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# The Occurrence Of Moral Distress In Certified Registered Nurse Anesthetists

Linda Radzvin

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THE OCCURRENCE OF MORAL DISTRESS IN CERTIFIED REGISTERED  
NURSE ANESTHETISTS

A Dissertation

Submitted to the School of Nursing

Duquesne University

In partial fulfillment of the requirements for  
the degree of Doctor of Philosophy

By

Linda Clerici Radzvin

August 2008

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Linda Clerici Radzvin

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NURSE ANESTHETISTS

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Approved May 6, 2008

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# ABSTRACT

## THE OCCURRENCE OF MORAL DISTRESS IN CERTIFIED REGISTERED NURSE ANESTHETISTS

By

Linda Clerici Radzvin

August 2008

Dissertation Supervised by L. Kathleen Sekula, PhD, APRN

Registered nurses are frequently confronted with ethical dilemmas in their nursing practice. As a consequence of their decisions regarding ethical challenges, nurses report experiencing moral distress. This experience is often manifested by such feelings as anger, guilt, sadness, fear, and frustration and has been identified as a contributing factor to burnout and turnover in nursing. A review of the literature has shown that the incidence of moral distress has been examined in various nursing settings. However, to date only one qualitative study has been conducted that examined the occurrence of moral distress in nurse anesthetists related to the delivery of anesthesia to older patients.

The purpose of this exploratory, descriptive study was to determine if Certified Registered Nurse Anesthetists (CRNAs) experience moral distress in their nursing practice. Demographic variables were also examined in relation to moral distress. A

random sample of 800 Certified Registered Nurse Anesthetists from the registry of the American Association of Nurse Anesthetists was selected to participate in this study. Participating nurses were asked to complete a demographic data survey and the Ethics Stress Scale. Three hundred and two responses were received and 300 surveys were analyzed utilizing the Statistical Package for the Social Sciences 15.0 (SPSS).

The data supported the assumption that CRNAs do experience moral distress in their nursing practice. While a small number of nurse anesthetists experienced high levels of moral distress, as indicated by total Ethics Stress Scale scores, CRNAs generally experienced moderate levels of moral distress. Moral distress was associated with situations in which they believed they were aware of the morally correct course of action but were unable to follow through with these behaviors. Nurse anesthetists reported physical and psychological manifestations in relation to moral distress and have considered changing positions or even leaving nursing as a result of ethical dilemmas. Also, CRNAs in the age group of 24-30 had higher levels of moral distress than anesthetists in any other age range. The results of this study supplement existing nursing knowledge, emphasizing the importance of the recognition and alleviation of the occurrence of moral distress in nurses.

## DEDICATION

This dissertation is dedicated to my parents, Gisto and Marion Clerici, my husband Peter, and my sons Tristan and Justen.

## ACKNOWLEDGMENTS

Sincere thanks must be extended to the following persons, without whose assistance this study would not have been possible.

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The Certified Registered Nurse Anesthetists who participated in this study.



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# Chapter 1

## Moral Distress

### 1.1 Introduction

In an ever-increasingly complex health care arena, nurses are faced with ethical challenges in their delivery of nursing care. Nurses report that they often feel compelled to make ethical decisions that are counter to their professional and personal values in relation to various situations that arise in the clinical setting. These clinical issues include care-related decision-making that nurses believe is counter to the expressed desires of the patient; aggressive or futile treatment of terminal patients; issues related to informed consent; working with incompetent nurses and physicians; and working under institutional policies that constrain ethical decision-making and may interfere with the needs of patients (Badger & O'Connor, 2006; Hamric, Davis, & Childress, 2006). As a consequence of their decisions regarding these issues, nurses report experiencing moral distress (Corley, Elswick, Gorman, & Clor, 2001; Hanna, 2005; Wilkinson, 1988). This experience is often manifested by such feelings as anger, guilt, sadness, fear, withdrawal, silence, not taking risks, and frustration and has been identified as a contributing factor to burnout and turnover in nursing (Gutierrez, 2005) as well as the occurrence of moral residue, a residual distress that lingers after the initial experience of moral distress (Webster & Baylis, 2000). While the incidence of moral distress has been examined in

various nursing specialties (Elpern, Covert, & Kleinpell, 2005; Hefferman & Heilig, 1999) the nursing specialty of nurse anesthetists has been investigated in only one qualitative study that examined the occurrence of moral distress in relation to the delivery of anesthesia to older patients, one limited facet of anesthesia care (Mauleon, Palo-Bengtsson, & Ekman, 2005).

In the United States each year, Certified Registered Nurse Anesthetists (CRNAs) provide 65% of the anesthesia delivered and are responsible for independent anesthesia administration in 65% of American rural hospitals (Anesthetists, n.d.). Anesthetists' roles are also expanding to include procedures in radiology and the area of pain management (Merwin, Stern, & Jordan, 2006). The field of anesthesia is continuously evolving as new medications and procedures are introduced, requiring nurse anesthetists to adapt to this changing environment. Nurse anesthetists are also faced with practice situations that require the monitoring of patients who are in extremely vulnerable and critical situations, requiring responses to physiologic conditions on a continuous basis, sometimes without a physician's order (Booth, 1998). Often decisions must be made that have life or death consequences and because of the urgent nature of situations, ethical issues may go unaddressed. Nurse anesthetists, like other nurses, relate that they are faced with ethically-challenging clinical situations, such as working with incompetent colleagues or prolonging the dying process of patients (Jenkins, Elliott, & Harris, 2006). If dilemmas are accompanied by perceived or real constraints that prohibit advanced practice nurses from acting in what they believe is the morally correct manner, moral distress may arise. The occurrence of moral distress may result in professional and personal ramifications for CRNAs as a result of their decisions.

## 1.2 Background of the Study

Throughout the literature, the terms ethics and morals are used in discussions regarding moral distress. Morals or morality are terms used to describe “social conventions about right and wrong human conduct that are so widely shared that they form a stable (although usually incomplete) communal consensus” (Beauchamp & Childress, 1994, p. 5). Morals are often considered one’s personal set of values. Ethics can be defined as the examination, understanding, and practice of morals, morality, or moral issues. “Ethics examines the decisions and choices agents ought to make in regard to their interactions” (Husted & Husted, 2001, p. 5). Ethics encompasses what we should or ought to do in a situation.

A nurse’s primary duty is to his or her patient. However, when faced with certain ethical situations where nurses feel they are prohibited from acting in an ethically correct manner, they often perceive that they have violated ethical principles, including beneficence and nonmaleficence (Beauchamp & Childress, 1994), as well as their own professional values. Nurses may experience physical and psychological manifestations as a consequence of their decisions in these situations. Various terms have been utilized in the literature to refer to the stress or distress that accompanies ethical decision-making in nursing, including personal conflict, moral distress, ethical stress, moral stress, and moral discord.

Redman and Hill (1997) discussed personal conflict in relation to ethical situations. “In a conflict between ethical beliefs, principles, or theories, either intrapersonally or interpersonally, each side of the conflict represents a morally defensible position” (p. 244). Personal conflict occurs when persons involved in the

ethically-challenging situation arrive at different interpretations or decisions, resulting in the occurrence of discord.

The term “moral distress” was introduced by Jameton in 1984 to assist in categorizing ethical issues that occurred in hospitals. He identified moral distress as a consequence of a situation in which a person is cognizant of what is the morally correct action to be taken but encounters obstacles to acting in such a manner. Obstacles encountered in morally distressing situations may be in the form of institutional constraints or conflicts with coworkers that prohibit the person from acting in what he or she believes is the morally correct manner. Jameton (1993) later differentiated between two types of moral distress. He defined initial distress as “feelings of frustration, anger, and anxiety people experience when faced with institutional obstacles and conflict with others about values” (p. 544) and reactive distress such as the anguish people experience when they fail to respond to their initial distress. Jameton stated that reactive distress frequently occurred in nurses as a result of their lack of decision-making capabilities in relation to patient care.

Wilkinson (1988) defined moral distress as “the psychological disequilibrium and negative feeling state experienced when a person makes a moral decision but does not follow through by performing the moral behavior indicated by that decision” (p. 16). Situations that she identified as resulting in moral distress included delivery of aggressive care to terminal patients, performing unnecessary tests on dying patients, and not being truthful with patients. Wilkinson acknowledged four components of moral distress: (1) a patient-care situation with a moral aspect; (2) a moral decision by the nurse on how to act, generally based upon consequences rather than rule, with the exception of lying to

patients; (3) a perception by the nurse that constraints inhibited acting in the morally correct manner; and (4) resultant distress manifested by upsetting feelings, such as anger, guilt, loss of self-worth, depression, and frustration, psychological disequilibrium, and physical symptoms including headache, palpitations, and gastro-intestinal upset. According to Wilkinson, moral distress encompasses both the experience and consequences of the experience.

Webster and Baylis (2000) defined moral distress as “incoherence between one’s beliefs and one’s actions and possibly outcomes (that is between what one sincerely believes to be right, what one actually does, and what eventually transpires)” (p. 218). These authors believed that moral distress may be an outcome of a person not following through with what they felt is the morally correct action as a result of poor personal decision-making or uncontrollable events. Manifestations of moral distress involved the occurrence of negative emotions such as anger, guilt, frustration, sadness, discouragement, withdrawal, sorrow, helplessness, compromised integrity, anxiety, grief, anguish, and fear in response to a failure to act in an ethical manner.

Kalvemrak, Hoglund, Hansson, Westerholm, and Arentz (2004) presented a revision of the definition of moral distress offered by Jameton (1984, 1993). They concluded that moral distress was “traditional negative stress symptoms that occur due to a situation that involves ethical dimensions and where the health care provider feels s/he is not able to preserve all interests and values at stake” (pp. 1082-1083). They found that moral distress also occurred in disciplines of health care providers other than nurses. They also stated that persons confronted with ethical dilemmas are rarely capable of ascertaining for certain what is right or wrong in a given situation.



Another definition of moral distress was proposed by Hanna (2005) that was intended to be useful in clinical practice. “My definition of moral distress refers, in a universal manner, to moral distress as an act of interior aversion which occurs with the perception of harm to an objective good” (p. 119). She identified a conflict between an employer and employee as a potential harm to an objective good, although this did not represent the only possibility of potential harm. The author also identified emotions that occurred as a result of moral distress that included anger, pain, shock, and fear.

Nathaniel (2006) synthesized a definition of moral distress that she believed was a reflection of the literature:

Moral distress is the pain or anguish affecting the mind, body, or relationships that results from a patient care situation in which the nurse is aware of a moral problem, acknowledges moral responsibility, and makes a moral judgment about the correct action, yet, as a result of real or perceived constraints, participates, either by action or omission, in a manner he or she perceives to be morally wrong. (p. 421)

Moral distress, which may occur as a result of institutional issues such as power inequality and discrepancies between nurses’ values and institutional policies, results in significant effects upon nurses, including feelings of powerlessness, guilt, remorse, sadness, and anger and can impact self esteem. It can also lead to unproductive or negative behaviors such as blaming self or others or the rationalizing of one’s behavior. Finally, moral distress can be manifested as physical responses such as crying and sleep disturbances (Nathaniel, 2006).

Raines (2000) employed the term ethical stress to refer to “an individual’s perception of the stress experienced while dealing with ethical dilemmas or issues” (p. 34). She stated that ethical stress had been identified as an aspect of occupational stress and that it was closely aligned to Jameton’s (1984) definition of moral distress.

Lutzen, Cronqvist, Magnusson, and Lars (2003) synthesized the concept of moral stress to describe a situation “when nurses are aware of what ethical principles are at stake in a specific situation and external factors prevent them from making a decision that would reduce the conflict between contradicting principles” (p. 314). One example they provided involved the conflict nurses experienced in allowing patients to die a dignified death while feeling that they were responsible to do all they could to keep the patient alive. They concluded that there is a moral aspect associated with stress and that moral stress results when a person’s moral sensitivity cannot be acted upon as a result of what is viewed to be external constraints. While previous work on moral distress focused upon the occurrence of distress rather than upon the ethical aspect of distress, the authors believed that moral stress was similar to moral distress because both concepts contained a moral element.

Cronqvist, Lutzen, and Nystrom (2006) defined moral stress in nursing as the stress that nurses are subjected to when “a nurse is morally sensitive to a patient’s vulnerability and is hindered by external factors in doing what is the best for the patient” (p. 406). Moral sensitivity is the perception of how one ought to act in a certain situation. Stress results as the nurse ponders whether to act as she believes she should or ought to act. This experience differs from moral distress in that the focus of moral stress is the moral aspect of a stressful event rather than the psychological aspects of the experience.

Finally, the term moral discord was employed by Badger and O'Connor (2006) to describe ethical conflicts encountered by nurses. "Moral discord or distress occurs when contextual constraints prevent nurses from implementing their moral mandates" (p. 148). Situations that contributed to the occurrence of moral discord in nurses included such things as not considering the patient's advanced directives during the delivery of care, and misuse of limited health care resources. When faced with situations where nurses felt incapable of responding as they believed they should morally, they experienced unpleasant emotional responses that included anger and guilt.

Hamric et al. (2006) identified three categories of moral distress: (1) clinical situations; (2) internal factors; and (3) external factors. Clinical situations that elicited moral distress included the delivery of futile or unnecessary care, issues related to informed consent, and incompetence among health care professionals. Moral distress as a result of internal factors involved feelings of powerlessness and increased moral sensitivity on the part of the health care professional. External factors that contributed to moral distress involved institutional constraints, lack of administrative support, and varying patient care perspectives among members of the health care team.

Moral distress is manifested by emotions such as sadness, guilt, remorse, and fear as nurses come to the realization that they have violated their personal principles and values and compromised their integrity. Moral distress may result in moral residue, which involves being burdened by the effects of this experience for an indefinite period of time. Webster and Baylis (2000) stated that moral residue often resulted from the realization that a person has compromised their integrity. While moral residue can have a positive impact by assisting a person to redefine their ethical principles and moral

obligations, it can also have profound negative effects if it results in nurses losing their moral compass and continually shifting their values. Such continual shifts can leave nurses in a state of being incapable of identifying their personal values and becoming “desensitized to wrongdoing, willing to tolerate morally questionable or morally impermissible actions” (p. 224).

Although various expressions have been used in the nursing literature to describe ethical conflicts and the manifestations that may result from these conflicts, not all terms should be used interchangeably. A unifying theme among the various definitions of moral distress that were reviewed is the nurse’s actual or perceived inability to act in a morally correct manner in a given situation, resulting in negative feelings and emotions. All of these definitions of moral distress describe similar feelings and experiences that result from ethically-challenging situations. The definition of ethical stress employed by Raines (2000) is closely aligned to those of moral distress, as is the term moral discord used by Badger and O’Connor (2006), and both could be substituted for moral distress. However, the definition of moral stress, as defined by Conqvist et al. (2006) focuses more on the moral aspect of a stressful event rather than upon the psychological manifestations that result from morally distressing situations and should not be used in place of the term moral distress.

### 1.3 Specific Aim

The aim of this exploratory, descriptive study was to determine levels of moral distress of Certified Registered Nurse Anesthetists in nursing practice. Demographic variables were also examined in relation to moral distress.

### 1.4 Research Questions

The research questions that guided this study were:

1. What levels of moral distress are experienced by Certified Registered Nurse Anesthetists, as measured by the Ethics Stress Scale?
2. How do levels of moral distress correlate with demographic variables that include, but are not limited to, age, years of experience, and educational level?

### 1.5 Assumptions

The following assumptions were made in this study:

1. That CRNAs do experience moral distress in their nursing practice.
2. That CRNAs will respond openly about the occurrence of moral distress in their nursing practice.

### 1.6 Definition of Terms

The following operational definitions guided this study:

Morals: One's personal set of values.

Ethics: The examination, understanding, and practice of morals.

Moral distress: The overwhelming occurrence of stressful feelings, such as guilt, powerlessness, and sadness that result when nurses are unable to act in what they believe is a morally correct course of action in relation to patient care situations as a

consequence of limitations that are genuine or perceived, with resultant moral wrongdoing.

Certified Registered Nurse Anesthetists (CRNAs): Men and women who have graduated from an accredited nurse anesthetist program and are active members of the American Association of Nurse Anesthetists (AANA).

### 1.7 Significance of the Study

The occurrence of moral distress in nurses has profound implications for the profession and for patient care. Moral distress can lead to emotional and physical suffering. Suffering has been defined by Reich (1989) as:

...an anguish which we experience on one level as a threat to our composure, our integrity, and the fulfillment of our intentions but at a deeper level as a frustration to the concrete meaning that we have found in our personal existence. It is the anguish over the injury or threat of injury to the self—and thus the meaning of the self—that is at the core of suffering. (p. 85)

Rowe (2003) discussed suffering in relation to the concept of suffering of the healer and its effect upon health care providers. He defined suffering of the healer as “severe distress associated with events that threaten the intactness of the healer in the role of healer” (p. 17). Guilt is one of the threats that leads to healers suffering and guilt is one of the many manifestations of moral distress. Healers who suffer may “cease to heal” in an attempt to avoid the pain of suffering as well as preventing an assault on their selfhood (Rowe).

