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Exploring the Relationship Between Moral Distress and Coping in Emergency Nursing

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EXPLORING THE RELATIONSHIP BETWEEN MORAL DISTRESS AND COPING IN
EMERGENCY NURSING

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Thank you all of touching my life and helping me be the best nurse and person I can be every day.

DEDICATION

This dissertation is dedicated to my Mother and Father who gave me courage and for all the ED nurses I've worked with who have taught me how to use it.

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ABSTRACT

Background: Emergency Department (ED) nurses practice in environments that are highly charged and unpredictable in nature and can precipitate conflict between the necessary prescribed actions and the individual's sense of what is morally the right thing to do. As a consequence of multiple moral dilemmas ED staff nurses are at risk for experiencing distress and how they cope with these challenges may impact their practice.

Objectives: Is to examine moral distress in ED nurses and its relationship to coping in that specialty group.

Methods: Using survey methods approach. One hundred ninety eight ED nurses completed a moral distress, coping and demographic collection instruments. Advanced statistical analysis was completed to look at relationships between the variables.

Results: Data analysis did show that moral distress is present in ED nurses ($M=80.19$, $SD=53.27$) and when separated into age groups the greater the age the less the experience of moral distress. A positive relationship between moral distress and some coping mechanisms and the ED environment were also noted.

Conclusion: This study's findings suggest that ED nurses experience moral distress and could receive some benefit from utilization of appropriate coping skills. This study also suggests that the environment with which ED nurses practice has a significant impact on the experience of moral distress. Since health care is continuing to evolve it is critical that issues like moral distress and coping be studied in ED nurses to help eliminate human suffering.

Chapter I THE PROBLEM

Introduction

Emergency Department (ED) nurses practice in environments that are highly charged and unpredictable in nature and can precipitate conflict between the necessary prescribed actions and the individual's sense of what is morally the right thing to do. The moral decisions in ED care not only involve life and death situations but also include environmental and psychosocial issues that are impacted by health policy and access to healthcare. As a consequence of multiple moral dilemmas ED staff nurses are at risk for experiencing distress, similar to that found in nurses practicing in critical care.

Emergency Departments are intense environments that present nurses with many challenges every day. These challenges are both anticipated and unanticipated. Anticipated challenges include overcrowding, short staffing, high acuity, unpredictable levels of care, violence and the need to respond to rapidly changing situations (ENA, 2010a; ENA 2010b; Gacki-Smith et al, 2009). Unanticipated challenges can be attributed to the continuing rise in the number of ED patients and the need to provide care to patients who don't necessarily have a condition that would warrant emergency care, a consequence of more patients seeking primary care as a result of poor access to health care (Brody, 2013; National Center for Health Statistics, 2012).

The rise in the number of patients, lack of insurance, diversity and the range of acuity, dictates that ED nurses have the broad skills necessary to cope in this unpredictable practice environment. Better coping skills may serve to help ED nurses meet the demand of the complex and vulnerable population they serve

(Ashker et al, 2012; Gillespie & Gates, 2013; Mark & Smith, 2012). The patients in this challenging environment require specialized care by both expert nurses and physicians therefore it is imperative that research identifies barriers geared towards maintaining a robust ED workforce.

The National Center for Health Statistics (2011) reported that 1.36 million Americans sought emergency care in 2009, a rise in 41% since 1995. Included in this increase are many individuals who do not present with traditional emergency problems. It is estimated that 48 million Americans are uninsured (National Center for Health Statistics, 2012). Many of those uninsured have no other option for health care than an already overcrowded emergency department (ED). Crowding contributes to a number of undesirable consequences to patient care which can lead to moral consequences such as anger, frustration, depression and burnout to staff caring for them (Agrawal, 2007; Moskop et al, 2009).

Within the ED environment at times of high crisis and in the midst of chaos, nurses are often called upon to assist patients and families in making life and death decisions based on very little information, situations which may cause clinical quandaries leading to moral dilemmas for the nurse. Jameton (1984) describes moral dilemmas as occurring when two or more conflicting principles can be used and supported within a given situation. While the moral dilemmas that ED nurses face may be typical of most other specialties such as those providing end of life care, they are exacerbated by the unpredictable and emotionally charged nature of the patient's visit, the higher acuity and the greater potential for violence, which can lead to a conflict in what the nurse believes, is morally right. According to the Bureau of Labor Statistics (2012) 46% of all

non-fatal assaults and violent acts requiring days away from work were committed against Registered Nurses (RN). The National Institute for Occupational Safety and Health (2002) reports that the ED is considered the most dangerous work setting in health care for nurses which can be attributed to violence from both patients and visitors. Consequently, the experience of moral dilemmas may be a more common experience for ED nurses than nurses from other specialties. It is through these moral dilemmas, compounded by a highly charged practice environment, that ED nurses may experience moral distress.

Jameton (1984) describes moral distress as a specific type of moral conflict that occurs when the individual knows the right thing to do, but institutional constraints make it nearly impossible to pursue the right course of action. Since nurses play a key role in the delivery of health care, when they experience moral distress they may feel disempowered because they cannot follow through with what they believe is the right course of action to take for patients and families, thus undermining their professional and personal integrity and authenticity (Rittenmeyer & Huffman, 2009). Regardless of the population of nurses studied evidence suggests that there are negative consequences of moral distress that include but are not limited to anger, frustration, sadness, depression and helplessness (Brazil et al., 2010; Elpern, Covert & Kleinpell, 2005; Hamric & Blackhall, 2007; Ohnishi et al., 2010; Pauly et al., 2009; Pavlish et al., 2011; Radzvin, 2011; Rice et al., 2008). When nurses experience moral distress it has the potential to create some degree of human suffering (Ohnishi et al., 2010; Radzvin, 2011). It has also been reported that higher levels of moral distress can add to a more

negative work climate, job dissatisfaction and premature career abandonment (Brazil et al., 2010; Hamric & Blackhall, 2007; McAndrew, Leske & Garcia, 2011; Pauly et al., 2009; Pavlish et al., 2011; Radzvin, 2011; Rice et al., 2008). Weigland and Funk (2012) demonstrate how moral distress can have a lasting effect on critical care nurses. However, moral distress has yet to be fully explored in other populations of nurses, including ED nurses.

ED nurses, like most nurses, experience work related stress that may be related to moral issues and dilemmas and how they cope and adapt impacts their practice and overall sense of wellbeing. Lazarus and Folkman (1984) describe coping as it relates to stress. As described by these two theorists, coping is the process with which an individual responds to a threat to self. They add that coping can either be problem or emotion focused, with both aimed at altering the source of stress and promoting adaptation. Roy's (2011) adaptation model is built on Lazarus and Folkman's work and both describe in their theories the relationship between humans' coping and adaptation. Coping and adaptation together represent the pattern of innate and acquired ways of taking in and responding to a changing environment that directs the individual toward survival, growth, reproduction, mastery and transcendence. A coping response is the individual's ability to respond positively to changes in his or her environment by using coping styles and strategies to adapt effectively to challenges. The environment in which ED nurses practice in is challenging to say the least and their ability to respond positively within these setting affects patients and families as well as the nurse both individually and collectively.

Carver, Scheier and Weintraub (1989) built upon Lazarus and Folkman's work and propose additional dimensions of coping, which include active, restraint and emotion-focused coping. Being consistent with the Lazarus and Folkman's model of problem-focused coping they identify active coping as the process of taking steps such as planning, suppression of competing activities and mental and behavioral disengagement to try to remove the stressor. Conversely, restraint coping is demonstrated when an individual waits for an appropriate time to act as well as seeks social support for instrumental reasons such as seeking advice or information. Through a logical response to the numerous moral or ethical dilemmas that ED nurses face, coping has yet to be studied in emergency nursing practice.

Moral distress has been studied in many populations of nurses, but to date there is only one study exploring its presence in nurses working in EDs (Fernandez-Parsons, Rodriguez & Goyal, 2013) and no exploration of its relationship to coping in that population. The paucity of studies examining moral distress and coping in emergency nursing practice limits nursing's understanding of the behaviors that may reduce the effects of numerous ethically distressing situations encountered in ED's.

