighting for my Patient in Face of Consequences in a Complex System | <ul style="list-style-type: none"> • Refusing to give therapy and not getting the patient's consent. I went to the physician and his nurse and stated the patient needed to come back to an exam room to discuss treatment side effects prior to infusion. The physician was trying to push to continue d/t time constraints and I pushed back and said it wasn't appropriate. • Speaking with a more senior physician on staff and he arranged for the infant to spend a few hours with the young mother on the unit. • Calling the Doctor and told him she refused and he said I was crazy, she did not even know what was going on. I did not insert the tube and got the head of Ethics to come and he agreed that patient was refusing the feeding tube. • Approaching a physician who continued to aggressively treat a terminally ill patient. Encouraged palliative care and dialogue with family. Dr. was not happy. My experience and strong patient advocate philosophy helped. • Calling the physician and refusing to give drugs. Physician called administration. I was supported by my nurse manager in the a.m. |

| Content category | Themes | Taking a Stand/Moral Courage Example |
|--|--|--|
| <p>Goes beyond compliance – one who not only considers the rules, but reflects on their purpose, goes beyond compliance-based measures to consider what is right, just, and appropriate (Sekerka et al., 2009)</p> | <p>Conquering Fear</p> | <ul style="list-style-type: none"> • Initiating an Ethics panel meeting and the decision to proceed with disconnecting the ventilator was made. The physician volunteered to come in and turn off the machine himself in view of the stance by the staff (they said they would quit the job rather than follow the order). • Calling Legal counsel as this was an emergent situation. I wanted to support the written and verbal desires for care communicated by both the patient (when able) and the wife as the durable power of attorney. Legal consult done with physician. Patient was not placed on ventilator. However, the physician came by my office and physically knocked office door off hinges wanting to know where I was. I was not present. Security was called by my office mate. Physician was escorted out of hospital. • Contacting legal department to come to discuss situation with patient's durable power of attorney. Dr. was instructed to abide by the wishes of patient/patient's durable power of attorney • Taking a deep breath, praying and answering according to patients conditions and needs |
| | <p>Sharing Information: Getting to meaning</p> | <ul style="list-style-type: none"> • Collaborating with our SW, the other nurse, the NP in our palliative care division, and the physician. I'm usually quick on my feet, but this was delicate: didn't need the family getting into an uproar, but at the same time, there was no reason to hide this diagnosis! If the patient had flat-out said "I don't want to know. Just treat me." fine. But he hadn't. • Talking honestly about her wishes, what she wanted and how she felt about going to the in-patient Hospice facility. What was going through my head was how not terminal she looked. (I have had loads of experience with terminal patients and this was not the feeling I was getting from her.) I asked her if she had spoken to the covering medical oncologist. We talked and laughed and cried that afternoon/evening. Finally I asked her frankly, "what do you want to do? Do you have any desire to try the chemotherapy again?" I mentioned that either decision was hers, but if she wanted me to, I would call her medical oncologist and see if we could try one more round of treatment. I would do whatever it took to make her comfortable and peaceful. I also set in motion a lot of very upset administrators, nurses and supervisors who called me on the carpet for interrupting what was their plan to transfer her to the in-patient Hospice. I argued that I was advocating for my patient, whom I knew very well and did not feel she was entirely hospice appropriate at this time. I very nearly lost my job for going over the heads of the doctors, charge nurse and supervisor, but I did not back off advocating for her and I had given her the option of proceeding to hospice |

| Content category | Themes | Taking a Stand/Moral Courage Example |
|--|--|---|
| Moral Goal – a drive for task accomplishment that includes the use of virtues (e.g., prudence, honesty, and justice) throughout the decision making process to achieve a virtuous outcome (Sekerka et al., 2009) | Tricky Situation | <p>care or trying a drug that had worked well for her in the past. I went with my experience and instinct, as it has served me well over my oncology nursing.</p> <ul style="list-style-type: none"> • I sat down with him and asked him why he wanted to continue with therapy and what he expected to achieve with doing so. The patient had the understanding that he could be cured. I gently explained that the goal of therapy in his condition was palliation but if receiving therapy caused him more distress and decreased QOL he may want to consider forgoing therapy. The patient started to cry and definitely did not want therapy. I explained to his MD the patient's understanding. The physician's response to me was that he had been told! • Telling the physician as nicely as I could that I had his number and I knew he was on call the weekend and I was working all weekend and I would be calling on an hourly basis to continue to advocate for the patient who was moaning and writhing in the bed but not awake enough to tell me his pain level. • I found myself coming between my patient and administration and standing up to administration to allow my patient to come to terms with this very grave condition. They backed off. |
| | Truth Telling Protecting my Patient | <ul style="list-style-type: none"> • Discussing with the patients their thoughts on what they wished for their care if they were to not recover from their disease and if they suddenly stopped breathing. I explained to the patient normally in the situation of a patient that becomes unresponsive it is protocol to begin CPR and in the event the patient did not breathe on their own they would be intubated, and hooked up to a breathing machine to keep them alive. I took a stand for my patient helping them discuss what their end of life wishes were. • I was very honest and candid with them and suggested some questions for them to ask the physician team. |