Moral distress has the potential to create suffering in those nurses who experience it, impacting the nurse’s ability to practice in an ethical manner and possibly

compromising the care they provide. Moral distress can fracture nurses' self images, feelings of worth, and their integrity. Thus it is important that moral distress be identified and strategies be designed to prevent its occurrence, to eliminate unnecessary suffering, and to provide relief in an attempt to avoid the potential impact upon nurses and patients. While moral distress has been examined in nursing specialties such as intensive care (Gutierrez, 2005; Sundin-Huard & Fahy, 1999), the specialty of nurse anesthetists who deal with patients in very vulnerable and critical situations has only been examined in one qualitative study (Mauleon et al., 2005).

The findings of this study may identify the occurrence of moral distress in CRNAs and hopefully will offer challenges for future research.

# Chapter 2

## Review of the Literature

The review of the literature for this study focused upon the concept of moral distress in nurses. These terms were utilized in searches employing CINAHL, Pre-CINHAL, Medline, Clinical Pharmacology, MasterFILE Premier, Health Source: Nursing/Academic Edition, PsychINFO, EBSCO HOST, and Google Scholar.

Incorporated into this review is a theoretical framework that guided this study.

### 2.1 Theoretical Framework

Wilkinson (1988) developed the Moral Distress Model to examine the phenomenon of moral distress in nurses. This model recognized that in their practice, nurses are often confronted with patient care dilemmas that encompass a moral component and require the nurse to formulate a moral decision. This decision is affected by the nurse's individual beliefs regarding moral practice, beneficence, and patient empathy. However, nurses, during the course of action, become aware that there are constraints, which can be real or perceived that prevent them from pursuing the morally correct course of action for their patient, resulting in distressing physical and/or psychological manifestations. The magnitude of these manifestations is impacted by several factors including how the nurse perceives her relationship with the patient as well as her perception of her role as a nurse.



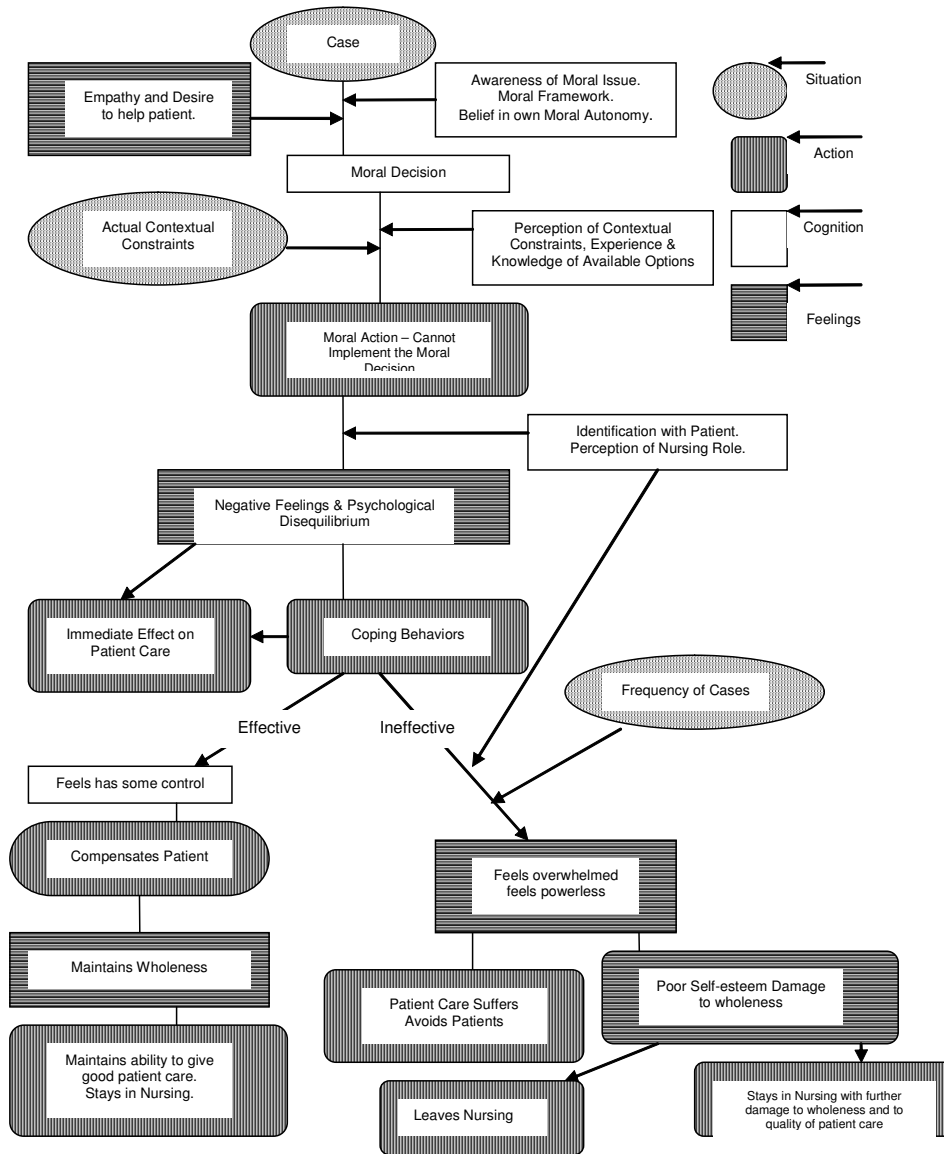
Nurses react to the negative emotions they experience by utilizing coping behaviors, which may or may not be successful in dealing with these feelings and can be affected by the number of occurrences of moral distress they encounter. Effective coping skills lead to a sense of completeness or integrity, control of patient care issues, and the delivery of satisfying patient care. Ineffective coping behaviors result in feeling a lack of control over patient care issues, a fractured sense of self, and possibly a change in employment or even careers.

Wilkinson's (1988) Moral Distress Model was the theoretical framework that guided this study and provided an approach to identify the occurrence of moral distress in CRNAs as well as the ramifications of moral distress on these nurses (Figure 1).

Permission to use this model was obtained from the author (Appendix 1).

Figure 1

Moral Distress Model



Source: Wilkinson, J. (1988). Moral distress in nursing practice: Expertise and effect. Nursing Forum 23(1), p.26.

## 2.2 Moral Distress in Nurses

### *Moral Distress in Critical Care Nurses and Staff*

Fenton (1988) employed a phenomenological approach to examine the lived experiences of nurses involved in situations that were ethically challenging. In semi-structured interviews, five nursing instructors and five students enrolled in an Intensive Care Nursing Program discussed their responses to ethical issues and the coping strategies they employed. From the data, two types of responses emerged. The first involved ineffective responses to the ethical issues and experience of moral distress, including emotional reactions such as anger, crying, and sarcasm, and behaviors such as withdrawal from the situation or patient, acting in a manner that the nurses felt was morally incorrect, and leaving the job or profession. The second response involved effective action and coping strategies where nurses focused their efforts on providing care and comfort to the patient. In these situations nurses responded to ethical issues by focusing upon behaviors that were viewed as beneficial to patients and emphasized caring and attention to dignity. The author concluded that moral distress can impact nurses personally and professionally, in both a positive or negative manner, and affect the delivery of patient care.

Corley (1995) undertook a quantitative study of 111 nurses to measure the occurrence of moral distress in critical care nurses. She employed the Moral Distress Scale (MDS), which was based upon Jameton's (1984) and Wilkinson's (1988) concepts of moral distress. This tool employed a 7-point Likert scale with anchors of 1=low to 7=high and included items regarding prolongation of life, not being truthful to patients, and incompetent care administered by physicians. Three significant factors emerged

from factor analysis: (1) aggressive care, including such issues as care that prolonged death and carrying out orders for unnecessary tests or treatments; (2) action response, or being a participant in patient care that the nurse did not agree with; and (3) honesty, with aggressive care being identified as the cause of the highest distress. These findings supported those identified by Wilkinson (1988) in her study on moral distress. The author also found that the mean scores reflected relatively low levels of moral distress, however some nurses experienced high degrees of moral distress with certain issues, as demonstrated by a score greater than 4 on a scale of 1=low to 7= high. Also, issues that were identified as occurring most frequently were not the same situations nurses identified as causing the most moral distress. Finally, moral distress was a cause of position change in 12% of the nurses surveyed. Test-retest reliability of the measure was  $r=.86$  ( $P < 0.01$ ). Cronbach's alpha for the following factors was also reported: (1) aggressive care 0.81; (2) action response 0.93; and (3) honesty 0.85.

Moral distress and its relationship to burnout in critical care nurses was examined by Sundin-Huard and Fahy (1999) in 10 Australian critical care nurses utilizing in-depth, unstructured, audio-taped interviews. A focus group was also employed during the analysis phase to validate the emerging findings of the researchers. The authors discovered that these nurses experienced moral distress when confronted with ethical dilemmas related to inappropriate treatment of patients in defenseless situations. In an effort to deal with moral distress, nurses' responses included not reacting to the situation, employing "covert communication strategies as a way of attempting to alleviate the suffering of the patient" (p. 12), or becoming the patient's advocate. As a consequence of not being able to achieve what they felt was ethically appropriate for their patients, the

nurses experienced frustration, anger, and moral outrage. The authors concluded that moral distress and accompanying recurrent ethical issues lead to burnout in nursing.

One study that examined futility of care and burnout in critical care nurses was undertaken by Meltzer and Huckabay (2004). These authors surveyed 60 critical care nurses working in Southern California, utilizing a modification of the original Moral Distress Scale by Corley (1995). They eliminated four questions on the 32-item measure (numbers 11-14), with permission from Corley, for a total of 28. The questions that were not utilized addressed issues related to medical students and pediatrics. Following elimination of the four questions, Cronbach's alpha was calculated for the subscales. The authors reported .95 for the intensity subscale and .96 for the frequency subscale. They also administered a demographic survey and the Maslach Burnout Inventory (MBI), a 22-item instrument created to measure three aspects of burnout: emotional exhaustion, depersonalization, and personal accomplishment. These facets of burnout frequency were measured using a 6 point Likert scale with 0=never and 6=every day. Reliability and validity of this measure was not addressed. Results of this study indicated that there was a significant relationship between the frequency of occurrence of morally distressing situations involving care that was considered futile or of no benefit to the patient and the occurrence of emotional exhaustion. The authors also found that nurses with bachelor's degrees or higher levels of education experienced greater distress in dealing with situations of medical futility than did nurses with associate degrees

Elpern et al. (2005) studied the degree of moral distress experienced by 28 nurses working in a medical intensive care unit through a two part instrument. They employed Corley's (2001) MDS as the first part of the questionnaire and in the second section

asked participants to respond to an open-ended question regarding how they perceived they were affected by experiences of moral distress. Results of analysis of data from the MDS demonstrated that critical care nurses experienced significant moral distress intensity and moral distress frequency in relation to the delivery of aggressive care that may not be of benefit to the patient. Scores also indicated overall moderate levels of moral distress. Responses to the open-ended question demonstrated that all of the nurses had experienced negative effects as a result of moral distress. A nurse's years of experience were also positively correlated with moral distress. The authors stated that reliability and validity of the MDS had been established.

A qualitative study of moral distress in 12 critical care nurses was conducted by Gutierrez (2005). Participants were asked questions that focused upon the concepts of moral conflict, moral judgment, and moral action in audio-taped interviews. Data were analyzed utilizing constant comparison and summarized by means of descriptive statistics. Situations identified by the participants as representing moral conflicts included providing exceptionally aggressive medical care to patients, ignoring patients' desires regarding their care, and misappropriation of health care resources. The author found that these nurses experienced emotional effects of moral distress in response to their healthcare decision-making that included feelings of anger, sadness, guilt, frustration, and fear, as well as physical effects, such as pain and sleep disturbances. Professional effects were also identified, such as withdrawal from others and a desire not to care for the patient involved, findings that were also identified by Wilkinson (1988).

Hamric and Blackhall (2007) examined the relationships among moral distress, ethical climate, collaboration between nurses and doctors, and satisfaction with quality of

care in registered nurses and physicians working in, or admitting patients to, intensive care units. The researchers employed Corley's Moral Distress Scale (Corley et al., 2001). This measure was revised from 38 items to 19, with a calculated Cronbach's alpha of 0.83. Also used were a modified version of McDaniel's Ethics Environment Questionnaire (EEQ) with a Cronbach's alpha of 0.89; a shortened version of Olson's Hospital Ethical Climate Survey (HECS) with a Cronbach's alpha of 0.88; and a modified version of Hojat's instrument to measure collaboration with a Cronbach's alpha of 0.89. Questions were also included that related to end of life communication and satisfaction with quality of care. The sample included 29 physicians from one hospital and 196 registered nurses from two hospitals. Results indicated that while both physicians and nurses experienced moral distress, especially in regard to the provision of aggressive care in terminal patients, nurses experienced greater moral distress than did the physicians. The researchers also found that nurses who reported higher moral distress also experienced less satisfaction with quality of care and physician collaboration and felt the ethical environment was more negative than did nurses with low moral distress. Finally, 45% of nurses at one hospital site reported leaving a job or considered leaving a job as a result of moral distress.

A quantitative study employing two questionnaires addressing moral distress was undertaken by McClendon and Buckner (2007) to examine levels of moral distress in critical care nurses, the effects of moral distress upon them, and their methods of coping with this distress. Of the 37 eligible registered nurses who had at least one month's experience working in either the intensive care or coronary care units of an urban hospital, nine participated in the study. Participants were asked to complete a

demographic questionnaire, a researcher created instrument that included open-ended questions regarding situations encountered in nursing practice, methods of coping, effects of moral distress on the nurse personally and professionally, and a rating of overall moral distress on a scale of 1 (least distress) to 10 (most distress), and the Moral Distress Scale (Corley et al., 2001). The researchers determined that nurses identified an overall level of moral distress of 5.5 on the researcher developed questionnaire, indicating a moderate level of distress. The top four situations resulting in moral distress, as indicated on the MDS, included agreeing to the family's request to continue life support that was not in the patient's best interest, instituting life sustaining procedures that merely prolonged the dying process, working with unsafe levels of nursing staffs, and following families' requests for patient care that were counter to the nurses' beliefs because of fear of legal action. Nurses identified coping strategies that included talking with families about the patient, relaxation, and distancing themselves from the stressful situation and felt that the development of support groups would also help with handling of distress. Moral distress was found to affect nurses' personal lives as a result of behavioral changes such as being short-tempered or irritable, and affected their professional lives as a result of experiencing burnout or difficulty concentrating. Finally, the researchers found that there was a relationship between age, experience, and moral distress. Levels of moral distress were found to decrease with age and with years of service. This finding varied with those of Elpern et al. (2005) who reported a positive correlation with years of experience and moral distress.



*Moral Distress in Nurses and Health Care Providers in Neonatal Intensive Care Units*

Hefferman and Heilig (1999) examined moral distress among nurses and other health care providers who cared for extremely low birth weight infants (ELBW) in a neonatal intensive care unit. They employed two informal surveys with a sample of 33 nurses, neonatologists, and a respiratory therapist over five months that asked the participants to identify ethical issues they confronted in the neonatal intensive care unit and the impact these situations had on them personally as well as on their delivery of care. The researchers concluded that nurses and other participants in the survey experienced significant moral distress regarding the issue of resuscitation and aggressive treatment of ELBW infants. They stated that health care providers should consider how the effects of moral distress may impact them as they continue to deliver health care to these vulnerable infants and their families.

A quantitative study of the experiences of nurses and residents delivering care in neonatal intensive care units was conducted by Janvier, Nadeau, Deschenes, Couture, and Barrington (2007). All physicians in residency programs in obstetrics and pediatrics in one Canadian province were surveyed. Nurses were also surveyed who worked in the delivery room of a university health center, in the neonatal intensive care unit of a maternity hospital, and in the neonatal intensive care unit of a Children's hospital. Both groups of participants were asked to complete a demographic questionnaire and a survey with three questions related to: (1) the occurrence of ethical confrontation or moral distress in relation to resuscitation and treatment of extremely premature infants, with possible responses including always, generally, exceptionally, and never; (2) parameters for the resuscitation of preterm infants, with responses related to gestational ages of 22,

23, 24, 25, 26, 27, or 28 weeks; and (3) the prevalence of cerebral palsy in infants weighing less than 1000 grams at birth and evaluated at ages 5-8 years of age, with responses including 10%, 15%, 25%, and 40%. One hundred and sixty-four residents and 115 nurses participated in the study. Findings indicated that both nurses (35%) and residents (19%) experienced frequent ethical confrontations; however the occurrence varied in residents depending upon the site of their residency program. Also, nurses working in the Children's hospital neonatal ICU experienced greater ethical confrontation than did nurses in the other settings. The authors also found that significant numbers of both residents and nurses who cared for these infants were poorly informed regarding outcomes and stated they would not resuscitate infants born at 26 and 27 weeks of gestation even though these infants had "high potential for good outcomes" (p. 206). The authors concluded that educational programs aimed at improving the knowledge base of residents and nurses regarding outcomes for extremely premature infants are important as a method of reducing the occurrence of ethical confrontations or moral distress.

#### *Moral Distress in Oncology Nurses*

Krishnasamy (1999) undertook a qualitative study exploring the moral dimensions of nursing care among three nurses working with patients enrolled in cancer clinical trials. Employing a group interview format, a semi-structured interview was undertaken, tape-recorded, and analyzed for the emergence of themes. Results of data analysis yielded three main themes that included moral distress and being appreciated, caring within the context of research, and the consequences for moral reasoning within the framework of caring and cure. Nurses expressed a desire and responsibility to care for their patients yet felt they lacked the power to influence decision-making in regard to

care. This conflict resulted in nurses believing that they had compromised their personal values, with resultant feelings of insecurity, decreased self worth, powerlessness, and an inability to act in what they considered to be the patient's best interests. The author stated that a consequence of nurses experiencing compromised integrity is the occurrence of dissatisfaction with nursing.