Purpose

The purpose of this study is to examine moral distress in ED nurses and its relationship to coping in that specialty group. Since the relationship between these two concepts has never been studied together in emergency nursing practice findings from this study will contribute unique knowledge to nursing literature

Definitions of Variables

Dependent variable

Moral distress: Moral distress is conceptually defined as a specific type of moral conflict that occurs when one knows the right thing to do, but institutional constraints make it nearly impossible to pursue the right course of action (Jameton, 1984). Examples of institutional constraints include physician incompetence, poor leadership, insufficient staffing, and inappropriate policies leading to legal implications. Moral distress will be operationalized using the Moral Distress Scale revised (MDS-R) tool (Hamric, Borchers & Epstein 2012).

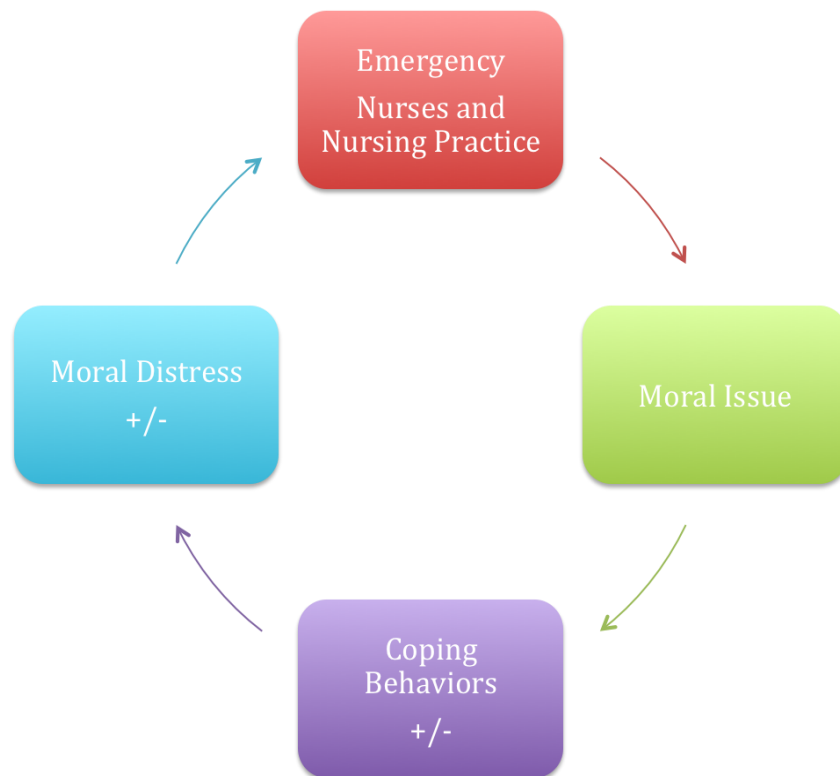
Independent variables

Coping: Coping is conceptually defined as how an individual responds to stress or a threat to self by utilizing problem focused or emotion focused coping (Lazarus & Folkman, 1984). Stress has three major processes: primary appraisal the process of perceiving a threat, secondary appraisal the process of bringing to mind a potential response to that threat, and executing a coping response. The coping responses of ED nurses will be operationalized by the utilization of the 60 – item, 15 domain COPE Inventory (Carver, 1989). The COPE Inventory measures use of the following strategies via individual subscales: active coping, planning, positive reframing, acceptance, humor, religion, emotional support, instrumental support, self-distraction, denial, venting, substance abuse, behavioral disengagement, self-blame.

Emergency nursing is defined as an independent and collaborative specialized area of practice that takes place in a setting that delivers emergency care

(ENA, 2013). Emergency nurses require a wide variety of skills in order to deliver quality urgent and complex care within a limited time span to health care consumers. Emergency nurses care for patients across the lifespan and in a variety of settings (ENA, 2011). In this proposed study emergency nursing will be operationalized by including only nurses who actively practice in the ED in either full-time, part time or per diem capacity.

Figure 1. Conceptual framework for the relationship between moral distress, coping and ED nursing practice



Inclusion and exclusion criteria: The inclusion criteria for this study was that the participants had to be registered nurses currently working in an ED either full-time, part-time or per-diem status and must be able to read and write English.

Theoretical Framework

The theoretical framework used for this study was Roy's Adaptation Model (Roy, 2009) including her midrange theory of coping and adaptation. Roy's adaptation model is built on Lazarus and Folkman's (1984) work on stress and coping, where coping is described as being either problem or emotion focused and aimed at altering the source of stress. Roy's adaptation model describes human beings as a set of interrelated biological, psychological and social systems. As conceived by Roy, human beings try to maintain a balance between their personal systems and their environment and strive to exist in an environment that allows them to cope, by using innate or acquired way of responding to a changing environment. Roy's theory of coping and adaptation describes the process through which humans demonstrate positive and therapeutic coping skills that will enable adaptation to new situations (Roy, 2009).

Roy's Adaptation Model

In the emergency department and in practice the nurse receives stimulation from patients, families, colleagues and the practice environment, which provokes a response. The response may be positive and/or negative and may change or vary according to the circumstances facing the nurse in the ED.

Roy's model was designed to focus on individual's adaptation to a changeable environment and to guide both nursing assessment and the process by which nurses

facilitate adaptation. All of the studies to date have focused on patients or groups of people who are adapting to either health or illness (Chayaput and Roy, 2007; Gonzalez, 2007; Guiterrez, 2009; Tonya and Tsushako, 2008), making this the first study that will utilize Roy's adaptation model as a theoretical framework to study emergency nursing's response to their practice environment. It is within the ED that nurses must readily adapt to their frequently changing environment in order to be able to provide care to a highly acute and diverse population, which makes Roy's adaptation model a logical choice to guide this study.

Roy (2009) defines adaptation as the process and outcome from coping whereby thinking and feeling individuals or groups use conscious awareness and choice to have human and environmental integration. This adaptive behavior is viewed in relation to four interdependent adaptive modes, which represent the ways human beings respond to stimuli from the environment. The adaptive modes are described as physiologic, self-concept, role function and interdependence. It is within these four adaptive modes that the person utilizes behaviors to cope both internally and externally in a way that enables him or her to adapt. The coping behaviors rooted in the adaptive modes can be classified as either adaptive or non-adaptive. Adaptive responses are those that promote the integrity of the human system. The relationship between coping as a control mechanism and moral distress (a potential outcome response) in ED nurses was the focus of this study.

The human adaptive system is made up of three hierarchical levels: integrated, compensatory and compromised (Roy, 2009). The first level, integrated, describes the functions of the person working as a whole to meet human needs. In

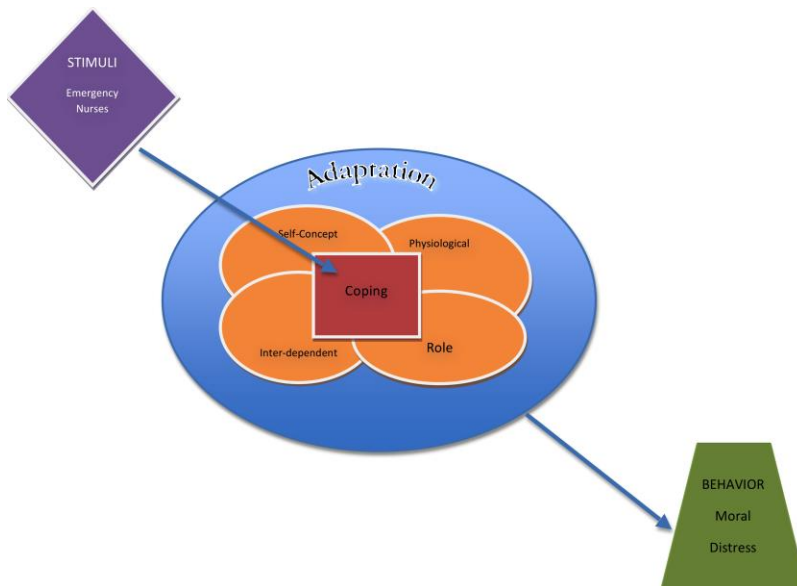
this study the first level is the nurse being able to recognize that a practice situation may or may not lead to a sense of uneasiness. The second level, compensatory is stimulated by a challenge or situation, which in this study this is whether or not the nurse addresses the feelings of uneasiness. The third adaptation level Roy labels as compromised and occur when the process in the compensatory level proves to be inadequate in dealing with the uneasiness. In this study, the experience of moral distress is indicative of a compromised level.