APPENDIX J: ANNOUNCEMENT OF FINAL EXAMINATION

Announcing the Final Examination of Lolita W. Melhado for the degree of Doctor of Philosophy

Date: March 16, 2016

Time: 1:30 pm

Room: 328

Title: Evaluating Moral Distress, Moral Distress Residue and Moral Courage in Oncology Nurses

Purpose: To examine relationships between moral distress, moral distress residue, and moral courage and to determine which nurse characteristics are predictive of moral distress and moral courage.

Methods: The study used a mixed methods cross-sectional correlation design and qualitative content analysis to investigate oncology nurses' characteristics and relationships between moral distress, moral distress residue, and moral courage. A convenience sample of 187 oncology nurses working in inpatient and outpatient settings was recruited through the national Oncology Nursing Society in the Southeastern United States. A power analysis determined a sample of 159 subjects was required to detect statistical significance. Hamric's 21-item Moral Distress Scale-Revised (MDS-R) and Sekerka et al. 15-item Professional Moral Courage Scale (PMCS) supplemented with written examples of moral courage were used for data collection. Descriptive statistics, independent-samples *t* test, Pearson correlation, ANOVA, and multiple regressions analyses were used to evaluate data.

Findings: MDS-R scores were not predictive of PMCS scores. No statistically significant differences were found between nurses' characteristics (age, education level, certification, ELNEC training) and MDS-R. Though nurses with a BSN had higher Moral Distress scores compared with other levels of education, none were predictors of MDS-R. ANOVA results indicate a marginal but not significant difference of the MDS-R score among the nurses with different basic ethics education ($p = .067$). Nurses working in adult inpatient settings had significantly higher MDS-R than those in outpatient settings. Nurses who had moral distress residue by virtue of leaving a previous job (26%) and those who considered leaving (28%) reported statistically significantly higher mean Moral Distress levels than those who had not considered leaving. Nurses (17%) currently considering leaving their jobs due to the way patient care was handled at their institutions had the highest Moral Distress mean scores and the lowest Professional Moral Courage scores. Work setting and having left a previous job were weak predictors of MDS-R, accounting for 11.6% of the moral distress score variance ($p = .013$) compared with 4.4% when work setting was a single predictor ($p = .014$). Total years' oncology experience was a weak predictor of PMCS, accounting for 2.5% or an inconsequential amount of the variance ($p = .043$). Moral courage was displayed in major areas of supporting the patient, risk taking, advocacy, enlarging the circle for decision-making, putting aside personal beliefs, respecting patient autonomy, empowering the patient, fighting for the patient in face of consequences in a complex system, sharing information, getting to the meaning, handling tricky situations, protecting the patient and truth-telling

Discussion/Implication: Despite experiencing levels of moral distress, oncology nurses demonstrate support and respect for patients' decision-making and autonomy. Ethics education derived from clinical practice can provide an opportunity for open discussion for nurses to create and maintain morally acceptable work environments that enable them to be morally courageous. This research underscores the presence of moral distress and moral distress residue among oncology nurses and the importance of finding ways to lessen moral distress and strengthen moral courage in nurses.

Outline of Studies:

Major: Doctor of Philosophy Nursing

Educational Career:

AAS, Queens Borough Community College, 1993

BSN, Florida Gulf Coast University, 2001

MSN, Florida Gulf Coast University, 2007

Committee in Charge:

Dr. Susan Chase, Chair

Dr. Norma Conner, Co-Chair

Dr. William Haley

Dr. Victoria Loerzel

Dr. Nizam Uddin

Approved for distribution by Dr. Susan Chase, Committee Chair and Dr. Norma Conner, Co-Chair on February 24, 2016. The public is welcome to attend.

APPENDIX K: VITA

VITA

Lolita Winifred Melhado

- 1993 Associate of Applied Science, Nursing, Queens Borough Community College
- 1993-1994 Registered Nurse, Winthrop University Hospital, Mineola, New York
- 1995-1997 Registered Nurse, Lee Memorial Health System, Fort Myers, Florida
- 1997-2000 Infection Control Coordinator/Risk Manager, Southwest Regional Medical Center, Fort Myers, Florida
- 2001 Bachelor of Science, Nursing, Florida Gulf Coast University, Estero, Florida
- 2000-2004 Registered Nurse, Lee Memorial Health System, Fort Myers, Florida
- 2004-2007 Clinical Educator, Lee Memorial Health System, Fort Myers, Florida
- 2007 Master of Science, Nursing, Family Nurse Practitioner, Florida Gulf Coast University, Estero, Florida
- 2007-Present Palliative Care ARNP, Lee Memorial Health System, Fort Myers, Florida
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