Raines (2000) examined the occurrence of ethical stress and its relationship to moral reasoning and coping style in a quantitative study of 229 oncology nurses. Participants completed: (1) the Moral Reasoning Questionnaire, whose content and test-retest validity were stated to have been established; (2) the Ways of Coping Inventory, whose validity and reliability were not discussed; (3) the Ethics Issue Survey, whose reliability and validity were stated as having been established; and (4) the Ethics Stress Scale, with a Content Validity Index of 0.98,  $p < 0.05$ , and reliability coefficient of  $r = 0.82$ ,  $p = < .005$ . The author found that oncology nurses had experienced an average of nearly 32 various ethical dilemmas in the year preceding the study. Issues of primary concern included pain management, cost containment, and decisions related to the best interests of the patient and quality of life. Results indicated that ethical stress was a significant outcome of decision-making in relation to ethical issues encountered in nursing practice by oncology nurses and that as the number of ethical dilemmas the nurse encountered increased, so did the number of coping strategies that were employed. Finally, the author found that the highest ethics stress scores were related to factors that nurses felt either prohibited or assisted them in acting upon ethical decisions, such as powerlessness and obligations to others. This finding supported Wilkinson's (1988) assertion that contextual constraints impacted the ethical decision-making of nurses.

### *Moral Distress in Hospital Nurses*

Wilkinson (1988) conducted a phenomenological study to examine the occurrence of moral distress in nurses. Employing a state Board of Nursing registry, a random sample of 382 nurses were contacted regarding their experience with the occurrence of moral distress and requesting their participation in an interview regarding their experiences. Twenty four current and former staff nurses agreed to participate in taped, face-to-face interviews. The author discovered that moral distress arose from patient care situations that involved limitations on the nurse's ability to carry out moral decisions, that nurses frequently experienced moral distress, and that nurses were able to identify constraints that impacted upon their moral actions. Aspects of moral distress included emotional, cognitive, situational, and behavioral components. Wilkinson also substantiated emotions that resulted from moral distress, such as guilt, anger, and frustration. Other manifestations included loss of self-esteem, feelings of depression, physical symptoms, and either avoidance of patients or behaving in a manner to provide atonement to the patient for their previous actions. Nurses reported leaving their place of employment and the nursing profession as a result of moral distress.

Corley et al. (2001) undertook a quantitative study of a convenience sample of 214 nurses from several hospitals in the United States to assess the reliability and validity of the Moral Distress Scale (MDS). This 32-item instrument employed a 7-point Likert scale to measure nurses' moral distress that resulted from ethical issues they encountered in their hospital practice, as well as its consequences. Choices on the MDS that related to situations encountered in nursing practice ranged from little/almost never (1) to great (7). Higher scores were indicative of higher levels of moral distress. The researchers found

mean scores of the 32 items to range from 3.9 to 5.5, which indicated that nurses experienced moderately high levels of moral distress. Situations identified as eliciting highest levels of moral distress included conditions where inadequate patient care resulted from poor staffing, performing tests or procedures on terminally ill patients, working with incompetent physicians, and working with inadequate levels of staff. The authors found that nurses believed that organizational constraints prohibited them from acting according to their values and that 15% of the nurses surveyed had left a position as a result of moral distress. Reliability of the MDS was determined employing inter-item, item-factor, and factor-to-factor correlation. Three factors were identified: (1) individual responsibility (alpha 0.97); (2) not in the patient' best interest (alpha 0.82); and (3) deception (alpha 0.84).

Corley, Minick, Elswick, and Jacobs (2005) employed a descriptive-correlational study that examined both the frequency and intensity of moral distress and the ethical work environment in a convenience sample of 106 registered nurses working on medical surgical units in two medical centers. In this study, they administered the revised MDS, which included 38 items for measuring moral distress intensity and moral distress frequency on a scale of 0-6, with 0=none and 6=great extent on the moral distress intensity scale and 0=none to 6=very frequent on the moral distress frequency scale. The revisions to the tool reflected the addition of items focusing upon pain management, managed care, and incompetent health care workers. These issues surfaced in surveys that had been conducted previously on ethical issues. They also administered the Ethical Environment Questionnaire (EEQ), a survey designed to measure to what extent a health-care facility reflected an ethical environment. This was a 20-item survey that utilized a 5-

point Likert scale with a range of responses from strongly agree to strongly disagree. For this study the Cronbach's alpha was 0.93. The authors discovered that nurses experienced a moderate degree of moral distress as a consequence of issues they encountered in their delivery of nursing care and that there was a moderate correlation between moral distress intensity and frequency. They also found that the EEQ predicted moral distress intensity to a significant degree but did not predict moral distress frequency, nor did it reflect a positive ethical environment in this study. Finally, results indicated that 25% of the nurses surveyed in this study had left a position as a result of moral distress. Cronbach's alpha was determined to be 0.98 for the MDS intensity subscale and 0.90 for the MDS frequency subscale. Content validity was 100% based upon experts' reviews.

The occurrence of moral distress in registered nurses working in a medical center in an urban area was examined by Zuzelo (2007). Employing Jameton's (1984) framework of moral distress, the researcher undertook a quantitative, descriptive study employing Corley's Moral Distress Scale (2001) and open-ended questions to facilitate the identification of situations that elicited moral distress. One-hundred registered nurses working in various clinical areas participated in the study. Two versions of the MDS were employed. Nurses working in neonatal care were given a modified version with three items deleted (n=29) that addressed patient incompetence, physician-assisted suicide requests, and physician failure to address the probability of dying with patients. Nurses employed in adult health were given the original 32-item version. Both MDS surveys were color-coded to identify the different versions of the scale. The open-ended questions addressed recent ethical dilemmas encountered, resources available for dealing

with ethical dilemmas, barriers within the institution that interfered with utilization of coping resources, and suggestions regarding ethical practice within the institution in which the participants were employed. The results of the MDS indicated that nurses experienced moral distress in various clinical settings. The most distressing situations involved working with unsafe staff levels, working with physicians and nurses viewed as not competent for the level of patient acuity, and following orders for administration of medication that were ineffective for pain relief. Findings from the open-ended questions revealed nurses' resentment over physicians' refusal to deal with death, frustration over feelings of being in a subordinate role to physicians, concern with family members pressuring patients to change care decisions or overriding patient's decisions, and working with inadequate levels of staff. Identified supports systems for nurses included nursing supervisors, nursing coworkers, and chaplains. Techniques for dealing with and reducing moral distress included utilization of ethics rounds and consultations, and group discussions. The researcher concluded that findings from this study were consistent with other studies examining the occurrence of moral distress in nurses undertaken by Corley (1995) and Elpern et al. (2005).

#### *Moral Distress in Nurse Practitioners*

Godfrey and Smith (2002) examined the experience of moral distress in nurse practitioners (NPs) working in out-patient settings. Seven nurses participated in this qualitative study. Five experienced NPs participated in a group discussion that involved responding to researcher questions related to ethical issues and moral distress in practice, and two novice NPs participated via email. The authors identified five categories related to ethical issues from the dialogue: "(1) access to care; (2) tension between standards and

quality; (3) NPs' increased risk and responsibility; (4) wrestling with the 'greater good'; and (5) working within the system" (p. 330). While the authors stated that the emotional responses described by the participants were consistent with those identified by Jameton as indicative of moral distress, the nurse practitioners in this study "vehemently disagreed with the phrase *moral distress*, explicitly stating that the words did not accurately reflect their experiences" (p. 335). The researchers concluded that moral distress did occur in the practice of nurse practitioners but that advanced practice nurses may not recognize and manage moral distress in the same manner as other nurses.

The occurrence of moral distress in nurse practitioners was also examined by Laabs (2005). Seventy-one nurses who worked in primary care settings completed a researcher-designed questionnaire that focused on ethical issues that occurred in their practice, the frequency of occurrence, the degree of distress associated with each situation, and the types of moral problems associated with the ethical issues, including moral distress, moral dilemmas, moral uncertainty, and moral outrage. Psychometric properties of this measure were not reported. The author found that while some nurse practitioners encountered ethical situations in their practice, 67% indicated that they never or rarely were faced with the ethical issues included in the survey or with other ethical situations. Of the nurse practitioners who specified that they had encountered ethical issues with accompanying distress, 10% indicated that they had experienced moral distress, with associated feelings of powerlessness and frustration. These feelings resulted in some nurse practitioners leaving their jobs and thinking about abandoning their advanced practice role. The author concluded that not as many nurse practitioners participating in this study experienced ethical issues or distress to the degree as had been



proposed in previous literature, stating that the cause of these finding was not readily identifiable.

Laabs (2007) undertook a grounded theory study of moral conflict in nurse practitioners (NP) employed in primary care, including the specialties of family practice, pediatrics, adult health, and geriatrics. Twenty-three nurse practitioners participated in interviews that entailed responding to three hypothetical situations regarding patients and their care. Data were analyzed employing a constant comparative method. The core category that emerged from the data was “maintaining moral integrity” (p.798). This grounded theory study involved four stages that included the work environment, relationships with patients within the role of NP, experience and knowledge, and values. There were four phases related to the four stages that included encountering a conflict situation, determining practice parameters, meeting patient needs within these practice parameters, and determining if the integrity of the NP had been preserved. Nurse practitioners who perceived that their integrity had not been compromised experienced no distress, while those whose integrity had been compromised experienced varying degrees of psychological distress that included feelings of frustration over external constraints, self-doubt, indignation related to the unethical behavior of others, regret, sorrow, and disappointment. Nurses utilized various methods to reduce distress including avoidance of situations that precipitated distress, leaving their place of employment, and seeking to compensate for their behavior. While the researcher did not refer to the distress that resulted from these moral conflicts as moral distress, the emotions experienced by the NPs were consistent with the findings of moral distress in nurse practitioners in studies conducted by Godfrey and Smith (2002) and Laabs (2005).

### *Moral Distress in a Labor and Delivery Nurse*

The occurrence of moral distress gleaned from an interview with a labor and delivery nurse who participated in a physician's decision to allow a premature infant to die while telling the mother that the infant was dead at the time of delivery was examined by Wilkinson (1989). The participant identified moral issues associated with the situation, perceived constraints that prohibited her from acting in what she believed was the morally correct manner, consequences of her action in relation to patient care, and emotions associated with the moral distress she experienced. These findings supported Wilkinson's (1988) earlier work on moral distress and the need for further research to examine the effects of moral distress on nurses personally and on their delivery of patient care.

### *Acute Care Nurses and Moral Distress*

Ethical issues in nursing practice were explored by Holly (1993) in a qualitative study of 65 nurses who worked as acute care nurses. Participants were asked to respond in writing regarding an ethical issue encountered in their work, with a description of their reaction and feelings about the issue. Three categories emerged from the findings: (1) exploitation or treating patients or families in an impersonal manner; (2) exclusion or the treatment of patients in a manner that did not consider or respect their desires; and (3) anguish that occurred when constraints prevented nurses from acting as the patient's advocate. While the author did not refer to the nurses' experiences as moral distress, she stated that the constraints that prohibited ethical actions supported the findings of Wilkinson (1988).

*Moral Distress in Nurses Caring for Dying Children and Children in a Persistent Vegetative State*

Davies et al. (1996) employed a grounded theory approach to examine the experiences of 25 nurses who had cared for a dying child. In semi-structured interviews, nurses discussed experiencing grief distress and moral distress when it became apparent that a child was terminal. Moral distress resulted when nurses felt that following physicians' orders conflicted with their beliefs that the prescribed care contributed to the child's suffering and was inconsistent with the desires of the family. As a result, nurses experienced feelings of powerlessness, helplessness, resentment, anger, and sadness. Nurses who were able to be participants in the plan of care of the child and who engaged in communication with other members of the health care team were better able to deal with their feelings of distress. While all nurses interviewed did not experience moral distress, those who did related that it intensified their grief over the impending death of the child. Finally, the author identified that while the feelings the nurses experienced were consistent with those of nurses experiencing moral distress (Fenton, 1988; Wilkinson, 1988), none of the nurses identified the issues as moral dilemmas. She also found that grief distress does not necessarily result in moral distress.

A study of nurses caring for children in a persistent vegetative state (PVS) was undertaken by Montagnino and Ethier (2007). Eight nurses working in a step-down unit of a Children's hospital completed a demographic questionnaire and participated in a face-to-face interview conducted by one of the researchers. Interviews were conducted over a seven month period and analyzed using van Kaam's method of phenomenologic analysis. Themes that emerged from analysis included "focusing on the parents,

delivering sensorially offensive physical care, enduring conflicting emotions, suffering moral distress, finding relief and comfort, and gaining perspective” (p. 440). Nurses related experiencing moral distress in response to feelings of powerlessness in relation to patient care, conflicting feelings of prolonging the dying process, and concerns over children’s levels of awareness and ability to experience pain. Moral distress was related to nurses caring for children who would not improve clinically and this care was perceived as an overall negative experience for these nurses. Nurses also reported that methods of dealing with distress associated with caring for children in a PVS included developing a support network with other nurses and nurturing a relationship with the patient’s family members to gain an understanding of their feelings regarding the child.

#### *Recent Graduate Nurses and Moral Distress*

In a follow-up study of student nurses’ perceptions of their professional and personal values, Kelly (1998) conducted a grounded theory study of 22 nurses that focused upon their perception of how they had adapted to the role of a graduate nurse two years after graduation. Open-ended interviews were utilized to assist the researcher in determining how nurses perceived they had adapted to the role of practicing nurse and what factors they felt had affected their personal, moral values. The author found that as these new nurses struggled to adapt to their professional role, they suffered feelings of vulnerability, threats to their moral integrity, and a compromising of their professional standards. As a consequence, these nurses experienced moral distress and feelings of lowered self-esteem, powerlessness, self doubt, and thoughts that they would not be the type of nurse they wanted to be. Consequences of coping with the experience of moral

distress included leaving their nursing unit, leaving the profession, blaming nursing and hospital administration, and avoiding patient contact.

#### *Moral Distress in Army Nurse Corp Officers*

In a 2002 qualitative study, Fry, Harvey, Hurley, and Foley employed semi-structured, audio-taped interviews to elicit the stories of moral distress from 13 Army nurse corp officers who had been deployed during a military crisis. The authors stated that the unique aspects of military nursing deployment contributed to moral distress, including working in hazardous areas, employing military triage of patients, experiencing mass casualties, and the sudden displacement of nurses from family and support systems. They discovered that these nurses had experienced initial moral distress when they encountered constraints to desired moral action regarding patient care. Initially moral distress was associated with such feelings as powerlessness, anxiety, and anger. If these barriers could not be overcome, the nurses responded by not taking any action or being incapable of following through with actions they had begun previously. As a consequence, the nurses experienced a reactive distress which had both short and long term ramifications on them personally, such as feelings of worthlessness, loss of confidence, and nightmares as well as on their nursing care including withdrawing from nursing and burnout.

#### *Moral Distress in Mental Health Nurses*

A hermeneutic phenomenological study was undertaken by Austin, Bergum and Goldberg (2003) examining the occurrence of moral distress in mental health nurses in relation to their delivery of nursing care. Nurses related experiencing moral distress as a result of inability to deliver quality nursing care related to a lack of personnel and

resources. The nurses recounted feeling discouraged and disconnected from patients and felt that there was a lack of respect for both patients and nursing staff on the part of the administrators. The authors concluded that identification of the occurrence of moral distress can be an initial step toward dealing with the cause. “Naming and understanding the distress that arises when we are blocked from answering the call of our patients is a first step toward empowering ourselves to action” (p. 183).

#### *Moral Distress in Nurses Working in a Neurological Unit*

A qualitative study of moral distress in Chinese nurses working in a neurological unit was undertaken by Ping Fen, Johansson, Wadensten, Wenneberg, and Ahlstrom (2007). Twenty nurses agreed to participate in this study. Audio taped interviews lasting between 45 to 60 minutes were carried out by two of the researchers. Questions that guided the interview process focused upon upsetting situations in the workplace, ethical situations encountered in the workplace, coping strategies utilized, discrepancies between ideal quality of nursing care and the actual level of care delivered, and obstacles encountered in attempts to resolve ethical issues. Latent content analysis was used to analyze the data. Researchers discovered that nearly all of the participants experienced both ethical dilemmas and distress in their practice. Situations eliciting distress included conflicts of opinions on the best course of treatment for patients with family members, failure to treat patients due to their inability to pay, lack of nursing influence in decision-making, excessive workloads, and lack of respect from doctors, patients, and their relatives. Nurses reported physical and psychological manifestations related to ethical dilemmas including deteriorating physical health as well as feelings of powerlessness, sadness, exhaustion, and difficulty relaxing while away from work; symptoms Wilkinson

(1988) associated with moral distress. The authors concluded that these nurses experienced moral distress from a variety of factors including discrepancies between their professional responsibilities to patients and lack of input into decision-making, subordination to physicians, excessive workload, and ethical situations encountered in practice. Because they found that both nurse characteristics and workplace issues contributed to moral distress, they stated that “there is a need for changes in both management style and nurse work environment” (p. 822) in dealing with moral distress, and that moral distress would be reduced by an increase in job satisfaction.