Roy (2009) defines human behavior as internal or external actions and reactions, innate or acquired under specific circumstances. How humans process the input through the control processes results in a behavioral response. In applying the notion of a simplified system's control process to human adaptive systems, Roy conceptualizes the complex dynamics within the individual as the coping process. Underlying this study is the process that begins when a nurse is faced with a given situation that causes a feeling of uneasiness, creating the need to adapt to the given situation after coping processes are utilized. Applying this theory, it is posited that if the nurse is unable to cope with the situation or uses non-adaptive coping strategies, moral distress may develop.

Specifically, adaptation is realized when an individual shows a positive reaction to stimuli through the four human interrelated adaptive modes: physiological-physical (ED nurse as a living organism), self-concept/group identity (view of them self as a practicing ED nurse), role function (ED nurses individual personal characteristics) and interdependence (ED nurses work and social support system) (Roy, 2009). These adaptive modes will not be measured individually in this

study, but will be looked at collectively as contributing to the adaptive response which influences coping. Adaptive responses are those that promote the integrity of the human system and it is the adaptive responses, identified as coping in this study, to emergency nursing practice situations, which may or may not lead to the experience of moral distress that will be studied. Aspects of both emotion focused and problem focused coping will be examined closely to determine if there are any behaviors or influences that have a greater influence. In summary, this study will examine the relationship between coping and moral distress in nurses who practice in an ED and what, effect the individual nurses coping behaviors have on moral courage and the experience of moral distress. Roy's human adaptation model provided the theoretical underpinnings in this study (Figure 2).

Figure 2. ED Nursing and moral distress: The relationship between ED nursing, coping and moral distress based on Roy's adaptation model



Research Question

The overarching question in this study was: what is the relationship between coping and moral distress in emergency department nurses.

There will be four research questions to guide this study:

RQ1: What is the frequency with which nurses who practice in emergency departments experience moral distress?

RQ2: What is the level of disturbance to morally distressing situations experienced by nurses who work in emergency departments?

RQ3: What is the relationship between the frequency and level of disturbance related to moral distress in nurses who practice in emergency departments?

RQ4: What is the relationship between specific coping behaviors and moral distress in nurses who practice in the emergency department?

Hypothesis

Based on the existing empirical research and Roy's Adaptation Model the following hypotheses have been derived.

H1: Nurses who practice in emergency departments experience moral distress.

H2: Nurses who work in emergency departments experience disturbance as related to morally distressing situations.

H3: Nurses who work in emergency departments and frequently experience moral distress have higher levels of disturbance related to moral distress.

H4: There is an inverse relationship between moral distress and specific coping behaviors (humor, denial, social support, positive reinterpretation and growth) demonstrated in nurses practicing in emergency care.

Significance of the Study

Emergency nursing practice is influenced everyday by the highly charged, challenging environment within which nurses practice as well as the nurse's individual coping response. Some of the challenges that ED nurses need to cope with consist of overcrowding, varying patient acuities and violence, which are all addressed in various position statements published by the Emergency Nurses Association (ENA) (ENA, 2010, 2011, 2013).

The overuse of emergency departments is a growing and increasingly costly problem that results in overcrowding, long waits, overly stressed health professionals and compromised care for people with true emergencies (Brody, 2013). In order to be able to care for this challenging population nurses who are highly skilled are a necessity to insure quality care. The Emergency Nurses Association, a specialty nurses organization with a membership of 40,000+ with members representing over 35 countries around the world, states that ill prepared ED nurses and nurse educators have the potential to deepen health disparities, inflate costs, and exacerbate poor health care outcomes (2011). Concerns about the environment in which emergency department nurses practice has resulted in two position papers from the ENA: one on workplace violence (2010) and the other on the effect of the environment on patient safety (2013).

The ENA's Healthy Work Environment (ENA, 2013) position statement declares that an unhealthy work environment may have both direct and indirect impacts on

patient safety. Healthy work environments have been linked to increased nurse and health care worker retention, recruitment, job satisfaction and have decreased stress and burnout, which subsequently results in safer patient practices (Schmalenberg & Kramer, 2008; Spence Laschinger, Finegan, & Wilk, 2011; Chang, 2009). The possibility of moral distress is posited to be potentiated by an unhealthy environment. Achieving a healthy work environment is multi-factorial and requires the support of the health care workers through a positive environment (Chang, 2009; Schmalenberg & Kramer, 2008; Spence Laschinger, Finegan, & Wilk, 2011).

Furthermore, the overwhelming consequences of moral distress reported in the literature relates to burnout, job satisfaction and retention regardless of specialty (Brazil et al., 2010; Elpern, Covert & Kleinpell, 2005; Hamric & Blackhall, 2007; Ohnishi et al., 2010; Pauly et al., 2009; Pavlish et al., 2011; Radzvin, 2011; Rice et al., 2008). Some of the specific psychological symptoms that are reported by nurses are frustration, anger, fear, sorrow, low self-esteem, sadness and helplessness (Brazil et al., 2010; Elpern, Covert & Kleinpell, 2005; Hamric & Blackhall, 2007; Ohnishi et al., 2010; Pauly et al., 2009; Pavlish et al., 2011; Radzvin, 2011; Rice et al., 2008). The potential for the long lasting effects of moral distress on nurses has been noted by Weigland & Funk (2012) with recommendations that nurses promote their personal self-care and rejuvenate themselves; indicating an understanding that the environmental climate is not easily changed.

However, the experience of moral distress has yet to be fully explored in ED nurses despite literature suggesting that there may be benefits to studying this population in terms of decreasing human suffering by limiting anger, frustration, depression and burnout (Fernandez-Parsons, Rodriguez & Goyal, 2013; McAndrews, Leske & Garcia

2011; Pauly et al 2009; Weigland & Funk, 2012). There is evidence that moral distress exists in ED nurses in Ireland (Kilcoyne & Dowling, 2007) and in the US where it has been linked to intent to leave (Fernandez-Parsons, Rodriguez & Goyal, 2013).

In summary, emergency nurses practice in emotional, volatile environments and deal with potentially ethically disturbing situations on a regular basis putting them at risk for experiencing moral distress, a phenomenon known to have detrimental effects on both nurses and patient care. Since the relationship between moral distress, coping and emergency nursing practice has not been studied previously and the potential for moral distress appears high in those nurses, it is critical that those relationships be explored. The expanded knowledge about coping and moral distress gained by this study will provide direction to nursing research, education and practice specific to ED nursing.

Chapter II

REVIEW OF THE LITERATURE

Introduction

This chapter will describe the theoretical underpinnings of this study and explicate the current state of knowledge related to moral distress and coping. This review will also identify gaps in the literature and will conclude with a description of how this study addresses these gaps. The literature was searched through electronic databases that included the Cumulative Index for Allied Health Learning (CINAHL) and PubMed. The search was limited to empirical studies that were published within a period beginning in 2005 to 2014 in order to focus the analysis on the current state of the science as it relates to moral distress. However select seminal works beyond the limits of that time frame are reviewed in order to make the review more comprehensive. Two hundred fifty articles were found in the search and the articles that used various reliable tools and those that were related to or would help enhance this study of nurses in emergency care were utilized.