#### *Nurses Assisting with Abortions and Moral Distress*

Hanna (2005) employed a modified phenomenological study to examine the lived experience of moral distress in 10 registered nurses who willingly or unwillingly assisted with legal, elective abortions through a series of three interviews. As a result of this study, the author arrived at five properties of moral distress. These included: (1) *perception* or comprehension of a moral harm experienced both physically as well as intellectually; (2) emotional *pain*, expressed as shock, dismay, and horror and experienced personally in regard to the aborted fetus and empathically for the patient undergoing the abortion; (3) *valuing* or the sense of obligation to the patient as well as judgments regarding the patient’s decision to undergo the abortion; (4) *altered participation* or the reflection upon, or suppression of, the experience of moral distress; and (5) *perspective* or personal views regarding abortion as well as concerns regarding the long term effects of abortion on the patient. Hanna also identified three types of moral distress that included shocked moral distress manifested as anger, fear, or panic; muted moral distress displayed as shock, fatigue, or headache and associated with an

accompanying external silence; and suppressed moral distress characterized by its persistence.

#### *Certified Registered Nurse Anesthetists and Moral Distress*

In the only study found that addressed moral distress in Certified Registered Nurse Anesthetists, Mauleon et al. (2005) conducted a qualitative study that examined the experiences of seven nurse anesthetists “to be in problematic anesthesia care situations concerning older patients” (p. 265). Participants were asked to relate a situation that they considered challenging in relation to anesthesia delivery involving the elderly. Two themes emerged from data analysis: (1) struggling to overcome barriers, with resultant feelings of moral failure; and (2) overcoming the barrier to be able to deliver care, with resultant maintenance of moral integrity. Participants experienced moral distress whenever they believed they had encountered constraints that prohibited them from acting in the patient’s best interests and when they acted in a manner considered to be morally wrong, such as yielding to other team members’ demands for patient care during emergency situations. As a result of feeling that they had compromised their integrity, the nurse anesthetists experienced loneliness, despair, and helplessness.

#### *Moral Distress in Nurses Witnessing Medically Futile Care*

Finally, Ferrell (2006) examined the occurrence of moral distress in nurses who witnessed care they believed to be medically futile. One-hundred eight nurses attending two different end-of-life continuing educational courses participated in the study. Fifty-one nurses attending the first course were asked to respond in writing about a situation they had experienced that they would consider involving futile care and their reaction and response to the experience. Fifty-seven nurses at a second course responded



to the initial questions regarding futile care, as well as to additional questions regarding the effect of these situations on the nursing profession and personal spiritual or religious issues that had impacted the experience of futility of care. Surveys were coded so that data were quantified regarding the experience of moral distress. Results indicated that the most distressing situation involved the delivery of aggressive care that nurses viewed as not only futile but prohibiting the patient from receiving palliative care. Emotions nurses experienced in response to the ethical conflicts included frustration, anger, distress, sorrow, and guilt. Nurses also related being actively involved in conflicts involving patients, their families, and physicians.

### 2.3 Conclusion

In conclusion, there is considerable literature on the occurrence of moral distress in nurses, factors that contribute to its occurrence, and the manifestations that result when nurses experience moral distress. The literature also reflects the severity of the effects of this phenomenon on the nursing profession. While some nursing specialties have been examined in relation to moral distress, including critical care nurses, oncology nurses, neonatal nurses, and military nurses, a gap exists in the literature in relation to other nursing specialties. Certified Registered Nurse Anesthetists represent a specialty group of nurses who administer care to patients in extremely critical conditions, involving life or death consequences, and often under conditions independent of anesthesiologists. The occurrence of moral distress in this group of nurses warrants examination, in light of research demonstrating that CRNAs acknowledge encountering ethical issues in their clinical practice (Jenkins et al., 2006) and the very limited research on the occurrence of moral distress in nurse anesthetists.

# Chapter 3

## Methodology

### 3.1 Design

This study employed an exploratory, descriptive, design to examine the occurrence of moral distress in Certified Registered Nurse Anesthetists (CRNAs). Quantitative methods were employed to gather data regarding moral distress as well as demographic data related to the sample. This design was appropriate because no treatment or intervention was administered to the sample, no manipulation of variables occurred in this study, and CRNAs had not been examined previously in relation to moral distress except in one qualitative study.

### 3.2 Sample

Participants were recruited from the registry of CRNAs in the state of Pennsylvania that was obtained from the American Association of Nurse Anesthetists (AANA). When identifying the member types to be included from the organization, the researcher requested the categories of certified (indicating these members had passed the exam within the past two years, and were practicing and voting members of the organization) and recertified (indicating the members had passed the exam over two years ago and were practicing and voting members). Members who were categorized as student, graduate associate (had not yet passed the certification exam), life (typically not

practicing) and inactive (not practicing) were not selected for inclusion because directions on the Ethics Stress Scale asked participants to consider each question as it related to the last year and the researcher could not be certain that the excluded groups of nurse anesthetists had been practicing within that time frame. Utilizing an alpha of .05, an effect size of .20, and a power of .80, a sample size of 160 CRNAs was targeted. With the prospect of receiving a 20% return rate, 800 participants were randomly selected from the registry utilizing a systematic sample. This involved the process of identifying the total number of available CRNAs from the mailing list (2,359). An interval was determined based upon the desired sample size of 160. The total number of available CRNAs (2,359) was divided by the sample size of 160 to arrive at a sampling interval of 15. The researcher placed the numbers 1 through 15 into a bag and selected the number four for the starting point in the selection process. Every 15<sup>th</sup> name was selected until the last name on the registry was reached. At this point the process was begun again with the first name on the registry, selecting every 15<sup>th</sup> name, skipping over those that were already selected, until 800 participants were chosen.

### 3.3 Instruments

Two instruments were employed for data collection for this study: a demographic data questionnaire and the Ethics Stress Scale.

#### *Demographic Data Questionnaire*

Demographic data were collected utilizing a nine-item questionnaire designed by the researcher (Appendix 2). This tool sought to elicit data regarding such variables as age, ethnicity, marital status, gender, highest educational degree, health care setting where the participant was currently employed, employment status, years of service at the

current employer, and years as a nurse anesthetist. Only a few studies examined in the literature review reported a correlation with demographic data and moral distress in their findings. Elpern et al. (2005) reported a positive correlation with years of experience and moral distress. In other words, the more years of experience, the greater the degree of moral distress experienced by the nurses. This finding was not supported by McClendon and Buckner (2007) who found that there was a relationship between age, experience, and moral distress. These researchers discovered that levels of moral distress decreased with age and with years of service. These conflicting results are interesting in light of the fact that both studies utilized Corley's Moral Distress Scale (2001). Finally, Meltzer and Huckabay (2004) found a correlation between higher levels of nursing education and greater levels of distress. Therefore, demographic data were examined to see if levels of moral distress in CRNAs correlated with the demographic variables.

### *Ethics Stress Scale*

The Ethics Stress Scale (Appendix 3) was employed to measure moral distress. This tool was developed by Raines and Tymchuk (Raines, 1994) and was employed by Raines in her study of nurses and ethical decision making. She defined ethical stress "as an individual's perception of the stress experienced while dealing with ethical dilemmas or issues" (p. 34). The Ethics Stress Scale is a self-administered, 56-question instrument with responses for the first 52 questions rated on a Likert-type scale of 1 (agree strongly) to 5 (disagree strongly).

Within the first 52 questions are 3 questions that request supplementary information in addition to the Likert-type responses. Question 24 asks participants to respond to the following: "I sometimes feel powerless/like I have little influence in

dealing with others about ethical issues. Please specify the profession or institutional position of these others (e.g., physicians, nurses, psychologists, administrators, lawyers, etc)\_\_\_\_\_.”

Question 26 asks participants to indicate which of the following are concerns related to ethical decision making: “I worry about losing my job/status/financial security (circle which apply to you) due to the decisions I make regarding ethical issues”.

Finally, Question 46 asks participants to identify professionals they have avoided or stopped working with: “I have avoided working with or stopped working with a nurse, physician, or other professional (please specify which\_\_\_\_\_ ) because of the ethical issues involved”.

Questions 53 through 56 are intended to provide additional information to the researcher and are designed to be answered in various ways. Question number 53 asks participants to rank order three statements according to how much stress they cause: (1) “Not knowing if a situation is actually an ethical dilemma/problem;” (2) “Knowing the ethical thing to do, but not being able to follow through or implement what I think is the ethical thing to do;” and (3) “Not being able to decide what is the ethical thing to do.” Responses for these three questions are to be ranked with a range of 1 (causes most stress) to 3 (causes least stress).

Question number 54 asks participants to identify resources used to deal with ethical stress utilizing a scale of 1 (always helpful) to 4 (not very helpful at all). Participants are presented with 15 options that include: spouse/significant other; hospital chaplain; nurse manager/head nurse/supervisor; hospital administration; other nurses in the workplace; hospital ethics committee; clinical nurse specialist; social worker;

physician; professional organization; staff meetings; ethics rounds; education programs; legal counsel; and books/articles.

Question 55 asks the participant to list other resources utilized in dealing with ethical stress and to rate them using question 54's scale of 1=always helpful to 4=not very helpful at all. The final question, number 56, asks in what manner or from whom the participant would like to receive more support in dealing with ethical issues.

There are six identified subscales of the instrument, based upon the first 52 questions: positive and negative affective subscales; positive and negative behavioral subscales; and positive and negative cognitive subscales. Content validity of this tool was established by Raines (1994) using a 4-option Content Validity Index rating scale by a group of advanced practice nurse clinicians who were exposed to ethical dilemmas in their practice several times per week. Content Validity Index of 0.89,  $p < 0.05$  was obtained. Content Reliability of the tool was also established by Raines employing test-retest methods. A reliability coefficient of  $r = 0.82$ ,  $p = < .005$  was determined. In the current research, the Cronbach's alpha was 0.87 (mean=3.64).

Prior to initiation of the mailing, face validity of questions 1 through 52 was established by review of the Ethics Stress Scale by four nurse educators. One nurse educator was master's prepared and teaching in an associate degree in nursing program; two other nurse educators were teaching in a university program, one of whom was master's prepared and the other PhD prepared; and the fourth nurse educator was PhD prepared with a background in ethics and teaching nursing at the university level.

Permission to use the Ethics Stress Scale was obtained from both authors (Appendix 4).

### 3.4 Data Collection

Following permission from the Duquesne University Institutional Review Board to conduct this research study (Appendix 5), names from the Certified Registered Nurse Anesthetist registry from the state of Pennsylvania were randomly selected. This registry was obtained from the American Association of Nurse Anesthetists (AANA). Selected nurses were sent the Ethics Stress Scale, the demographic questionnaire, and cover letter, along with a self-addressed, postage paid envelope. Participants were asked to complete the forms and return them in the postage-paid envelope. Follow-up reminders (Appendix 6) were sent approximately two weeks following the initial mailing to all who received the original mailing, thanking those who had completed the forms and reminding those who had not to complete the questionnaires if they wished to participate in the study.

### 3.5 Data Management

Data were entered on a Compaq Presario computer by the researcher. Coding of the variables was undertaken by the researcher and confirmed by the Committee Chair. Consistency of entered data was checked in two ways. Data were double checked for accuracy by the researcher after initial entry of each survey and were verified prior to analysis by a doctoral-prepared volunteer with a background in research. Five percent (5%) of the surveys were reviewed and determined to be accurately entered by the researcher.

Data were analyzed utilizing the Statistical Package for the Social Sciences 15.0 (SPSS). Missing data were left blank by the researcher and indicated by a dot in the specific column by SPSS. Analysis of data provided a column labeled as valid percent that provided the percentage of records in a frequency distribution, while omitting

records with missing data. This information (valid percent) was used by the researcher to exclude surveys with missing data.

### 3.6 Human Research Subject Protection

Included with the questionnaires was a cover letter (Appendix 7) which described the research project, request for participation, description of the random selection of participants, and a statement that participants may refuse to answer any questions or not complete the form. To assure anonymity, participants were instructed not to include a return address on the self-addressed, stamped envelope included for return of the surveys. To help prevent participants from including their return address, the researcher's home address was affixed to the upper left hand corner of the return envelope. However, three participants did include their return address on the envelope. In one case, the spouse of the researcher removed and destroyed the identifying information. In the other two cases the researcher removed the identifying information without looking at the surveys. There was also one instance in which a participant included a letter with the surveys. The letter was removed from the envelope by the researcher without reading it and given to her spouse who read the contents of the letter to the researcher, while excluding the participant's name, and then destroyed the letter because of identifying data contained there in. In all of these instances the returned questionnaires were utilized, as they no longer contained an identifier. Voluntary consent was assumed by receipt of unidentified, completed participant questionnaires.

Data collected are secured in a locked safe and locked box in the researcher's home and accessible only to the researcher and Committee Chair. Data will be destroyed by the researcher after completion of the study and dissemination of the findings.



# Chapter 4

## Presentation of Findings

In this chapter, the sample population utilized for this study is described and the findings from this sample are examined to determine their significance. Results of the administered surveys are also analyzed to establish if Certified Registered Nurse Anesthetists experience moral distress in their nursing practice and if relationships exist among the demographic variables and levels of moral distress.

### 4.1 Sample Description

Two hundred and ninety three respondents completed the entire demographic survey. However, all surveys were used to generate demographic data. The majority of respondents (65%) were between the ages of 41 to 60 years of age. Ninety-six percent were Caucasian and 68% were female. The greatest percentage of nurse anesthetists (58%) held master's degrees in nursing or other fields, worked in hospital settings (79%), were married (80%), and had worked 26 years or more as anesthetists (29%). Finally, the majority of respondents (32%) had worked at their current employer between 1-5 years and 83% were employed full time (Table 1).

Table 1

Demographic Data for Certified Registered Nurse Anesthetists (n=300)

<b>Variable</b>	<b>Frequency</b>	<b>Percent</b>
<b>Age</b>		
24-30	9	3.1
31-40	60	20.4
41-50	94	32.0
51-60	98	33.3
61 and over	33	11.2
<b>Ethnicity</b>		
African-American	3	1.0
Asian	3	1.0
Hispanic	1	0.3
Caucasian	281	93.7
Other	5	1.7
<b>Marital Status</b>		
Single	30	10.2
Married	235	79.9
Divorced	18	6.1
Widowed	8	2.7
Separated	3	1.0
<b>Gender</b>		
Male	95	32.3
Female	199	67.7
<b>Highest Educational Level</b>		
Diploma	31	10.6
Associate Degree	12	4.1
BS/BSN	73	24.9
MS/MSN	174	59.4
Doctorate	3	1.0
<b>Current Place of Employment</b>		
Hospital	237	80.9
Clinic/Office	7	2.4
Ambulatory Surgery Center	20	6.8
Other	29	9.9

Table 1 (continued)

<b>Variable</b>	<b>Frequency</b>	<b>Percent</b>
<b>Length of Employment with Current Employer</b>		
Less than 1 year	32	10.9
1-5 years	95	32.4
6-10 years	72	24.6
11-15 years	28	9.6
16-20 years	30	10.2
21-25 years	13	4.4
26 years or more	23	7.8
<b>Number of years as a CRNA</b>		
Less than 1 year	17	5.8
1-5 years	43	14.7
6-10 years	45	15.4
11-15 years	36	12.3
16-20 years	32	10.9
21-25 years	36	12.3
26 years or more	84	28.7
<b>Employment Status</b>		
Full Time	244	83.3
Part Time	43	14.7
Casual	6	2.0

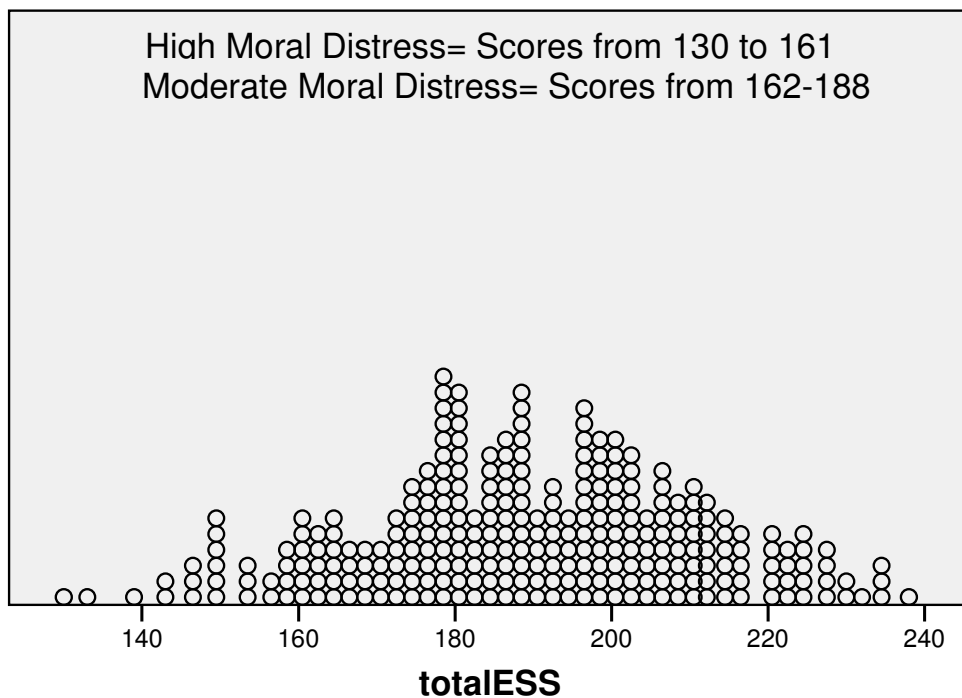
## 4.2 Ethics Stress Scale

Of the 800 surveys that were sent, 302 replies were received by the researcher for a 38% response rate. However, two of the surveys were unable to be used as one survey was returned completely blank and the second had only two responses out of a total of 56 questions. Two hundred and eighty-three surveys (n=283) had complete data for questions 1 through 52 of the tool that were rated on a Likert-type scale of 1=strongly agree to 5=strongly disagree. While the original Ethics Stress Scale included 56 questions, Raines (1994, 2000) did not address the method used to calculate the total score for the Ethics Stress Scale. Therefore, for purposes of this research study, the sum

of responses to questions 1 through 52 was used as the subject's total Ethics Stress Scale score. Totals for these questions ranged from a minimum of 130 to a maximum of 238, with a mean score of 190 (Table 2). The lower 10% of the total Ethics Stress Scale scores were considered indicative of high moral distress, which included scores of 161 and below. Scores of 188 (the median) to 162 were determined to be indicative of moderate moral distress (Figure 2). Questions 53 through 56 provided additional data to the researcher regarding moral distress.