In order, this chapter begins with a conceptual clarification and overview of the studies on moral distress and coping. Next, studies that investigate the relationship between moral distress and nursing in the acute care setting are reviewed and followed by coping and its relationship to nursing practice. Finally, the research related to the challenging characteristics of emergency nursing practice is examined. A critical analysis of the literature will elucidate what is known about each of the variables in this study, their relationships with one another and important gaps in the literature.

Moral Distress

Jameton (1984) is a psychologist who is well known for his theoretical definitions and seminal work related to moral distress in nursing. Foundational to his theory is the premise that in order to make their work meaningful and to avoid burnout, nurses need their work to express or be reflective of their values and realize their expectations of proper patient care. Furthermore, Jameton posits that nurses may experience stress and anger as they attempt to reconcile their ideals about health care with the realities of its uncertainties, inadequacies and abuses. The conflicts that arise, according to Jameton, may be viewed as either ethical or moral problems and as such, coming to terms with them requires ethical thinking on the part of the nurse.

Jameton's moral distress theory was influenced by Kramer's (1974) seminal work, which explores the question of why nurses leave nursing. Based on her findings, Kramer theorized that nurses need to make their work meaningful and, in order to avoid burnout; they must be able to express their values and realize their expectations in the delivery of care. Viewing nursing as a profession and using the American Nurses Association (ANA) Code of Ethics to support the importance of ethics, Jameton (1984) theorized that it is through the interaction between moral problems and professionalism that a distressful response to moral dilemmas emerges in nursing. More specifically, Jameton (1984) posited that the moral and ethical problems that arise in hospitals are sorted into three stages: moral uncertainty, moral dilemmas and moral distress.

Moral uncertainty arises when one is unsure what moral principles or values apply or even what the moral problem really is. Moral dilemmas occur when two or more clearly moral principles apply, but they support mutually inconsistent courses of action. Moral distress occurs when one knows the right thing to do, but institutional constraints make it nearly impossible to pursue the right course of action (Jameton, 1984, p.6).

The term moral distress originated as a result of Jameton's (1984) recognition that nurses' stories of *moral dilemmas* did not meet the definition of dilemma. Specifically, when asked to relate their personal stories of moral dilemmas, nurses would talk about situations that caused moral problems, and they were able to identify the appropriate actions, but they felt constrained in following their convictions in response. Jameton (1984) suggested that nurses, as a profession, are more often compelled to tell their stories because of the suffering they experience and witness when rendering care as well as their commitment to patients.

In seeking to explain this phenomenon, Jameton (1984) contemplated how nursing practice differs from medical practice; a difference he suggested impacts the experience of moral distress in nursing. He posited that nurses have a stronger orientation toward health maintenance, disease prevention, patient education and holistic modes of patient care than do physicians. Expanding on that theme, Jameton distinguished between professional focus: physicians focus on the cure functions, while nurses' focus on care functions, and though each profession performs both of these interrelated functions, he suggested that the philosophical differences can

create an intensified struggle for nurses, especially in hospital environments that are known for being overwhelmingly complex.

Namely, nurses have a broad and diverse set of responsibilities, which create multiple opportunities for conflict within the responsibility. Nurses have a responsibility to their patients, but they also have responsibility to their employer (hospital, agency, etc.). In addition, nurses are expected to follow procedures, report incidents and to ensure that physicians follow policies and that orders are carried out. Nurses thus work in a triangle of responsibilities consisting of the patient, organization and physicians. This triangle is at times complicated by the fact that nurses may have poor relations with each other and with other health care workers. Without teamwork in healthcare, Jameton suggests that struggles for power, accumulated bitterness, frustration and despair will dominate the nursing profession.

In his seminal work, Jameton (1984) suggested that moral distress poses a threat to the future of nursing practice, a threat influenced by the many ethical conflicts nurses experience from unresolved questions about the nature, scope and goals of nursing practice. Moreover, nurses work in particularly difficult circumstances because of their central role in health care, their close contact to patients and families, the dominance of the medical profession, and tensions in the directions and definitions of nursing.

The experience of moral distress is very individualized, thereby making it challenging to study (Wilkinson, 1989). In order for moral distress to develop a situation must arise in which a nurse is able to recognize it as a moral (or ethical)

issue and believe that he or she is responsible for it. Therefore, awareness of an issue is a critical element of moral distress. Through this awareness the nurse must make a decision as to the correct moral action to take. Moral distress does not occur automatically, it is influenced by the nurse's ability to think and reason his or her feelings, which may be based on the individual's belief system. Perceived inability to take action on an individual moral decision also influences moral distress, due to either internal or external forces, also influences moral distress. The inability to act morally produces negative feelings and psychological discomfort/disequilibrium. Some of the negative feelings experienced are anger, frustration and guilt (Wilkinson, 1989).

Expanding on Jameton's work, Wilkinson (1989) introduced coping, suggested that moral distress is moderated by the implementation of coping strategies in response to moral dilemmas. The coping behaviors may be successful or unsuccessful. In some cases successful coping behaviors help restore psychological equilibrium and wholeness. However, some coping strategies involve changes in how nurses deliver patient care and may range from over involvement to its opposite, extreme avoidance, two endpoints on a continuum that may exacerbate moral distress. Moreover, high moral distress is likely to reduce the success of coping behaviors. Wilkinson (1989) posited that a successful coping mechanism allows the nurse to maintain a level of wholeness but if insufficient, the nurse suffers damage and loss of self-esteem. Specifically, using effective skills coping when in moral distress maintains control and satisfaction in nursing practice. However, unsuccessful coping and loss of wholeness cause the nurse to feel powerless and

overwhelmed, raising potential for reduced patient care and leaving the profession (Wilkinson, 1989).

The key concepts identified in Jameton's work on moral distress include moral uncertainty, moral dilemmas, and moral distress. Advancing the theory by considering the environment, Wilkinson (1989) suggests that if during morally challenging situations a nurse has healthy coping strategies or works in an environment where he/she is more likely encouraged dealing with the ethical situations at hand, negative effects such as moral distress may be mitigated.

Corley (2002) describes her theory of moral distress as a means to clarify what happens when a nurse is either unable or feels unable to advocate for his/her patients. This newer theory is based on several other theories and concepts: Jameton's (1984) concept of moral distress in nursing, House and Rizzo's (1972) role conflict theory, which links beliefs, attitudes and values to conflict management, and Rokeach's (1973) theory of human values, as related to values and value systems and perceived ambiguity in the workplace.

Corley's (2002) theory addresses two contexts affecting this process: internal and external. The internal context consists mainly of the nurse's psychological response and the external context is defined as the work or job setting. Within the internal context she identifies eight moral concepts: commitment, sensitivity, autonomy, sense making, judgment, conflict, competency and certainty. The relationship among the various moral concepts is complex and she suggests that the experience can lead to taking one of two paths: moral distress or moral intent to act in a way will have consequences for the nurse, patient and institution.

As noted, Corley's (2002) theory suggests that nurses as part of a profession utilizing moral concepts, are moral agents who have two avenues for action. They can either act morally with moral courage that leads to moral comfort or, if unable to act or constrained by external factors, they will experience moral distress with negative consequences to the patient, nurse and the organization. This theory focuses on the contexts and their relationships and holds institutional constraints to be a major focus. The theory also addresses how moral distress is influenced by the choices nurses must face. Many of their choices are influenced by the unpredictable nature of nursing practice, such as varying diagnosis and patient responses, and the necessary actions may be further influenced by considerations of potential outcomes. The outcomes may put the nurse at risk for ensuing unpleasantness and or present extra work that may also require cooperation from other colleagues to undertake in order to insure a successful outcome. If knowledge, behavior and attitudes lead to moral actions then some level of moral courage is required. If nurses opt to not take moral action when they are confronted with a moral problem they will likely experience moral distress and its subsequent negative effects.

In her work Corley (2002) suggests that moral distress is also impacted by organizational constraints. Some of those constraints are lack of a constructive work culture, poor relationships with peers, managers, patients, physicians and administrators. She also suggests that when organizations provide policies to guide ethically complex situations there will be much less moral distress.

Jameton (1984), Wilkinson (1989) and Corley's (2002) theoretical perspectives of moral distress are complementary to each other. Jameton identified

that moral distress exists in nursing practice, while Wilkinson outlined how coping effects moral distress, and Corley takes it a step further to theorize what happens to the nurse, patient and the institution when nurses experience moral distress.

Collectively, these theorists discuss both the impact the organization/agency and individual coping has on moral distress, therefore suggesting that coping behaviors may help to mitigate its negative effects.

Moral Distress Empirical Review

Empirical Measurement

Since 2005 the majority of studies have explored moral distress using a quantitative approach. Many of the studies in this literature review utilized Corley's Moral Distress Scale (MDS). Corley et al. (2001) developed this instrument to measure nurses' moral distress and to identify the moral issues they face. To provide the theoretical underpinnings for instrument development Corley utilized Jameton's (1984) concept of moral distress in nursing, Rokeach's (1973) theory on values and House and Rizzo's (1972) theory on role conflict. The MDS consists of 32 items in a 7-point Likert format; a higher score reflects a higher level of moral distress. A convenience sample that consisted of 214 nurses from various hospitals in the United States was used to test the instrument (Corley et al., 2001). An exploratory factor analysis was performed and Cronbach's alpha was reported as being 0.97, for the first factor: *individual responsibility*. The second factor examined questions that determined actions that were not in the patient's best interest and had a reported Cronbach's alpha of 0.82. Factor three, *deception*, had a reported Cronbach's alpha of 0.66, which is just below the recommended 0.70 (Polit & Beck,

2004). In their discussion the authors noted that for factor three additional questions needed to be developed in order to improve internal consistency. The large alpha for factor one reflected redundancy and further testing to determine what questions could be deleted was recommended.

The MDS was revised in 2001 by the authors to include a 38-item scale with two new factors: intensity and frequency. This was done in order to be able to differentiate between the frequency and the intensity of the morally distressing experience. The reported content validity was 100% through the use of expert reviewers in the area of critical care nursing and the Cronbach's alpha for intensity was 0.98 and 0.90 for frequency. Corley's theory of moral distress was published following the publication of this tool.

Moral Distress Scale-Revised ([MDS-R], Hamric, Borchers, & Epstein, 2012) built on Dr. Corley's original work measuring moral distress. Hamric and colleagues revised the MDS with three objectives: to include more root causes of moral distress, to expand its use in non-ICU settings and to make it appropriate for use by both nurses and physicians. As a result of their study the tool was reduced from 38 questions to 21 with room for open-ended responses. The range of total score is from 0-336. Content validity was established by having four moral distress experts review the tool. The sample was comprised of nurses and physicians from 8 ICU's in an academic medical center, located in the southeastern part of the United States. Consistent with other studies, they reported an overall higher score for nurses than physicians and a negative correlation ($r = -.402, p = < .001$) between the ethical climate and moral distress for both groups. An overall Cronbach's alpha of .88 was

reported for both nurses and physicians. Individually, the Cronbach's alpha for nurses and physicians was reported as .89 and .67 respectively. The authors added two additional questions at the end of the survey that asked if the participant had ever left or considered leaving a job due to moral distress and if they are currently considering leaving their current job. Significantly higher levels of moral distress were reported for clinicians who responded that they were considering leaving their jobs (131.13), compared to (82.61) who were not considering leaving their jobs currently. The authors only studied critical care nurses and physicians, but suggested that the MDS-R be used for further research efforts with additional specialties, since the questions examine the root cause of moral distress using more general questions.

Two other instruments have been used to measure moral distress. One was constructed for that purpose and the other was an instrument originally developed to identify ethical stress. In the first, a group of nurses from Israel developed a culture-sensitive moral distress questionnaire (Eizenberg, Desivilya & Hirschfeld, 2009). The authors utilized both Jameton and Corley's theories in the development of their instrument as well as by work by Sporrang et al. (2006). Additionally, they proposed a broader definition of moral distress, one encompassing negative stress symptoms emerging in situations involving ethical dilemmas arising when the healthcare provider feels incapable of protecting all needs and values at stake. The development of this tool occurred in two phases: a qualitative phase to elicit cultural themes and a quantitative phase to design the questionnaire. Factor analysis from the entire instrument resulted in three environmental factors that

represented moral distress: 1) lack of resources, 2) poor work relationships and 3) time pressure. The Cronbach's alpha reported for all three factors was greater than 0.79 and validity was tested using t-tests for independent samples and test-retest reliability was measured and statistically significant positive correlations for each factor were noted ($r = .624, p < .001$; $r = .385, p < .05$; $r = .535, p < .01$, respectively), all lower than the recommended 0.7 or greater (Polit & Beck, 2012). To the best of my knowledge this instrument has not been used in other published studies.

The Ethics Stress Scale ([ESS], Raines, 1994) was used in Radzvin's (2011) exploratory descriptive study to determine if certified registered nurse anesthetists (CRNAs) experience moral distress in their practice. Wilkinson's moral distress model was used as a theoretical frame for this study and the researchers found the ESS measure to be compatible with that theory. The Ethics Stress Scale (Raines, 1994) is a 56-question instrument that uses 5 point Likert scale with a reported content validity index of 0.89 and an internal reliability co-efficient of 0.82. In light of the unavailability of the developer of this instrument, Radzin categorized scores into three groups based on the lowest, median and highest score. In Radzvin's study the sample of CRNAs ($n = 300$) reported a moderate level of moral distress, but when CRNAs had less experience they were likely to have high levels of moral distress, which is in contrast to findings reported in critical care nurses, a conflict that will be discussed later in this chapter.

In summary, there are several instruments used to measure moral distress. Overall, the tools demonstrate reliability and validity with the MDS having been utilized the most frequently in critical care nurses. The MDS-R, was designed to tap

into more root causes than the MDS and will have broader relevance to other specialties such as emergency nurses. It also includes open-ended questions that will allow exploration of new domains related to moral distress in emergency care.

Quantitative Studies

In order to adequately review the vast amount of empirical literature related to moral distress in a systematic way studies that utilized the MDS will be discussed. Elpern, Covert and Kleinpell (2005) performed an exploratory descriptive study of the moral distress experienced by staff nurses in a medical intensive care unit (MICU). The researchers reported that this sample had common encounters that were associated with high levels of moral distress on items related to providing aggressive care. They reported a positive correlation between moral distress scores (range = 3.26 - 4.63) and years of experience in critical care nursing ($r = .0476$; $p = .02$). Rice et al. (2007) utilized the MDS to help determine moral distress in medical/surgical nurses at an adult acute care hospital. They found that moral distress is common in this specialty and that a positive correlation existed between years of experience and the frequency and intensity of moral distress ($r = 0.67$; $p = .001$). These studies show that a negative relationship exists between experience and moral distress in critical nurses.

The following studies explored the relationship between moral distress and the ethical climate. Using an exploratory descriptive design, Hamric and Blackhall (2007) explored RN's and physician's perspectives on caring for dying patients in ICU's and they found that nurses reported greater amounts of moral distress than physicians (RN mean=55.80($SD = 9.56$) vs. MD mean=52.12($SD = 11.06$) $t = 1.51$,

$p=.139$) as well as lower levels of perceived collaboration (RN mean=39.13 ($SD = 6.86$) vs. MD mean=44.71 ($SD = 4.92$), $p < .001$) and a more negative ethical environment (RN mean=30.8, range:17-43; MD mean=37.9, range: 22-44; $p < .001$). Pauly et al. (2009) utilized a descriptive correlational approach to study hospital nurses in order to determine if there was a relationship between moral distress and an ethical climate. The researchers describe an ethical climate as the context for which professional practice is promoted that has an impact on patients, safety and recruitment and retention of nurses. The authors reported a negative correlation between moral distress and the ethical climate ($r = -.420$, $p < .01$). Ohnishi et al. (2010) examined moral distress in 289 acute care psychiatric nurses in Japan and reported that there was a relatively low level of reported moral distress (total mean score of 2.47 ($SD \pm 1.71$)) but for participants reporting low staffing the level of moral distress was reported as higher (total mean 2.86 ($SD \pm 1.79$)) and there was a positive relationship with moral distress ($r = 0.36$, $p < .001$). Also looking at MD in nurses, Silen et al. (2011) surveyed 249 hospital-employed nurses from two separate organizations in Sweden to describe moral distress and its relationship to ethical climate. They reported a negative correlation between moral distress and the ethical climate, the higher the perceived ethical climate the lower moral distress reported ($r = -.328$, $p < .001$). In summary, these studies show that ethical issues exist in many specialties and a positive relationship exists between an ethical environment and the experience of moral distress, possibly more apparent when there are environmental stressors such as low staffing rates.