Figure 2

Total Ethics Stress Scale Scores



Subscale scores were also calculated. In review of the previous work done by Raines (1994, 2000) it became apparent that all subscales were not clearly identified in her dissertation or corresponding published article. This presented the researcher with a dilemma regarding assignment of questions to the various subscales. The researcher

attempted to contact Dr. Raines, but was notified by her husband that she was recently deceased. Further correspondence with Dr. Raines' husband was initiated in the hope that he may be able to locate the original data on the Ethics Stress Scale, however this was unsuccessful. The other scale originator, Dr. Tymchuk, was also unable to provide data regarding the composition of the subscales. Therefore, prior to mailing of the questionnaires, questions 1 through 52 were divided into six subscales by the researcher, based in part upon the sample subscales identified by Raines (1994) in her dissertation. Questions that were not identified as belonging to specific subscales by the author were categorized by the researcher and submitted to committee members for review and determination of intra-rater reliability. Finally, correspondence with Dr. Tymchuk produced agreement over the distribution of questions into six subscales. These included cognitive positive and negative subscales, affective positive and negative subscales, and behavioral positive and negative subscales (Appendix 8). There were a total of 16 questions in the cognitive positive subscale, 7 questions in the cognitive negative subscale, 4 questions in each of the behavioral subscales, 7 questions in the affective positive subscale, and 14 questions in the affective negative subscale.

Ranges for the six subscales are displayed in Table 2. The minimum score in the cognitive positive subscale was 43 and the maximum was 74, with a mean of 61. The cognitive negative subscale responses ranged from 11 to 35, with a mean of 26. Affective positive subscale scores ranged from 14 to 35 with a mean of 26. Affective negative subscales ranged from 19 to 68 with a mean of 50. Finally, the minimum score for the behavioral positive subscale was 4 with a maximum of 20 and a mean of 11, and for the negative subscale a low of 7 and a high of 20 with a mean of 15. Lower total

scores and subscale scores for questions 1 through 52 were indicative of higher levels of distress. Therefore the positive subscales ratings were reversed prior to analysis. Thus, in the three positive subscales, strongly agree was rated 5, agree somewhat was rated 4, neither agree nor disagree retained a rating of 3, disagree somewhat was rated 2 and disagree strongly was rated 1. This enabled the researcher to identify the lower 10% of the subscale scores as indicative of higher levels of moral distress. These scores included 52 and below for the cognitive positive subscale, 19 and below for the cognitive negative subscale, 20 and below for the affective positive subscale, 37 and below for the affective negative subscale, 7 and below for the behavioral positive subscale, and 11 and below for the behavioral negative subscale.

Table 2

Cognitive, Behavioral, and Affective Subscale Ranges

	Cognitive Positive	Cognitive Negative	Affective Positive	Affective Negative	Behavioral Positive	Behavioral Negative
Mean	60.55	25.99	26.31	50.47	11.01	15.13
Median	61.00	26.00	26.00	51.00	11.00	15.00
Mode	62	24	24	47	12	15
Standard Deviation	5.898	5.087	4.382	9.590	2.781	2.797
Minimum	43	11	14	19	4	7
Maximum	74	35	35	68	20	20

Pearson product moment correlation coefficients were computed to detect correlations between the subscale scores and the total Ethics Stress Scale scores. There were significant correlations between all subscale scores and the total Ethics Stress Scale scores with the exception of the behavioral positive subscale which did not demonstrate a correlation (Table 3). However, it should be noted that this subscale contained only 4 questions and this may explain the lack of significant correlation.

Table 3

## Total Ethics Stress Scale Scores and Subscale Scores Correlations

		Total ESS	Cognitive positive	Cognitive negative	Affective positive	Affective negative	Behavior positive	Behavior negative
Total Ethics Stress Scale score (TESS)	Pearson Correlation	1	.595(**)	.806(**)	.803(**)	.872(**)	-.051	.599(**)
	Sig. (2-tailed)		.000	.000	.000	.000	.393	.000
	N	283	283	283	283	283	283	283
Cognitive Positive	Pearson Correlation	.595(**)	1	.225(**)	.477(**)	.245(**)	.198(**)	.143(*)
	Sig. (2-tailed)	.000		.000	.000	.000	.001	.015
	N	283	289	289	289	285	288	287
Cognitive negative	Pearson Correlation	.806(**)	.225(**)	1	.546(**)	.781(**)	-.303(**)	.521(**)
	Sig. (2-tailed)	.000	.000		.000	.000	.000	.000
	N	283	289	295	292	286	290	290
Affective positive	Pearson Correlation	.803(**)	.477(**)	.546(**)	1	.617(**)	-.048	.373(**)
	Sig. (2-tailed)	.000	.000	.000		.000	.419	.000
	N	283	289	292	293	287	291	290
Affective negative	Pearson Correlation	.872(**)	.245(**)	.781(**)	.617(**)	1	-.318(**)	.528(**)
	Sig. (2-tailed)	.000	.000	.000	.000		.000	.000
	N	283	285	286	287	287	286	285
Behavior positive	Pearson Correlation	-.051	.198(**)	-.303(**)	-.048	-.318(**)	1	-.142(*)
	Sig. (2-tailed)	.393	.001	.000	.419	.000		.016
	N	283	288	290	291	286	292	288
Behavior negative	Pearson Correlation	.599(**)	.143(*)	.521(**)	.373(**)	.528(**)	-.142(*)	1
	Sig. (2-tailed)	.000	.015	.000	.000	.000	.016	
	N	283	287	290	290	285	288	292

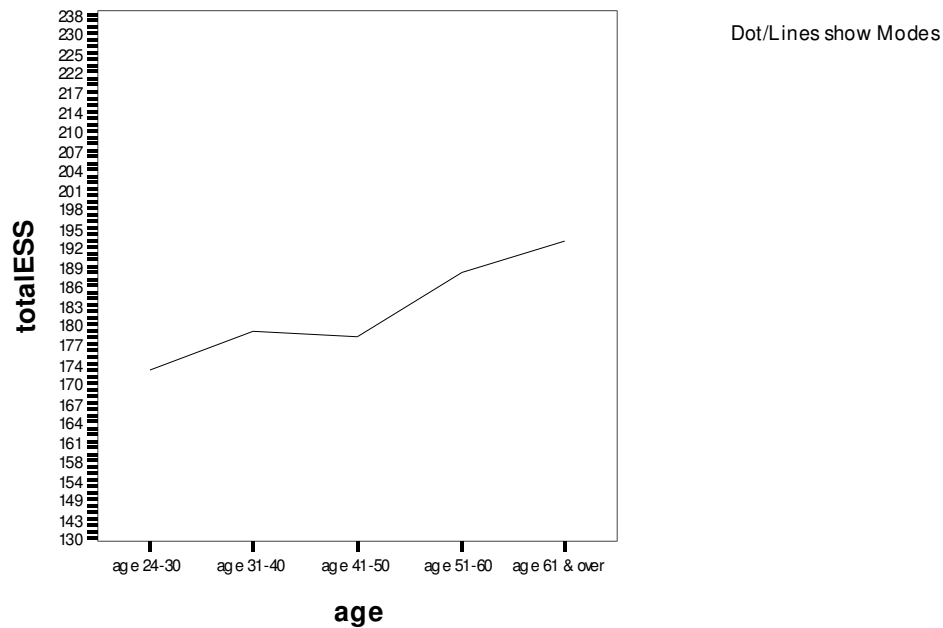
\*\* Correlation is significant at the 0.01 level (2-tailed). \* Correlation is significant at the 0.05 level (2-tailed)



Pearson product-moment correlation coefficients were also computed to determine if correlations existed between the demographic variables and the total Ethics Stress Scale score. Of all of the variables listed on the demographic survey, only age correlated with the total Ethics Stress Scale score ( $r=.120$ ,  $p=.05$ ). CRNAs ages 24-30 had higher levels of moral distress than anesthetists in any other age range (Figure 3). Thus, as nurses' ages increased, levels of moral distress decreased.

Figure 3

Total Ethics Stress Scale Scores and Age



Exploratory factor analysis was performed on the 52 questions rated on the Likert-type scale, utilizing principal component analysis with mean substitution (for full details on the implementation of this factor analysis, see Field (2005)). Factor rotation was performed utilizing oblique rotation with Direct Oblimin and Kaiser Normalization to improve the researcher's ability to interpret the factors. The Kaiser-Meyer-Olkin

Measure of Sampling Adequacy was .873, which Field (2005) identified as in the “great” range. Bartlett’s Test of Sphericity was significant with a value less than 0.05. Thus, given the significance of the test of sphericity and the level of sampling adequacy, it was determined that factor analysis was appropriate for this data.

For primary analysis, Eigenvalues over 1 were identified. This resulted in 15 factors being established. The average communality after extraction was .631. In determining the number of factors to be included, the scree plot was examined (Figure 4), which indicated the point of inflection on the curve occurring at the third factor. This determination was supported by Field (2005) who stated that “with a sample of more than 200 participants, the scree plot provides a fairly reliable criterion for factor selection” (p. 633). The decision to identify three factors was also reinforced by the pattern matrix, which identified factor loadings of 0.4 or greater, with the same three factors emerging. It should be stated that determination of the number of factors to be retained is not an exact science. However, based upon the above criteria, there was good evidence to retain three factors.

The three factors identified, which incorporated a total of 12 questions, were labeled: (1) Factor 1--Somatic Response, with five items loading greater than .50; (2) Factor 2--Self-Reliance, with four items loading greater than .43; and (3) Factor 3—Uncertainness, with 3 items loading greater than .62. These three factors explained 32.33% of the variability in Ethics Stress Scale responses (Table 4).

Figure 4

Scree Plot of Questions 1 through 52 on the ESS with Eigenvalues Greater than 1

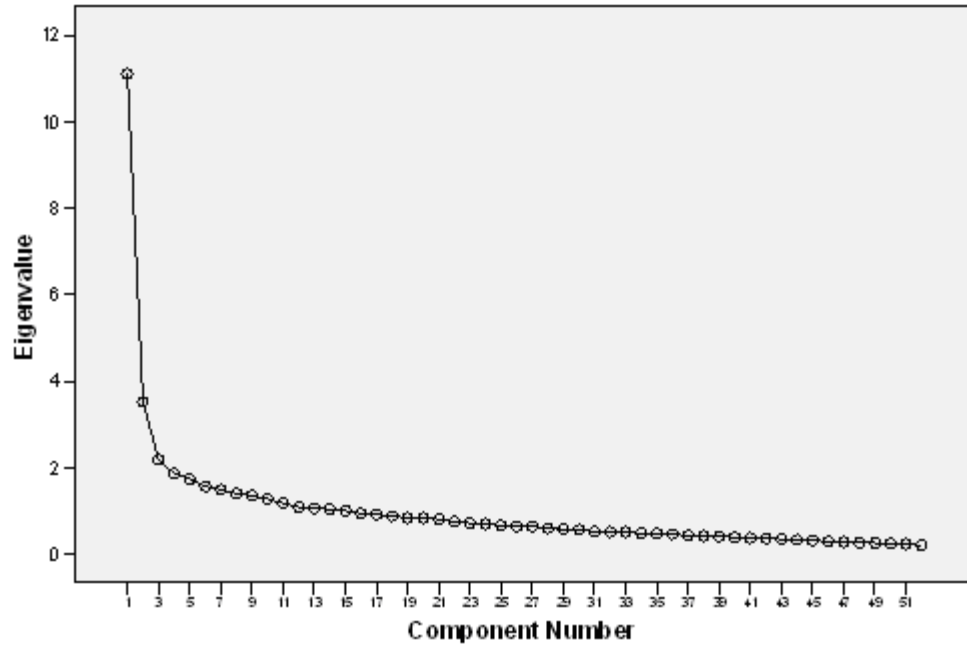


Table 4

Pattern Matrix with Items and Their Loadings for the Ethics Stress Scale

	<b>Factor loading</b>
<b>Factor 1 Somatic Response</b>	
I feel fatigued when I have to deal with ethical dilemmas/problems. (Question 11)	.791
I feel frustrated or angry when I cannot resolve an ethical issue. (Question 9)	.682
I sometimes experience somatic symptoms (i.e. headaches, stomach aches, tension in neck or shoulders) when I have to deal with ethical issues. (Question 47)	.558
I feel more stressed when dealing with some ethical issues than with others. (Question 3)	.518
I think I would be less stressed if there were fewer ethical problems to deal with. (Question 14)	.510
<b>Factor 2 Self-Reliance</b>	
I think I am more concerned about ethical issues than others in my profession. (Question 39)	.804
I frequently discuss ethical issues with colleagues and friends. (Question 38)	.583
I know others I respect/support my decisions about ethical issues. (Question 37)	.439
I think I am more concerned about ethical issues than others in my profession. (Question 40)	-.444
<b>Factor 3 Uncertainty</b>	
I feel confident that I can justify my decisions regarding ethical issues. (Question 6)	.784
I think maintaining professional relationships is important in dealing with ethical issues effectively. (Question 7)	.686
I believe I have handled most ethical issues in my practice appropriately. (Question 4)	.623

All five questions included in factor 1 (somatic response) were assigned to subscales by the researcher, with input from committee members. Questions 3, 9, 11, and 47 were categorized as affective negative and question 14 was categorized as cognitive

negative. All questions addressed physical or psychological manifestations related to dealing with ethical issues, including fatigue, frustration, anger, stress, headaches, stomach aches, and muscle tension. Thus, the term somatic response was chosen as a reflection of the manifestations of moral distress affecting the body. The fact that question 14 was not categorized as affective negative but loaded with other questions categorized as such may suggest that this question should be reclassified as affective negative.

Factor 2 (self-reliance) included 4 questions that were all assigned to subscales by the researcher. Questions 37, 39, and 40 were categorized as cognitive positive and question 38 was classified as behavioral positive. It should be reiterated that positive subscale ratings were reversed prior to analysis to be consistent with negative subscale ratings: lower scores were indicative of higher levels of moral distress. Factor 2 was termed self-reliance because all questions were related to the participants' expressions of confidence in their personal judgment in dealing with ethical dilemmas, rather than the opinions of others. The fact that question 38, which was classified as behavioral positive, interrelated with cognitive positive questions and loaded onto this factor suggests that it may need to be reclassified as a cognitive positive question. Also, the finding that question 39 loaded negatively may indicate that this question should also be re-categorized or reworded to reflect a cognitive negative question.

Factor 3 (uncertainty) included 3 questions. Question 4 was classified by Raines (1994) as cognitive positive, question 6 was classified by Raines as affective positive, and question 7 was classified by the researcher as cognitive positive. This factor was termed uncertainty to reflect the participants' doubts regarding the way they have

handled ethical issues and the role professional relationships played in assisting with their ethical decision making. Again, the fact that question 6 was affective positive and loaded with the other questions categorized as cognitive positive suggests that this question might be reclassified as cognitive positive.

It should be noted that if the above identified questions in the factor analysis had been reclassified in the various subscales indicated prior to this study, total subscale scores and subscale ranges may have been affected.

Questions 24, 26, and 46 requested additional information to the questions rated on the Likert-type response. These portions of the questions were separately coded as Question 24 A, 26 A, and 46 A. Question 24 A asked respondents to identify who nurses felt powerless in dealing with regarding ethical issues. Of the total of 300 respondents who answered question 24, 109 responded with additional information. Thirty eight percent of CRNAs felt powerless in dealing with physicians, 24% indicated feeling powerless in dealing with both physicians and administrators, and 9% indicated administrators. Less frequently occurring responses included a combination of physicians, nurses, and administrators (6%), physicians and nurses (6%), administrators and lawyers (2%), nurses (2%), and physicians and lawyers (2%).

Question 26 A asked participants to indicate which of the following were concerns related to ethical decision making: loss of job, status, and/or financial security. Twenty-three participants out of 300 answered this portion of the question, with 7 participants concerned with loss of job and an additional 7 concerned with loss of job, status, and financial security. Five respondents were concerned with loss of job and their

financial security, 2 were concerned with loss of financial security, 1 was concerned with loss of status and 1 participant was concerned with loss of both job and status.

Finally, question 46 A asked respondents to specify which professionals they had avoided working with or stopped working with because of ethical issues. Of the total of 300 respondents to this question, 53 participants responded to the additional portion of the question. Seventy-seven percent indicated they had avoided/stopped working with physicians, 8% indicated both physicians and nurses, 2% indicated nurses, while 8% stated they had never stopped working with other professionals because of ethical issues.

Other questions of interest on the Ethics Stress Scale included question 53 that asked participants to rank order how much stress each of three situations caused when dealing with ethical dilemmas. Two hundred and ninety participants responded to all three options. CRNAs indicated that “knowing the ethical thing to do, but not being able to follow through or implement what I think is the ethical thing to do” generated the greatest amount of stress (76%), followed by “not being able to decide what is the ethical thing to do” (13%), and finally, “not knowing if a situation is actually an ethical dilemma/problem” (4%).

CRNAs were also asked to identify resources that were helpful in dealing with ethical dilemmas (question 54). They were directed to rate a list of 15 possible resources in regard to their usefulness on a scale of 1 to 4, with 1= always helpful to 4= not helpful at all. Each possible resource was to be rated. However, participants did not reply to every option. Responses to each resource varied from a high of 292 participants to a low of 267. Respondents indicated that they found their spouse or significant other most helpful (45%), followed by other nurses in the workplace (16%), nurse managers/head

nurses/ or supervisors (15%), books/articles and educational programs (12%), and hospital chaplain and hospital ethics committee (11%). Interestingly, 48% of CRNAs identified hospital administration as not helpful at all.

Question 55 asked respondents to identify other resources that they have found beneficial in coping with the stress associated with ethical issues. A total of 95 out of 300 respondents answered this question; over 21% identified religious themes such as prayer, religious beliefs, their faith, the bible, clergy/pastors/ministers, and church as coping mechanisms. Other resources included family and friends (12%), coworkers (6%), and supervisory personnel (2%). However, some respondents indicated that ethical issues were not a problem for them (2%), and others responded that the question was not applicable (4%), that there were no other resources that were beneficial (8%), or answered with a question mark (4%).

Finally, participants were asked in question 56 to identify “from whom or in what way would you like to receive more support in working through ethical issues?” Again, not all CRNAs answered this question—140 answered out of 300 respondents—and responses were varied. However, the greatest majority (9%) indicated they would like more support from physicians, followed by co-workers and colleagues (7%), ethics committees (6%), and hospital administration (5%). Again, some participants (14%) responded with a question mark, or indicated not applicable, none, or that this was not a problem for them.

Questions on the Ethics Stress Scale that addressed findings in the literature regarding behaviors and the occurrence of physical and psychological manifestations related to moral distress were also examined. Ten percent of respondents stated that they



either strongly agreed or somewhat agreed with the statement that they had thought about leaving nursing because of the ethical issues encountered (question 1), 9% had thought of changing their specialty or work setting due to ethical dilemmas in the workplace (question 19), 20% had stopped working with patients or families due to ethical problems (question 15), and 77% had avoided or stopped working with physicians as a result of ethical dilemmas (question 46).

Physical and psychological manifestations of moral distress were also explored. Seventy percent of participants strongly agreed or agreed somewhat that they experienced frustration and anger when they could not resolve ethical issues (question 9), 41% experienced feelings of powerlessness (question 24), 12% experienced guilt (question 28), and 22% experienced somatic symptoms including headache, stomach aches, and tension in the neck and shoulders (question 47).

In addition, it is important to include in this initial phase of the evaluation of the Ethics Stress Scale the findings that, while not statistically significant, there was a relationship between years of experience as an anesthetist and moral distress. CRNAs with less than 1 year of experience had total Ethics Stress Scale scores of 207. This was followed by a sharp decline in scores for CRNAs with 1-5 years of experience. The mode of their total Ethics Stress Scale scores was 150. There was a sharp rise in scores in the 6-10 year range to 179, followed by a decline in scores for anesthetists with 11-15 years of experience, with scores of 163. There was another sharp rise in total Ethics Stress Scale scores to 202 for CRNAs with 16-25 years of experience. Finally, scores dropped slightly for nurses with 26 or more years of experience. The mode of their total Ethics Stress Scale scores was 190.

Total Ethics Stress Scale scores of 150 for the years of experience of 1-5 years were indicative of high levels of moral distress. Thus, there was a negative relationship between years of experience and higher levels of moral distress. Other total Ethics Stress Scale scores indicating moderate levels of moral distress included 6-10 years and 11-15 years as a CRNA, followed by a decrease in the occurrence of moral distress in the 16-25 years of experience range. Finally there was another slight rise in moral distress in those with the most years of experience (26 years or more), but it was not within the range of moderate levels of moral distress.

It should be stated that there appears to be some arbitrariness in relation to the answering of questions 53 through 56, questions that were not utilized for determination of the total Ethics Stress Scale scores. Perhaps participants viewed these as extra questions and only answered those that they felt most strongly about. This may account for the variability in the number of responses to these questions.

### 4.3 Conclusion

Certified Registered Nurses Anesthetists do experience moral distress in their clinical practice. CRNAs ages 24-30 had higher levels of moral distress than anesthetists in any other age range. Nurse anesthetists also identified feeling powerless in dealing with ethical issues, were concerned regarding loss of job, status, and/or financial security related to ethical decision-making, had avoided or stopped working with other professionals because of ethical issues, and found their spouses or significant others most helpful in dealing with ethical issues arising in the workplace. Finally, CRNAs experienced physical and psychological manifestations as a result of moral distress.

# Chapter 5

## Discussion and Conclusions

In this chapter, the results of the data analysis are discussed, conclusions are formulated regarding relationships among the variables, and the findings of the study are summarized and related back to the literature.

### 5.1 Discussion

Research Question 1: What levels of moral distress are experienced by Certified Registered Nurse Anesthetists, as measured by the Ethics Stress Scale?

The data support the assumption that Certified Registered Nurse Anesthetists do experience moral distress in their nursing practice. While the results for this study present a level of “high” moral distress for those who scored in the upper 10 percent of the scores for the Ethics Stress Scale, this cutoff point should be further explored in future research studies in order to determine what is the best cutoff point. Although a small number of CRNAs experienced high levels of moral distress as indicated by total Ethics Stress Scale scores, CRNAs in this study generally experienced moderate levels of moral distress. The finding of the occurrence of moral distress in nurse anesthetists is supportive of much of the research on moral distress presented in the literature review (Hefferman & Heilig, 1999; McClendon & Buckner, 2007; Wilkinson, 1988). The occurrence of moderate levels of moral distress in CRNAs corroborates the findings of

Elpern et al. (2005) and McClendon and Buckner (2007) who reported moderate levels of moral distress in critical care nurses, Corley et al. (2005) who found moderate levels of moral distress in nurses working on medical surgical units, and Corley et al. (2001) who reported moderately high levels of moral distress in hospital nurses.

#### *Wilkinson's Theoretical Framework of Moral Distress*

Within the context of Wilkinson's (1988) Moral Distress Model, nurses are at risk of experiencing both emotional and physical suffering as a result of moral distress. This suffering may in turn impact nurses' ability to realize their role as healer, affect their ethical decision-making, and result in ineffective coping mechanisms. As a consequence of these manifestations of moral distress, nurses experience feelings of lack of control over patient care issues, damage to their self esteem, and negative effects on the delivery of patient care. Wilkinson found that these situations resulted in negative emotions and "psychological disequilibrium," as well as feelings of powerlessness in dealing with ethical situations and ineffective coping behaviors, such as decisions to stop working with patients and families or requesting a change of assignment because of ethical situations, or considering leaving their place of employment or changing their nursing specialty. These types of actions were identified by Wilkinson as ineffective coping behaviors that could result in a fractured sense of self and poor self esteem on the part of the nurse.

The findings of this study support Wilkinson's theoretical framework of moral distress. CRNAs reported experiencing situations in which they believed they were aware of the ethically correct course of action but were unable to follow through with the appropriate behaviors. They also experienced feelings of frustration, anger, guilt and

powerlessness as well as physical symptoms in response to ethical dilemmas. Finally some CRNAs had considered leaving nursing or changing their work setting or specialty as a result of ethical issues in the workplace.

#### *Constraints to Acting in an Ethically Correct Manner*

Certified Registered Nurse Anesthetists overwhelmingly reported that when faced with an ethical dilemma, they believe they know the appropriate ethical response but are unable to follow through with the correct course of action. This finding supported the work of Jameton (1984) who identified that moral distress results when a person is mindful of the morally correct course of action to be taken but encounters obstacles to acting in that manner. It is also consistent with the findings of Wilkinson (1988) who acknowledged four components of moral distress, including a perception by the nurse that constraints inhibited them from carrying out the morally correct response. Finally, Mauleon et al. (2005) found that CRNAs experienced moral distress whenever they believed that they had encountered constraints that prohibited them from acting in a manner they believed was in the patient's best interest.

#### *Physical and Psychological Manifestations of Moral Distress*

Another significant finding is the resultant manifestations of moral distress experienced by CRNAs. These nurses reported psychological symptoms that included frustration, anger, feelings of powerlessness, and, to a lesser extent, guilt, and physical symptoms that included headaches, stomach aches, and muscle tension. These symptoms, as well as crying, sadness, fear, insecurity, decreased self worth, and sorrow, were reported in numerous studies regarding moral distress in nursing (Davies et al., 1996; Felton, 1988; Ferrell, 2006; Fry et al., 2002; Gutierrez, 2005; Kelly, 1998;

Krishnasamy, 1999; Laabs, 2005; Laabs, 2007; Montagnino & Ethier, 2007; Ping Fen et al., 2007; Raines, 2000; Sudin-Huard & Fahy, 1999; & Wilkinson, 1988). Webster and Baylis (2000) reported that these types of reactions are the result of failure to act in an ethically correct manner.

Interestingly, CRNAs felt powerless in dealing with physicians the majority of times (38%), followed by physicians and administrators (24%), and administrators (9%). They rarely reported feeling powerless in dealing with other nurses (2%). This finding is supported by the work of Krishnasamy (1999) and Gutierrez (2005) who found nurses felt that they lacked power to influence decision-making in regard to their patients' care, the research of Zuzelo (2007) who found that ethical dilemmas in the workplace included nurses experiencing feeling subordinate to physicians, and Ping Fen et al. (2007) who found that nurses experienced moral distress as a result of lack of input into decision making and being subordinate to physicians.

#### *Thoughts of Leaving a Nursing Position or Changing a Nursing Specialty*

Throughout the literature, many studies have reported that nurses have left their place of employment, or considered doing so, in response to the occurrence of moral distress. These findings were reported by researchers over a considerable time frame, indicating that the problem is ongoing. While some authors did not include the number of nurses in their study who considered leaving or had left positions (Kelly, 1998; Laabs, 2005; Laabs, 2007; Wilkinson, 1988), others supplied statistics including Corley (1995), who reported this finding in 12% of a sample of 111 nurses, Hamric and Blackhall (2007) who found that 45% of nurses at one hospital involved in their study had reported leaving a job or considered leaving, and Corley et al. (2005) who reported a 25% change of jobs

as a result of moral distress in the workplace in a sample of 106 registered nurses. Ten percent of the Certified Registered Nurse Anesthetists in this study responded that they had considered leaving nursing because of ethical issues and 9% indicated that they had thought of changing their nursing specialty or work setting in response to ethical problems.

#### *Professional Ramifications that Result from Moral Distress*

Several studies in the literature review discuss the professional ramifications experienced by nurses as a result of moral distress. One recurrent theme is that nurses avoid contact with the patients involved in the ethical issues (Kelly, 1998; Wilkinson, 1988), or express a desire to not care for the involved patients (Gutierrez, 2005). Twenty percent of respondents indicated that they have stopped working with patients and families due to ethical dilemmas. Surprisingly, 77% of respondents also indicated that they have avoided working with, or stopped working with, physicians as a result of ethical issues while 8% indicated they have avoided or stopped working with both physicians and nurses. While this finding has not been reported in previous studies, it does highlight further professional effects of moral distress on nurse anesthetists.

#### *Additional Effects of Moral Distress on CRNAs*

Nurse anesthetists also fear loss of job, status, and financial security as a result of ethical decision-making. Thirty percent of respondents indicated they feared losing their job, an additional 30% feared losing their job, status, and financial security, and 21% feared losing their job and financial security as a result of their ethical decision making. These results support the findings of Godfrey and Smith (2002) that nurse practitioners believed their moral responsibilities to meet their patients' needs may result in job loss

and Wilkinson's (1988, 1989) findings that fear of job loss was a constraint to carrying out what was believed to be the ethically-correct action.

Finally, 17% of CRNAs reported that they believed that their ethical values are compromised in their work setting. While the respondents were not afforded a vehicle to elaborate upon what types of situations contributed to these feelings, there are various examples in the literature that address causes of moral distress in the workplace. These include the delivery of aggressive care to patients who will not benefit from that care (Elpern, et al., 2005; Gutierrez, 2005; Hamric & Blackhall, 2007), ignoring the wishes of patients regarding treatment (Gutierrez, 2005), working with unsafe levels of nursing staffs (Austin et al., 2003; Corley et al., 2001; McClendon & Buckner, 2007; Zuzelo, 2007), and working with incompetent physicians (Corley et al., 2001).

#### *Supplementary Findings Regarding Moral Distress in CRNAs*

Another important result is that nurse anesthetists reported that they viewed their spouses and significant others as most helpful in dealing with ethical issues that arise in the workplace. This is an interesting finding that varies from those of Raines (1994, 2000) and Montagnino and Ethier (2007) who found that other nurses were most helpful in dealing with work-related ethical issues, and Zuzelo (2007) who found nurse managers and supervisors to be of most assistance. This discrepancy bears further examination. In the Raines study, the Ethics Stress Scale was administered to a sample of 229 oncology nurses. These nurses may have had a more collaborative practice than CRNAs, being able to more readily seek support in ethical decision-making from other nurses than nurse anesthetists who are generally restricted to a surgical suite for the duration of a procedure, with limited access to fellow CRNAs.



In the Montagnino and Ethier (2007) study, 8 registered nurses participated in the phenomenological study that involved registered nurses working in a step-down unit caring for children in a persistent vegetative state. The intimate nature of this clinical setting and the small sample size may account for the variation in findings regarding support. Nurses may have been able to be more accessible to each other within the setting and therefore able to offer support and assistance to fellow nurses. Accessibility of CRNAs to each other is a logistical issue that, again, may not be able to be realized in the surgical setting where anesthetists are generally restricted to one surgical suite and must be cognizant of time constraints because prompt turnover time between cases is generally expected.

Finally, the study conducted by Zuzelo (2007) utilized the Moral Distress Scale developed by Corley et al. (2001) as well as a questionnaire with four short-answer questions and had a response from 100 nurses working in various nursing units. The fact that these nurses found nurse managers and supervisors to be of most assistance in dealing with ethical issues may be a reflection of the smaller sample size of the study, the use of a different quantitative instrument, and the accessibility of supervisory personnel to non-Operating Room nursing units.

Research Question 2: How do levels of moral distress correlate with demographic variables that include, but are not limited to, age, years of experience, and educational level?

#### *Nurse Anesthetists' Ages and Moral Distress*

Of the demographic data examined, the only statistically significant relationship was between the age of the CRNA and the total Ethics Stress Scale score. There was an

inverse correlation indicating that levels of moral distress decreased with age. These results supported the findings of McClendon and Buckner (2007) who reported that as the nurses' ages increased, moral distress decreased. Thus it appears that younger nurse anesthetists may lack ethical decision-making experience and as a result encounter greater moral distress when faced with ethical dilemmas. This inexperience may be a manifestation of inadequate educational preparation in nursing curriculums in dealing with ethical decision-making or ethics-based practice. Thus, when younger CRNAs are faced with ethical dilemmas, it appears they do not possess the resources upon which to draw in formulating ethical decisions and as a result suffer the negative emotions that are associated with moral distress.

#### *Higher Levels of Education and Moral Distress*

In their study, Meltzer and Huckabay (2004) found a correlation between higher levels of nursing education and greater levels of moral distress. While not statistically significant, the data of this study also indicated that doctoral prepared nurses had higher levels of moral distress than nurses prepared at the diploma, associate degree, bachelors degree, and master's degree levels. This finding should be explored more fully in future research studies to examine the implications of being prepared at the doctoral level in relationship to ethical dilemmas.

#### *Years as a Nurse Anesthetist and Moral Distress*

Finally, while also not statistically significant, there was a negative relationship between years of experience and higher level of moral distress, indicating that CRNAs with lesser years of experience had higher moral distress that decreased with increasing experience. These results are not consistent with the findings of Elpern et al. (2005) who

reported a correlation between greater degrees of moral distress and more years of experience. This discrepancy may be related to the small sample size of 28 critical care nurses who participated in their study, as opposed to the 300 CRNAs who participated in the current research. The findings, however, do support McClendon and Buckner's (2007) discovery that moral distress decreased with years of service. Also, the precipitous rise in moral distress in those with 1-5 years of experience may reflect a progression of the anesthetist from the status of new graduate who is on orientation and therefore working closely with a more experienced practitioner to one who is considered capable of independent functioning and decision making. Thus when faced with the prospect of more autonomous anesthesia practice, the CRNA may initially experience greater levels of moral distress.