The professional practice environment and how it affects moral distress has also been studied. Papathanassoglou et al. (2012) conducted a descriptive correlational study that looked at autonomy in critical care nurses and its relationship to moral distress and physician-nurse collaboration. They reported that lower autonomy was associated with increased moral distress ($r = -.210, p = .01$) and lower levels of perceived physician-nurse collaboration ($r = -.339, p < .001$). McAndrew, Leske and Garcia (2011) also studied critical care nurses and the influence that moral distress has had on the professional practice environment and conflict utilizing a descriptive correlational design. The study focused on the experience of moral distress and its impact on both the organization and the nurse. They reported that the frequency of moral distress affects all aspects of professional practice (participation in hospital affairs, leadership and support, staffing and collaborative relationships) except for quality of care ($r = .12; p = .60$). In conclusion, if moral distress occurs in the professional practice environment the nurse not only suffers, but the organization is also affected by contributing to poor perceptions of the professional practice environment.

To date there is only one study published that has explored the frequency and intensity of moral distress in nurses working in the ED (Fernandez-Parsons, Rodriguez, & Goyal, 2013). The sample was composed of 51 ED nurses from one community hospital in the pacific northwestern part of the United States. The range of experience of the sample was from 3 months to 27 years and the age range was between 27 and 68. The researchers used the MDS-R and reported an overall moral distress mean score of 3.18, indicating a low level of MD in this sample. Alpha's for

the MDS-R were not reported for this study. The most frequent cause of moral distress identified was following the family's wishes to continue life support even though it was not in the best interest of the patient. The top item in the intensity subscale was working with health care professionals that were considered unsafe ($M = 2.96$). In response to the query about contemplating leaving their job, 13.3% reported that they are currently considering leaving their job because of the moral distress they are experiencing.

Leggett, Wasson, Sinacore and Gamelli (2013) performed a pilot study to examine the moral distress experience in a United States burn center. Thirteen intensive care nurses who worked in a burn unit were enrolled in this pre-test post-test study. The study randomized the nurses into two groups. One group received a 6-week educational intervention about moral distress while the other group served as a control. They utilized the MDS-R and a tool to measure self-efficacy. The results showed that the study group had a lower MDS-R score (40.5) than the control group (92.0) and there was a statistically significant ($p=.03$) difference at six weeks post the intervention. While this sample is small the results certainly suggest that there is some benefit to education in the mitigation of moral distress.

Mason et al (2014) completed a study, which examined the relationship between compassion fatigue, moral distress and work engagement in 26 surgical intensive care unit trauma nurses. They utilized the MDS and only used the frequency of moral distress as a measurement as a way to decrease the amount of survey fatigue. They reported that this sample reported a significant negative correlation ($r = -0.49, p < .05$) between compassion fatigue and work engagement,

while 65% reported experienced moral distress. The authors reported no significant correlations between the frequency of moral distress and work engagement. This study therefore did not completely study moral distress as only the frequency part of the tool was utilized and in order to measure moral distress frequency and intensity must both be measured.

In summary, there are many quantitative studies that suggest that moral distress can have detrimental effects on nurses in various specialties. To date there is only one small study that explored moral distress in ED nurses working at a single community hospital and its findings support the need for further study in this vulnerable population and of using the MDS-R with nurses who practice in the emergency department.

Qualitative studies

The concept of moral distress involves feelings, emotions and experiences that may be difficult to capture in a quantitative study. The literature was reviewed for qualitative work that has contributed to the understanding of moral distress. Four qualitative studies exploring moral distress published in the past five years will be reviewed in this section. In the first, Brazil et al (2010) set out to examine the experience of moral distress in a broad range of health care occupations working in home-based palliative care. The research utilized the critical incident approach with 18 healthcare providers in Canada. Most participants described at least two critical incidents that triggered moral distress. The researchers clustered the findings into three themes: role of informal caregivers, challenging clinical situations and service delivery issues. Examples of these service delivery issues were both internal (unable

to have an impact and caregiver burden) and external (unable to have an impact, communication issues and inadequately trained staff), which supports the work done by Hamric, Borchers, and Epstein, 2012.

The second study by Pavlish et al. (2011) examined nurses' priorities, actions and regrets in clinical practice related to moral distress. The researchers utilized the critical incident technique and a total of 91 respondents completed the open ended survey and identified priorities in ethical incidents that included situations like quality of life, pain and suffering and aggressive medical treatment. When asked to identify actions taken, the respondents most often reported on the actions of others and not their own. Many of the respondent's utilized immediate supervisors during ethically charged situations. Regret with ethical situations was reported and centered on end of life situations and feelings of inadequacy for not doing enough. This study supports Wilkinson's work by identifying the impact of coping, such as social support, on the experience of moral distress in nurses.

The third study performed by Maluwa et al. (2012) examined moral distress in nursing practice in Malawi, Africa. The researchers interviewed 20 nurses who practiced in an acute care hospital. The results show that regardless of age, experience or tribe (African social division) the nurses experienced moral distress. The major distressing factors reported were inadequate resources and lack of respect from supervisors, patients, families and peers. This study supports Jameton's contention that moral distress does exist in other cultures and is impacted by the decisions made in the workplace, as evidenced by leadership support.

The last qualitative study that will be discussed is by Wiegand and Funk (2012). The purpose of the study was to identify clinical situations that caused critical care nurses to experience moral distress and to understand the consequences of moral distress for the nurse namely, would nurses change their practice based on experiencing moral distress. The researchers utilized an open-ended question approach recruiting a convenience sample of 204 critical nurses from a university hospital and reported the themes in terms of percentages, which is not typical of most qualitative research. Seventy nine percent of the sample experienced moral distress attributable to end of life and medically futile care. The consequences reported from moral distress include patient consequences identified as suffering, prolonged dying, disrespect, false hope and inappropriate care. However, sixty two percent of the participants would not have changed their actions if faced with a similar situation. The authors suggest that moral distress can be reduced, but not eliminated, and therefore nurses must learn to take care of themselves and learn from the experiences. These experiences can help strengthen a nurses resolve to do better in future situations. This study supports Corley's theory, which identified that the individual's moral concepts impact the experience of moral distress. Findings also suggest that the experience of moral distress has the potential to cause a negative impact not only on the nurse, but also on patient outcomes.

In summary, the qualitative studies reviewed show that moral distress in various nursing specialties and countries is common and that if left untreated or

unrecognized it can have detrimental effects on the nurse, patient, families and the profession.

Summary of the Moral Distress Empirical Literature

There is a body of empirical evidence using a quantitative and qualitative approach that supports that moral distress does exist in various specialties. The studies suggest that moral distress may have a negative impact on nurses themselves (Brazil et al., 2010; Fernandez-Parsons, Rodriguez & Goyal, 2013; Hamric & Blackhall, 2007; McAndrew, Leske & Garcia, 2011; Pauly et al., 2009; Pavlish et al., 2011; Radzvin, 2011; Rice et al., 2008), patients, families, and work environment, including co-workers, (Brazil et al., 2010; Elpern, Covert & Kleinpell, 2005; Fernandez-Parsons, Rodriguez & Goyal, 2013; Hamric & Blackhall, 2007; Ohnishi et al., 2010; Pauly et al., 2009; Pavlish et al., 2011; Radzvin, 2011; Rice et al., 2008), findings consistent with some aspects of the theoretical perspectives reviewed. Additional quantitative and qualitative research is needed to understand the phenomena of moral distress better and to generate more evidence related to the professional work environment and nurse burnout (Fernandez-Parsons, Rodriguez & Goyal, 2013; Pauly et al., 2009). Additional studies are needed to help further the understanding of the experience of moral distress in all nurses, which may help in determining how nurses cope with ethically distressing situations (Weigand & Funk, 2012).