## 5.2 Conclusions

The findings from the data analysis performed on this research are generally consistent with those findings presented in the review of the literature regarding moral distress. Certified registered nurse anesthetists do experience moral distress in their nursing practice, however high levels of moral distress occurred in a relatively small number of participants and generally nurse anesthetists experienced moderate levels of moral distress. CRNAs experienced distress when they encountered situations in which they believed they were aware of the morally correct course of action but were unable to follow through with these behaviors. They reported physical and psychological manifestations in relation to moral distress and have considered changing jobs or

specialties or even leaving nursing as a result of ethical dilemmas. Finally, CRNAs in the age group of 24-30 experienced higher levels moral distress, which then decreased with age.

# Chapter 6

## Limitations, Implications, and Recommendations

This chapter will focus upon implications for nursing practice that flow from this study, limitations inherent in the design and execution of this study, and recommendations for future research.

### 6.1 Limitations

Inherent in the design and execution of this study are various limitations that must be addressed.

Potential participants were recruited from the registry of CRNAs from the state of Pennsylvania, obtained from the American Association of Nurse Anesthetists. (AANA). This restricts the generalization of the findings to the larger population of CRNAs.

Data analysis and interpretation of the subscales presented another limitation. No published documentation regarding the method of calculation of total scores for the Ethics Stress Scale was available. And while the value of the tool was evident, the proper interpretation of scores and subscales presented a challenge. There was a lack of information on the assignation of questions to the six subscales, as well as lack of data on how the subscales were related to the total Ethics Stress Scale scores. The method of calculating cutoff scores for “high” and “low” moral distress based on the total scores was also unavailable. Raines (1994, 2000) addressed correlations of subscales to other

tools utilized in her study but not to the total Ethics Stress Scale scores. The researcher's attempts to obtain this information were unsuccessful and resulted in analyzing the data in a primarily exploratory fashion. The researcher, with the assistance of committee members, determined cut-off scores for both the total Ethics Stress Scale scores and the subscale scores. However, future studies should further refine the clarification of the subscales, the direction of the positive and negative scales, and the cutoff points for high moral distress and low moral distress.

Lack of correlation between the total Ethics Stress Scale scores and the behavioral positive subscale is also a concern. It appears that the behavioral positive subscale is not predictive of total moral distress. This finding may indicate a chance grouping of questions in this subscale that have no predictive power.

A fourth limitation focuses upon the fact that the Ethics Stress Scale questions elicited information regarding the occurrence of moral distress, but did not provide a vehicle for elaboration of the types of situations that elicited the greatest degree of distress or the frequency of occurrence of distress in various situations. Throughout the literature review, studies identified many situations (such as providing aggressive care to terminal patients, ignoring patients' desires regarding their care, and working with incompetent physicians and nurses) as morally distressing. However, this type of information was unable to be elicited with this survey. Therefore, in future studies, researchers should consider the addition of open-ended questions that would address the occurrence of moral distress in specific situations encountered in the clinical setting.

## 6.2 Implications

The implications for nursing practice that emanate from this study focus upon reducing the occurrence of moral distress in Certified Registered Nurse Anesthetists and promoting support for ethical decision making for nurses in the workplace.

This study was undertaken because the researcher believed that the occurrence of moral distress was a significant practice issue for CRNAs and was deeply concerned with the suffering of those dedicated to the healing of others. Although data analysis revealed, as was expected, a wide range of total Ethics Stress Scale scores, high moral distress was defined at the 10<sup>th</sup> percentile. Generally, CRNAs in this study experienced moderate moral distress. Nurse anesthetists also reported experiencing both physical and psychological manifestations of moral distress. These findings support the literature regarding the occurrence of moral distress in nursing practice settings and indicate that nurse anesthetists do experience suffering as a result of the occurrence of moral distress. The significance of suffering on the part of nurse anesthetists cannot be minimized. And it should be noted that it may be impossible to practice nursing without encountering some degree of ethical conflict. However, the occurrence of moral distress that results from ethically-challenging situations appears to increase the burden of functioning in an already professionally-challenging nursing specialty, leading to avoidable stress and negative emotions. Continued moral distress may result in moral residue, with the nurse anesthetist being plagued with feelings of guilt, powerlessness, anger and frustration for a prolonged period of time. One must question how the nurse anesthetist can continue to function effectively in the role of healer while dealing with the adverse consequences of moral distress.

Another important result is that nurse anesthetists reported that they found their spouses and significant others most helpful in dealing with ethical issues that arise in the workplace. This finding suggests that nurse anesthetists may be fearful of openly discussing ethical issues in the workplace, possibly due to fear of job loss and financial security, as indicated by their responses to these questions. Thus, they feel safer discussing ethical issues with their spouse or significant other. This also indicates that CRNAs may experience feelings of a lack of support within the work setting in dealing with ethical issues and thus turn to spouses or significant others for support that is lacking in the workplace.

It is apparent that greater emphasis must be placed on alleviating the moral distress encountered by nurse anesthetists and providing greater support for ethical decision making in the workplace. Perhaps if CNRAs perceived greater support by physicians, fellow nurses, and administration in ethical decision-making, there would be a decrease in the degree of moral distress experienced and a reduction in the occurrence of manifestations of these stressful feelings. It must be recognized that since life and death decisions are a facet of the responsibilities of the nurse anesthetist, they may not be afforded the luxury of extensive consultations regarding ethical issues. Thus it becomes critical that support of fellow CRNAs and physicians, both anesthesiologists and surgeons, be readily available during these urgent times so that timely decisions can be made without compromising the well-being of the patient. This fact was borne out by respondents who stated that they would like more support from physicians and other nurses in dealing with ethical issues.



The findings that age was inversely correlated with moral distress and that high moral distress was associated with lesser years of experience as a nurse anesthetist suggest that younger anesthetists and novice practitioners should be afforded greater support in ethical decision making. As young and newly graduated nurse anesthetists begin to function more independently following an initial orientation period, autonomous ethical decision-making seems to become most stressful. Mentoring of younger and newer practitioners by both other CRNAs and physicians may provide guidance and input regarding the most appropriate methods to address ethically challenging situations for these anesthetists and lead to alleviation of the occurrence of moral distress.

Implications of this study also suggest continued research into the complexity of the issue of moral distress and methods to alleviate its occurrence. This phenomenon permeates many nursing specialties and contributes to the suffering of countless nurses. It cannot be over emphasized that we cannot ignore the suffering of our fellow nurses in relation to the occurrence of moral distress. While increased experience within the clinical setting may assist in ethical decision making and lead to a decrease in moral distress, constraints that nurses perceive as impacting their ability to act in the ethically correct manner must be identified and removed. Physicians, nurses, and supervisory personnel must assist and support CRNAs and other nurses in their ethical decision making and strive to improve communication in dealing with these issues. Nurse anesthetists must also assume initiation of a dialogue with coworkers to improve communication and expand resources to deal with ethical issues. This is imperative since many CRNAs work independently and may not have physicians and other anesthetists readily available for consultation at the most critical times.

Other support resources should be examined that may contribute to recognition and understanding of ethical issues in the workplace and assist CRNAs in dealing with these issues when they arise. Educational and departmental in-service programs that address ethical dilemmas may foster greater dialogue between CRNAs and physicians and promote an understanding of the issues that confront nurse anesthetists in their practice and contribute to greater support and decreased moral distress.

Finally, interventions should be developed that are aimed at the reduction and alleviation of moral distress in CRNAs. Nursing and hospital administrators should strive to identify and implement strategies that will alleviate the occurrence of moral distress in nurse anesthetists in an attempt to decrease the burden of functioning in an already professionally challenging nursing specialty. These may include identification and elimination of constraints that CRNAs perceive as affecting their ability to act in what they believe is the morally correct manner, encouraging nurse anesthetists to communicate with their coworkers and supervisory personnel in response to morally distressing patient care situations, and greater involvement of ethics committees to provide forums for the discussion of ethical dilemmas and approaches to dealing with them in an ethically correct manner.

### 6.3 Recommendations

As a result of this study and its findings, several recommendations for future research are recognized. Further research testing of the Ethics Stress Scale is recommended. The results of this study have demonstrated that this instrument is useful in measuring moral distress in nurses; however several suggestions for this tool are in order. The researcher would propose separation of questions 24, 26, and 46 which

require two-part responses, into additional questions for clarity. By adding those questions as separate and distinct questions, it is anticipated that better responses would result. It appeared that many participants did not recognize that additional information was being requested.

Question 55 should be reworded to be answered as an open-ended question, rather than requesting that participants use a scale of 1=always helpful to 4=not helpful at all in relation to resources for coping with ethics-related stress. Respondents did not use the scale as directed and generally answered only with additional support resources utilized.

Finally, additional open-ended questions should be considered that direct participants to address those situations that they find most distressing in relation to ethical issues. Open-ended questions could be utilized to ask the participants to include their thoughts on feeling subordinate to physicians in regard to ethical decision making and specific issues related to patient care.

The assignment of questions to the various subscales should also be considered. Results of the factor analysis suggest that some of the questions in the existing subscales may be better suited to other categories.

The issue of scoring of the Ethics Stress Scale should also be reviewed. Methods for arriving at total Ethics Stress Scale scores and subscale scores should be researched further. It would also be less confusing if the negative subscales were reversed rather than the positive subscales so that higher total and subscale scores were indicative of higher distress rather than lower scores being reflective of higher distress.

A change to the demographic data questionnaire that would include a question on the number of years the CRNA had been a registered nurse should be added. Resulting

data may provide additional insight regarding ethical decision making. Random sampling of CRNAs from a larger, more geographically diverse population may provide a better picture of the relationship among Ethic Stress Scale questions and between Ethics Stress Scale questions and demographic variables. Results could then be compared for differences and similarities related to geographic locations, hospital description, gender, and other descriptors.

Finally, replication of this study is feasible and may illuminate this area of research and generate additional implications for nursing research and practice. This study is a first step in establishing the baseline criteria for scoring and interpreting the Ethics Stress Scale. Other studies are needed to further establish scoring criteria.

#### 6.4 Conclusion

In conclusion, the findings of this study support the occurrence of significant moral distress in Certified Registered Nurse Anesthetists. Any moral distress among nurse anesthetists is worthy of study in order to determine ways of decreasing this stress. In an era where there is a critical shortage of nurses and where nurses are leaving the work force, it is incumbent upon researchers to explore all issues that impact the quality of life of nurses. The results of this study supplement existing nursing knowledge, emphasizing the importance of the recognition and alleviation of the occurrence of moral distress in nurses. Nursing research that would continue to examine this phenomenon in an effort to identify resources that nurses could draw upon when dealing with ethical issues and provide nurses with interventions and specific prevention techniques is recommended.

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## APPENDICES

## APPENDIX 1

From: JudithWilkinson  
[jwilkinson11@mac.com]  
To: Radzvin, Linda C.  
Cc:  
Subject: Re: Moral distress mode.

Sent: Thu 5/3/2007 8:07 PM

Attachments

:

[View As Web Page](#)

Dear Ms. Radzvin,

I am happy to grant you permission use my moral distress model in your doctoral dissertation. This e-mail is adequate permission as far as I'm concerned. I trust you won't be selling your dissertation - not many people do that, I think. : ) The address you have for me is correct, should you be required to obtain a hard-copy signature.

I'm not familiar with the Raines and Tymchuk scale, but I do seem to recall someone named Raines who did some moral distress work as a part of a masters thesis or doctoral dissertation - but not a scale, a qualitative study as I recall. You probably have found it already, but Mary Corley has also done work on a moral distress scale. She is/was at Virginia Commonwealth U, I believe.

Best wishes for your work on your dissertation. Let me know if there is anything further I can do to help.

Judith Wilkinson

On May 3, 2007, at 1:41 PM, Radzvin, Linda C. wrote:

Dear Dr. Wilkinson,

I am a student in the PhD in nursing program at Duquesne University in Pittsburgh, PA and I am currently in the dissertation phase of my program.

I am planning on studying the occurrence of moral distress in certified registered nurse anesthetists and I would like to use your Moral Distress Model as the theoretical framework. I will be undertaking a quantitative study utilizing the Ethics Stress Scale developed by Raines and Tymchuk to conduct the survey.

I am writing to ask your permission to use this model in my dissertation.

If you would be so kind as to grant permission, I may need to also send you a letter requesting permission and a response that would contain your signature. I am not sure that this will be necessary as I may be able to include the email stating permission. However if I need to write to you I have the following address that I am assuming I could use to contact you. It is 11959 West 66th Street, Shawnee, KS 66216.

I look forward to hearing from you regarding this matter and would like to thank you in advance for taking time from your busy schedule to deal with this issue.

Sincerely,

Linda C. Radzvin, MSN, MEd, RN, CRNP

**APPENDIX 2**  
**Moral distress in Certified Registered Nurse Anesthetists study**  
**Demographic data survey**

Please complete the following questions about yourself.

1. Age: \_\_\_\_\_ 24-30  
          \_\_\_\_\_ 31-40  
          \_\_\_\_\_ 41-50  
          \_\_\_\_\_ 51-60  
          \_\_\_\_\_ 61 and over

2. Ethnicity: \_\_\_\_\_ African American  
                  \_\_\_\_\_ Asian  
                  \_\_\_\_\_ Hispanic  
                  \_\_\_\_\_ Caucasian  
                  \_\_\_\_\_ Other

3. Marital status: \_\_\_\_\_ Single  
                          \_\_\_\_\_ Married  
                          \_\_\_\_\_ Divorced  
                          \_\_\_\_\_ Widowed  
                          \_\_\_\_\_ Separated

4. Gender: \_\_\_\_\_ Male  
                  \_\_\_\_\_ Female

5. Highest Educational Level: \_\_\_\_\_ Diploma  
  \_\_\_\_\_ Associate Degree  
  \_\_\_\_\_ BS/ BSN  
  \_\_\_\_\_ MS/MSN  
  \_\_\_\_\_ Doctorate

6. Current place of employment: \_\_\_\_\_Hospital  
\_\_\_\_\_Clinic/ Office  
\_\_\_\_\_Ambulatory Surgery Center  
\_\_\_\_\_Other

7. Length of employment with current employer: \_\_\_\_\_less than 1 year  
\_\_\_\_\_1-5 years  
\_\_\_\_\_6-10 years  
\_\_\_\_\_11-15 years  
\_\_\_\_\_16-20 years  
\_\_\_\_\_21-25 years  
\_\_\_\_\_26 years or more

8. Numbers of years as a CRNA: \_\_\_\_\_less than 1 year  
\_\_\_\_\_1-5 years  
\_\_\_\_\_6-10 years  
\_\_\_\_\_11-15 years  
\_\_\_\_\_16-20 years  
\_\_\_\_\_21-25 years  
\_\_\_\_\_26 years or more

9. Employment status: \_\_\_\_\_Full-time  
\_\_\_\_\_Part-time  
\_\_\_\_\_Casual  
\_\_\_\_\_Unemployed

APPENDIX 3  
ETHICS STRESS SCALE

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**Please consider each of the statements below as it relates to the last year. Place a number from the scale below in the space at the left which most closely corresponds to how you feel about each statement. Thank you**

	Agree Strongly	Agree Somewhat	Neither Agree nor Disagree	Disagree Somewhat	Disagree Strongly
	1	2	3	4	5

**STATEMENTS**

1. \_\_\_\_\_ I have thought about leaving nursing because of the ethical issues/  
dilemmas I face.
2. \_\_\_\_\_ I worry that I handle ethical issues inappropriately.
3. \_\_\_\_\_ I feel more stressed when dealing with some ethical issues than with  
others.
4. \_\_\_\_\_ I believe I have handled most ethical issues in my practice appropriately.
5. \_\_\_\_\_ I think other people interfere with my being able to implement/follow  
through on my decisions related to ethical problems.
6. \_\_\_\_\_ I feel confident that I can justify my decisions regarding ethical issues.
7. \_\_\_\_\_ I think maintaining professional relationships is important in dealing  
with ethical issues effectively.
8. \_\_\_\_\_ I think the setting in which I work influences my ethical decision making  
in a positive manner.
9. \_\_\_\_\_ I feel frustrated or angry when I cannot resolve an ethical issue.
10. \_\_\_\_\_ I have adequate consultation resources and social support regarding the  
ethical issues I face.
11. \_\_\_\_\_ I feel fatigued when I have to deal with ethical dilemmas/problems.