The overwhelming themes of the studies in this moral distress literature review suggest consequences such as burnout, job satisfaction and low retention regardless of specialty. Some psychological symptoms related to moral distress are

feelings of powerlessness, hopelessness, regret, and health care failure (Brazil et al., 2010; Elpern, Covert & Kleinpell, 2005; Hamric & Blackhall, 2007; Ohnishi et al., 2010; Pauly et al., 2009; Pavlish et al., 2011; Radzvin, 2011; Rice et al., 2008). Some additional psychological symptoms reported are frustration, anger, fear, sorrow and low self-esteem (Brazil et al., 2010; Elpern, Covert & Kleinpell, 2005; Hamric & Blackhall, 2007; Ohnishi et al., 2010; Pauly et al., 2009; Pavlish et al., 2011; Radzvin, 2011; Rice et al., 2008).

Profound physical symptoms related to moral distress are also reported in two studies. The physical symptoms reported include: headaches, stomachaches, muscle tension, crying, and physical exhaustion (Ohnishi et al., 2010; Radzvin, 2011). Webster and Baylis (2000) suggest that these symptoms and reactions may be the result of the individuals' failure to act in an ethically correct manner.

Many of the studies in this literature review recommend the need for additional research on moral distress and the practice environment (Brazil et al., 2010; Elpern, Covert, Kleinpell, 2005; Fernandez-Parsons, Rodriguez & Goyal, 2013; Hamric & Blackhall, 2007; McAndrew, Leske & Garcia, 2011; Ohnishi et al., 2010; Pauley et al., 2009; Pavlish et al., 2011; Radzvin, 2011; Range & Rottherman, 2010; Rice et al., 2008). When nurses experience moral distress it has the potential to create some degree of human suffering (Ohnishi et al., 2010; Radzvin, 2011). It has also been reported that higher levels of moral distress can contribute to a more negative work climate, poor job satisfaction and premature career abandonment (Brazil et al., 2010; Fernandez-Parsons, Rodriguez & Goyal, 2013; Hamric & Blackhall, 2007; McAndrew, Leske & Garcia, 2011; Pauly et al., 2009; Pavlish et al.,

2011; Radzvin, 2011; Rice et al, 2008). The concept of moral distress has a very strong foundation based on this review of the literature. Regardless of the population, studies show that there are negative consequences of moral distress that include but are not limited to anger, frustration, sadness, depression and helplessness. Weigland and Funk (2012) discuss how moral distress can have a lasting effect on nurses. They recommend that nurses be guided and encouraged to do things to promote their personal self-care and rejuvenate themselves. Such suggestions have not been followed by intervention research and the empirical support to guide such interventions to facilitate moral courage appears lacking.

Clearly, an understudied at risk population is composed of ED and trauma nurses. In light of the stressful nature and the ethically challenging environment in which ED and trauma nurses work it appears important to study these populations and build on recently revealed findings about ED nurses (Fernandez-Parsons, Rodriquez & Goyal, 2013; McAndrews, Leske & Garcia, 2011).

In summary, the gaps in the moral distress literature are many. Despite the studies of nurses providing critical care, the attention to nurses in other different, but equally high risk, specialties such as emergency and trauma is virtually nonexistent. Though theoretically likely to be present, little is known about the scope of the problem in this group of nurses. Similarly, little is empirically known about the progression of moral distress over time in nurses, information that is important to develop interventions to reduce risk and maintain levels of personal, patient and organizational health. This study will provide knowledge about both exposure to situations and level of moral distress in this little studied group.

Coping

How people perceive stress is greatly influenced by how people cope. Lazarus and Folkman (1984) provide the theoretical underpinning for most of the research related to stress and coping. Lazarus and Folkman identify that stress has three major processes: primary appraisal, secondary appraisal and coping. Primary appraisal is the process of perceiving a threat, while secondary appraisal is the process of bringing to mind a potential response to that threat. Coping, the last phase, is described as the process of executing that response. Coping as presented by Lazarus and Folkman is differentiated as either problem focused or emotion focused.

Problem focused coping is aimed at either solving the problem or doing something to alter the source of the stress (Lazarus & Folkman, 1984). Emotion focused coping is aimed at reducing or managing the emotional distress that is associated with the given situation. Most stressful situations may elicit both types of coping, although Lazarus and Folkman posit that problem-focused coping tends to predominate when people feel that something constructive can or should be done. Conversely, emotion focused coping predominates when the individual believes that the stress is something that must be endured.

The two processes are distinct and composed of diverse actions. The singular process of problem focused coping typically involves several distinct activities: planning, taking direct action, seeking assistance, screening out other activities and

forcing oneself to wait before acting (Lazarus & Folkman, 1984). Emotion focused responses are also diverse; and while some may involve denial, others consist of positive re-interpretation of events or seeking out social support. According to Lazarus and Folkman the emotion based responses are very different from each other and may have very different implications for a person's ability to cope with a given situation.

Building on Lazarus and Folkman's seminal work, Carver, Scheier and Weintraub (1989) proposed 15 dimensions of coping. Remaining consistent with the Lazarus and Folkman model of problem focused coping they identified active coping as the process of taking active steps to try to remove the stressor. These steps include: planning (thinking about how to cope), suppression of competing activities by putting other projects aside to avoid becoming distracted, restraint (waiting for an appropriate opportunity to present itself), seeking social support for instrumental reasons. More negative dimensions of active coping identified by Carver et al. include behavioral and mental disengagement. Behavioral disengagement involves reducing efforts to deal with a stressor by giving up the attempt to attain goals and mental disengagement involves efforts to self-distract from the stressor. The components of emotion focused coping are determined by the individual's ability to positively reinterpret events, to accept or deny the outcome, to turn to religion, and to seek out social support.

Coping Empirical Review

How an individual copes can have a major impact on every aspect of his or her being. It can help him or her develop successful relationships in the workplace

as well as deal with critical and chronic illnesses. Not studied extensively, there are many studies that suggest that coping should be studied in high risk professions such as nurses.

Measurement. There are several reliable and valid tools that have been used to measure coping in various patient populations. The Jalowiec Coping Scale (Jalowiec, 2003), the Thought Control Questionnaire (Reynolds & Wells, 1999) and the Coping Strategies Questionnaire (1999) and the COPE Inventory (Carver, Scheier, & Weintraub, 1989). The Jalowiec, Thought Control and Coping Strategies scales will be discussed in greater detail within the context of the coping empirical literature. Each of these instruments utilizes the theoretical framework established by Lazarus and Folkman (1989), and all focus on measuring both problem and emotion focused coping.

Carver, Scheier and Weintraub's (1989) COPE Inventory is an instrument developed to enhance understanding of the self-regulatory functions implicit in an individual's coping efforts. The authors' underlying assumption was that there is benefit to problem specific aspects of the process of coping, which is measured in the tool through the 13 dimensions that may be important despite their not coming to mind immediately as coping tactics. The COPE Inventory measures use of the following strategies via individual scales: active coping, planning, positive reframing, acceptance, humor, religion, emotional support, instrumental support, self-distraction, denial, venting, substance abuse, behavioral disengagement, self-blame. The responses range from 1 (*I haven't been doing this at all*) to 4 (*I've been doing this a lot*). Each scale has 4 questions and is rated from 4-16. The authors do

not recommend that an overall score be calculated. Instead, each individual researcher is advised to use scores from each scale that relate to the coping response of interest and to look at each score in relationship to other variables being studied.