	Agree Strongly	Agree Somewhat	Neither Agree nor Disagree	Disagree Somewhat	Disagree Strongly
	1	2	3	4	5

- 12.\_\_\_\_ I have modified some of my clinical decisions regarding patient(s) because of ethical issues.
- 13.\_\_\_\_ I think my job is more difficult than it used to be because of ethical issues.
- 14.\_\_\_\_ I think I would be less stressed if there were fewer ethical problems to deal with.
- 15.\_\_\_\_ I have decided to stop working with a patient(s)/family or asked for a change of assignment because of the ethical issues involved.
- 16.\_\_\_\_ I feel dissatisfied about ethical decisions I have made/not made in my work.
- 17.\_\_\_\_ I often feel uneasy/uncomfortable about following through/implementing my ethical decisions.
- 18.\_\_\_\_ I think I can identify ethical issues found in my professional practice.
- 19.\_\_\_\_ I have thought about changing my nursing specialty/work setting due to problems with ethical issues.
- 20.\_\_\_\_ I never feel frustrated or angry over the way ethical issues are handled in my institution.
- 21.\_\_\_\_ I tend to recognize ethical issues before my colleagues do.
- 22.\_\_\_\_ I think general ethical principles (i.e. beneficence, justice, patient autonomy) are sufficient as guidelines for dealing with ethical issues I face.
- 23.\_\_\_\_ I sometimes feel overwhelmed by having to make ethical decisions.
- 24.\_\_\_\_ I sometimes feel powerless/like I have little influence in dealing with others about ethical issues.  
Please specify the profession or institutional position of these others (e.g. physicians, nurses, psychologists, administrators, lawyers, etc)\_\_\_\_\_



	Agree Strongly	Agree Somewhat	Neither Agree nor Disagree	Disagree Somewhat	Disagree Strongly
	1	2	3	4	5
25.____	I feel alone in resolving the ethical dilemmas/issues in my work/practice.				
26.____	I worry about losing my job/ status/ financial security (circle which apply to you) due to the decisions I make regarding ethical issues.				
27.____	I feel confident about my professional responsibilities and scope of practice related to ethical issues.				
28.____	I feel guilty about the way I have responded to some ethical issues.				
29.____	I use an ethical decision-making model or other systematic problem-solving method when dealing with ethical issues.				
30.____	I never fear being sued/reprimanded for my decisions related to ethical issues.				
31.____	I feel prepared to deal with the ethical issues I face.				
32.____	I believe there are some ethical issues I can do nothing about.				
33.____	I try to avoid becoming involved with ethical issues because it is stressful to me.				
34.____	I feel good about dealing with the ethical issues in my work.				
35.____	I believe I do everything I need to/ should do regarding ethical issues related to my work.				
36.____	I could be more influential in resolving ethical issues if I had more administrative power.				
37.____	I know others I respect support my decisions about ethical issues.				
38.____	I frequently discuss ethical issues with colleagues and friends.				
39.____	I think I am more concerned about ethical issues than others in my profession.				
40.____	I believe most of my colleagues think the way I do about ethical issues in our practice.				

	Agree Strongly	Agree Somewhat	Neither Agree nor Disagree	Disagree Somewhat	Disagree Strongly
	1	2	3	4	5

- 41.\_\_\_\_ I feel calm when I handle ethical issues.
- 42.\_\_\_\_ I tend to avoid dealing with ethical issues.
- 43.\_\_\_\_ I do not think that my ethical values are compromised in my work setting.
- 44.\_\_\_\_ I get upset when I see others avoiding ethical issues.
- 45.\_\_\_\_ I think Ethics Committees can be very helpful to me when I am facing an ethical dilemma.
- 46.\_\_\_\_ I have avoided working with or stopped working with a nurse, physician, or other professional (please specify which \_\_\_\_\_) because of the ethical issues involved.
- 47.\_\_\_\_ I sometimes experience somatic symptoms (i.e. headaches, stomach aches, tension in neck or shoulders) when I have to deal with ethical issues.
- 48.\_\_\_\_ I think most ethical dilemmas/issues are too complex for me to resolve, so I don't even try to resolve them.
- 49.\_\_\_\_ My religious beliefs help me to cope with ethical issues.
- 50.\_\_\_\_ My ethical decisions have been greatly influenced by the communications media (e.g. television, newspaper).
- 51.\_\_\_\_ Thinking about legal constraints, such as legislative and judicially mandated behaviors, cause me to make decisions I would not otherwise make.
- 52.\_\_\_\_ I often feel "rushed" or "in a hurry" to make decisions regarding ethical problems.

53. The stress experienced by nurses in dealing with ethical dilemmas/issues has many sources. Please rank order the following statements according to how much stress each causes you in dealing with ethical dilemmas/problems.

**1= causes most stress      2=causes some stress      3=causes least stress**

\_\_\_\_ Not knowing if a situation is actually an ethical dilemma/problem

\_\_\_\_ Knowing the ethical thing to do, but not being able to follow through or implement what I think is the ethical thing to do.

\_\_\_\_ Not being able to decide what is the ethical thing to do.

54. Resources that nurses have identified help them deal with stress related to ethical dilemmas/issues are listed below. Please indicate how helpful each resource is to you using the following scale:

**1=always helpful      2=helpful most of the time**  
**3=helpful some of the time      4=not helpful at all**

Spouse/Significant other\_\_\_\_

Hospital chaplain\_\_\_\_

Nurse manager/Head Nurse/ Supervisor\_\_\_\_

Hospital administration\_\_\_\_

Other Nurses in the workplace\_\_\_\_

Hospital ethics committee\_\_\_\_

Clinical Nurse Specialist\_\_\_\_

Social Worker\_\_\_\_

Physician\_\_\_\_

Professional organization\_\_\_\_

Staff meetings\_\_\_\_

Ethics rounds\_\_\_\_

Education programs\_\_\_\_

Legal counsel\_\_\_\_

Books/articles\_\_\_\_

55. Please list any other resources that you find helpful in coping with stress related to dealing with ethical issues/problems and indicate how helpful they are to you using the same scale given in # 54\_\_\_\_\_

56. From whom or in what way would you like to receive more support in working through ethical problems\_\_\_\_\_

APPENDIX 4



CALIFORNIA STATE UNIVERSITY  
SAN BERNARDINO

5500 University Parkway, San Bernardino, CA 92407-2397

COLLEGE OF NATURAL SCIENCES

Department of Nursing

(909) 880-5380

fax: (909) 880-7089

2/8/06

Dear Linda -

Here is a hard copy of the entire Ethics Stress Study Questionnaire I developed for my dissertation (completed in 1994). Please let me know how I may be of assistance to you in your deciding how to use the various parts of the questionnaire.

Good Luck with your study.

Dr. Marcia Raines

P.S. I would like a copy of your results when you're finished. Thanks.

home address ↓

Marcia L. Raines  
P.O. Box 3725  
Crestline, CA 92325

The California State University  
Bakersfield • Channel Islands • Chico • Dominguez Hills • Fresno • Fullerton • Hayward • Humboldt • Long Beach • Los Angeles • Maritime Academy  
Monterey Bay • Northridge • Pomona • Sacramento • San Bernardino • San Diego • San Francisco • San Jose • San Luis Obispo • San Marcos • Sonoma • Stanislaus

From: "Alexander Tymchuk" <ajtymchuk@hotmail.com>

To: radzvinl@duq.edu

Date: Thursday, September 07, 2006 10:31:03 PM

Dear Ms. Radzvin-you certainly have my permission to use it-and thank you

for tracking it down to do so. I am sure that I speak for Marcia as well.

It is nice to see that we sparked an interest. Your topic is a truly worthy

one and I would enjoy hearing of your findings. Good luck on your dissertation.

with best wishes, ajt

To: atymchuk@mednet.ucla.edu

CC: radzvinl@duq.edu

Subject: Ethics stress scale

Date: Thursday, September 07, 2006 10:12:47 AM

Dear Dr. Tymchuk,

I am a student in the doctoral nursing program at Duquesne University in

Pittsburgh, PA. I am interested in studying moral distress in nurses and

contacted Dr. Marcia Raines in February of this year regarding the ethics

stress scale that the two of you developed. At that time she sent me a hard copy of the scale. Since then I have contacted her several times via

email and telephone regarding use of this scale, but she has not responded

to my contacts.

I am writing to you to request permission to use this tool for my dissertation. I am considering using this scale to survey moral distress

or ethics stress in nurse anesthetists. I have not been able to locate the use of this tool in the literature other than the study done by Dr. Raines, but I feel this instrument would nicely address the questions I have regarding ethical and moral stress in nurses.

I look forward to hearing from you regarding this matter.

Sincerely,

Linda C. Radzvin, MSN, MEd, RN, CRNP

## APPENDIX 5



# DUQUESNE UNIVERSITY

Office of Research

424 RANGOS BUILDING ♦ PITTSBURGH, PA 15282-0202

Dr. Paul Richer  
Chair, IRB-Human Subjects  
Human Protections Administrator  
Office of Research  
Phone (412) 396-6326 Fax (412) 396-5176  
e-mail: richer@duq.edu

June 21, 2007

Ms. Linda Radzvin  
1529 Buckstown Road  
Stoystown PA 15563

**Re: "The occurrence of moral distress in certified registered nurse anesthetists"  
(Protocol #07-61)**

Dear Ms. Radzvin:

Thank you for submitting your research proposal for IRB review.

Based on the review of Dr. Linda Goodfellow, IRB Representative, and my own review, your study is approved as **Exempt** based on 45-Code of Federal Regulations-46.101.b.2 regarding research using anonymous surveys.

This approval applies strictly to the submitted protocol. If you intend to make any changes in procedure you must submit an amended protocol to the IRB Chair and receive approval before you proceed. In addition, if any unforeseen problems or adverse events occur, they should be reported immediately to the IRB Chair before proceeding. In correspondence, please refer to the protocol number shown after title above.

Once your study is complete, provide our office with a short summary (one page) of your results for our records.

Thank you for contributing to Duquesne's research endeavors.

Sincerely yours,

Paul Richer, Ph.D.

C: Dr. Linda Goodfellow  
Dr. Kathleen Sekula  
IRB Records

## APPENDIX 6

Dear Certified Registered Nurse Anesthetist,  
Approximately 2 weeks ago I contacted you, asking you to consider participating in a research study examining the occurrence of moral distress in nurse anesthetists.

If you have returned the surveys, I would like to take this opportunity to thank you for your participation. If, to date, you have not completed the surveys, I would like to ask you to please consider doing so, if you wish to participate in this study.

Sincerely,

Linda C. Radzvin, MSN, MEd, RN, CRNP  
Doctoral Student  
Duquesne University School of Nursing



APPENDIX 7

DUQUESNE UNIVERSITY

600 FORBES AVENUE ♦ PITTSBURGH, PA 15282

Date

Dear CRNA,

I am a doctoral student at Duquesne University School of Nursing and am currently undertaking a study examining the occurrence of moral distress in certified registered nurse anesthetists. I am writing to ask if you would be willing to participate in this study. Your name was randomly selected for inclusion from the registry of the American Association of Nurse Anesthetists (AANA).

There is minimal risk in participating in this study and no more than what you experience in everyday life. There is no particular benefit to you for participation in this study. Although remembering and responding to questions regarding situations that may cause moral distress might be upsetting, your experience may help in understanding this event. If your response elicits discomfort, you may refuse to answer the enclosed questionnaire or not complete it.

Since I will never know your name or any identifying information, your name will never appear on any research instrument or in the data analysis. Your responses will only appear in data summaries. All information will be kept in a locked file cabinet in the researcher's home. All materials will be destroyed at the completion of the study.

You are under no obligation to participate. The approximate time for completion of the questionnaires is 20 minutes. If you complete the enclosed questionnaires and return them to me in the enclosed self-addressed, stamped envelope, your consent to participate will be implied. Please do not include your return address on the enclosed envelope.

If you have any further questions regarding your participation in this study, you may call me at 814-754-4053 or Dr. Paul Richer, Chair of the Duquesne University Institutional Review Board at 412-396-6326.

Thank you for your consideration in participating in this study.

Linda C. Radzvin, MSN, MEd, RN, CRNP  
Doctoral Student, Duquesne University School of Nursing



APPENDIX 8  
 CODE: C +/- cognitive subscale; B +/- behavioral subscale; A +/- affective  
 subscale

**ETHICS STRESS SCALE**  
 © 1992 ML Raines & A Tymchuk

Please consider each of the statements below as it relates to the last year. Place a number from the scale below in the space at the left which most closely corresponds to how you feel about each statement. Thank you

---

Agree Strongly	Agree Somewhat	Neither Agree nor Disagree	Disagree Somewhat	Disagree Strongly
1	2	3	4	5

---

**STATEMENTS**

1. C- I have thought about leaving nursing because of the ethical issues/dilemmas I face.
2. A- I worry that I handle ethical issues inappropriately.
3. A- I feel more stressed when dealing with some ethical issues than with others.
4. C+ I believe I have handled most ethical issues in my practice appropriately.
5. C- I think other people interfere with my being able to implement/follow through on my decisions related to ethical problems.
6. A+ I feel confident that I can justify my decisions regarding ethical issues.
7. C+ I think maintaining professional relationships is important in dealing with ethical issues effectively.
8. C+ I think the setting in which I work influences my ethical decision making in a positive manner.
9. A- I feel frustrated or angry when I cannot resolve an ethical issue.
10. C+ I have adequate consultation resources and social support regarding the ethical issues I face.

Agree Strongly 1	Agree Somewhat 2	Neither Agree nor Disagree 3	Disagree Somewhat 4	Disagree Strongly 5
11. <u>A-</u>	I feel fatigued when I have to deal with ethical dilemmas/problems.			
12. <u>B+</u>	I have modified some of my clinical decisions regarding patient(s) because of ethical issues.			
13. <u>C-</u>	I think my job is more difficult than it used to be because of ethical issues.			
14. <u>C-</u>	I think I would be less stressed if there were fewer ethical problems to deal with.			
15. <u>B+</u>	I have decided to stop working with a patient(s)/family or asked for a change of assignment because of the ethical issues involved.			
16. <u>A-</u>	I feel dissatisfied about ethical decisions I have made/not made in my work.			
17. <u>A-</u>	I often feel uneasy/uncomfortable about following through/implementing my ethical decisions.			
18. <u>C+</u>	I think I can identify ethical issues found in my professional practice.			
19. <u>C-</u>	I have thought about changing my nursing specialty/work setting due to problems with ethical issues.			
20. <u>A+</u>	I never feel frustrated or angry over the way ethical issues are handled in my institution.			
21. <u>C+</u>	I tend to recognize ethical issues before my colleagues do.			
22. <u>C+</u>	I think general ethical principles (i.e. beneficence, justice, patient autonomy) are sufficient as guidelines for dealing with ethical issues I face.			
23. <u>A-</u>	I sometimes feel overwhelmed by having to make ethical decisions.			

	Agree Strongly	Agree Somewhat	Neither Agree nor Disagree	Disagree Somewhat	Disagree Strongly
	1	2	3	4	5
24. <u>A-</u>	I sometimes feel powerless/like I have little influence in dealing with others about ethical issues. Please specify the profession or institutional position of these others (e.g. physicians, nurses, psychologists, administrators, lawyers, etc)_____				
25. <u>A-</u>	I feel alone in resolving the ethical dilemmas/issues in my work/practice.				
26. <u>A-</u>	I worry about losing my job/ status/ financial security (circle which apply to you) due to the decisions I make regarding ethical issues.				
27. <u>A+</u>	I feel confident about my professional responsibilities and scope of practice related to ethical issues.				
28. <u>A-</u>	I feel guilty about the way I have responded to some ethical issues.				
29. <u>B+</u>	I use an ethical decision-making model or other systematic problem-solving method when dealing with ethical issues.				
30. <u>A+</u>	I never fear being sued/reprimanded for my decisions related to ethical issues.				
31. <u>A+</u>	I feel prepared to deal with the ethical issues I face.				
32. <u>C+</u>	I believe there are some ethical issues I can do nothing about.				
33. <u>B-</u>	I try to avoid becoming involved with ethical issues because it is stressful to me.				
34. <u>A+</u>	I feel good about dealing with the ethical issues in my work.				
35. <u>C+</u>	I believe I do everything I need to/ should do regarding ethical issues related to my work.				
36. <u>C+</u>	I could be more influential in resolving ethical issues if I had more administrative power.				
37. <u>C+</u>	I know others I respect/ support my decisions about ethical issues.				
38. <u>B+</u>	I frequently discuss ethical issues with colleagues and friends.				

	Agree Strongly	Agree Somewhat	Neither Agree nor Disagree	Disagree Somewhat	Disagree Strongly
	1	2	3	4	5
39. <u>C+</u>	I think I am more concerned about ethical issues than others in my profession.				
40. <u>C+</u>	I believe most of my colleagues think the way I do about ethical issues in our practice.				
41. <u>A+</u>	I feel calm when I handle ethical issues.				
42. <u>B-</u>	I tend to avoid dealing with ethical issues.				
43. <u>C+</u>	I do not think that my ethical values are compromised in my work setting.				
44. <u>A-</u>	I get upset when I see others avoiding ethical issues.				
45. <u>C+</u>	I think Ethics Committees can be very helpful to me when I am facing an ethical dilemma.				
46. <u>B-</u>	I have avoided working with or stopped working with a nurse, physician, or other professional (please specify which _____) because of the ethical issues involved.				
47. <u>A-</u>	I sometimes experience somatic symptoms (i.e. headaches, stomach aches, tension in neck or shoulders) when I have to deal with ethical issues.				
48. <u>C-</u>	I think most ethical dilemmas/issues are too complex for me to resolve, so I don't even try to resolve them.				
49. <u>C+</u>	My religious beliefs help me to cope with ethical issues.				
50. <u>B-</u>	My ethical decisions have been greatly influenced by the communications media (e.g. television, newspaper).				
51. <u>C-</u>	Thinking about legal constraints, such as legislative and judicially mandated behaviors, cause me to make decisions I would not otherwise make.				
52. <u>A-</u>	I often feel "rushed" or "in a hurry" to make decisions regarding ethical problems.				