Coping in various health related populations

The following review of the empirical literature will discuss research studies that examined coping in a selected patient populations followed by a general review of the relationship between coping and the general work force. This approach was taken to facilitate a more comprehensive review of the coping literature since there are so few empirical studies relating to coping and nurses. The six studies that have examined the relationship between coping and nurses will conclude the section.

Coping with wellness and illness

Various patient populations have been studied in order to help determine how they cope with wellness and illness, and comparisons are made between race, gender, diagnosis and age groups. To provide an overview of the vast empirical literature as it relates to coping, an abbreviated review of the patient related literature is presented.

Culver, Arena, Antoni and Carver (2002) prospectively studied coping and distress among African ($n = 8$), Hispanic ($n = 53$) and non-Hispanic White women ($n = 70$) who were undergoing treatment for breast cancer at the early stage. Overall there were many similarities in the coping strategies utilized among the groups over time, but both African-American and Hispanic woman reported utilizing more religious coping than non-Hispanic Whites ($F(2,125) = 9.74, p < .001$). Carver and

colleagues (2004) continued her research with minorities and early stage breast cancer and those finding substantiated the previous finding that religious coping was more common among African-Americans ($n=26$) and Hispanics ($n=59$) than among non-Hispanic Whites ($n=151$) $F(1,170) = 9.25, p < .01$). In this second study it was also found that non-Hispanic Whites had a greater tendency to use humor as a way of coping when compared to the minorities ($F(1,203) = 5.13, p < 0.03$).

Urcuyo (2005) continued to prospectively study early stage breast cancer patients ($n=230$) and examined the relationship between coping, personality and current wellbeing. The sample was made up of mostly white married women with a mean age of 53.45 ($SD=12.34$). A positive relationship of coping to trait optimism ($r = 0.24, p < .001$) and positive reframing ($r = 0.33, p < .001$) and religious activities ($r = 0.28, p < .001$) was reported. Each of the aforementioned studies utilized the Brief COPE (Carver, 1997) to measure coping and demonstrated that there are cultural differences in coping strategies used by females who are dealing with breast cancer.

In Shah et al.'s (2006) study the effects that coping and stress have on depression in adults with type 2 diabetes were examined. In this cross-sectional study using a convenience sample of 201 patients with diabetes they found that patients who experienced greater diabetes related stress and depression utilized significantly less problem-solving coping than did patients with less stress or less depression [$t = 7.74, p < .001$; $t = -6.86, p < .001$, respectively]. The researchers used the Diabetes Coping Measure (Welch, 1994) instrument to measure coping and behavioral coping strategies specific to diabetes.

Flemme, Johansson and Stromber (2011) studied coping strategies in adult patients with cardioverter defibrillators. The researchers utilized a cross-sectional multicenter approach to study 147 males and females who lived with a cardioverter defibrillator for between 6-24 months. They used the Jalowiec Coping scale (1984) to measure coping. This population reported that they seldom used or needed coping strategies, but those who did tended to rely on optimism ($m = 1.8, SD=0.68$). Moreover, they did find that women reported greater anxiety related to symptoms and overall utilized more coping strategies ($\beta = 12.3, p = .046$). This study suggests that there are some differences between men and women in how they cope to a chronic illness.

Sexual dysfunction and coping strategies in 45 adult multiple sclerosis (MS) patients were studied by Kilic, Unver, Bolu and Demirkaya (2011) utilizing a descriptive cross-sectional design. Kilic and colleagues measured coping with the COPE Inventory. They found that females had a greater rate of sexual dysfunction (60.9%, $p = 0.001$) and overall utilized affective coping strategies, such as seeking social support ($m = 13.50, SD = 3.37$) positive reinterpretation and growth ($m = 12.83, SD = 2.90$) while men ranked positive reinterpretation and growth ($m = 13.41, SD = 2.06$) and focusing on and venting emotions ($m = 13.14, SD = 2.44$) as their most used coping strategies. The researchers also found that while depression and anxiety was high for both genders ($p > 0.05$) no relationships were found between sexual dysfunction, anxiety and depression were found in either group ($p < 0.05$).

Tsai, Harpaz-Rotem, Pietrzak and Southwick (2012) studied the role of coping, resilience, and social support related to the experience of post-traumatic stress disorder (PTSD) and social function in 164 veterans returning from Iraq and Afghanistan within 12 months. The researchers used a cross-sectional design and the Thought Control Questionnaire (Wells and Davies, 1994) to assess coping. Fifty two percent of the veterans screened positive for PTSD. The results demonstrate that those veterans who screened positive for PTSD had greater difficulty with relationships, excessive worry ($r = .44, p < .001$), decreased acceptance of change ($r = -.30, p < .001$) and poor social support ($r = -.44, p < .001$).

Penacoba-Puente, Carmona-Monge, Marin-Morales and Naber (2013) studied coping strategies of 285 Spanish pregnant women in relation to anxiety and depression. The researchers used the Coping Strategies Questionnaire (Sandin and Chorot, 2003) to closely examine differences in problem-focused and emotion-focused coping in subgroups. They found no differences in problem focused coping ($p > .05$), but there were statistically significant variations in emotion-focused coping between some groups ($p = .002$). Specifically, women who were older, had higher levels of education, were employed, had a planned pregnancy and a previous pregnancy were more likely to have reported more adaptive problem focused coping ($r^2 = .223, p = 0.02$) and positive reappraisal ($r^2 = .190, p = 0.04$). Penacoba-Puente et al. also found that the presence of poor coping strategies was more predictive of anxiety ($F = 3.389, p < 0.01$) and depressive symptoms ($F = 5.512, p < 0.01$) in this sample. Overall coping strategies predicted 21% of the anxiety variance and 23% of the depression variance. The findings suggest that pregnant women

who utilize positive coping strategies are less likely to develop anxiety and depression throughout their pregnancy.

In conclusion, there are a substantial number of studies that have looked at coping strategies in patients. Utilization of positive coping strategies has been demonstrated in individuals with various diagnoses ranging from multiple sclerosis to PTSD to pregnancy and composed of varying cultures and genders. The studies suggest that utilizing positive coping strategies such as religion, social support, humor and problem solving techniques may enhance patients' overall sense of wellness.

Coping and Work

How people cope with day-to-day activities in the workplace is variable. Constant exposure to job related stressors can result in conflict and ambiguity in the workplace which may lead to utilization of negative coping strategies as a means to help create a sense of wellbeing and balance. The following studies demonstrate the influence of coping in the general workforce as well as in the nursing workforce.

General workforce

Recent research on stress and coping in the general workforce is limited with only two studies published within the past five years. One by Oren (2011) looked at differences in coping strategies used by self-employed and organizationally employed workers (n =159). They utilized the Coping Measure (Pines, 1997) to measure coping. The researchers reported no differences in the level of stress between the 2 groups. However, they did find that self-employed workers utilized more active coping (Fisher $z = 1.98, p < .05$) by confronting problems directly

whereas organizationally employed workers coped by avoiding problems ($\chi^2 = 240.98, p < .0001$). This suggests that those who are autonomous/empowered by virtue of their self-employment may choose more active coping strategies.

Turte et al. (2012) explored the relationship between empowerment and autonomy as coping strategies of young (15-20 years of age) workers for harassment at work. The researchers utilized qualitative methodology and interviewed 30 apprentices and trainees twice over a period of one year. They found that these young workers reported little or no knowledge of strategies to cope with harassment at work thereby putting them at risk for being a victim of and experiencing the negative effects of aggression in the work place.

Both of these studies show that the general workforce does experience stress and using coping techniques, such as problem solving, may provide some benefit.

Coping and the nursing workforce

Gibbons, Dempster and Moutray (2010) studied stress, coping and satisfaction in 171 senior nursing students using survey methods. They utilized the Brief COPE (Carver, 1997) to assess coping in students. The students in this sample reported a negative correlation between avoidance coping and general overall health ($r = -.515, p < .01$). The evidence suggested that when students demonstrated more avoidance they had a more stressful student experience.

Gerowetal (2010) conducted a qualitative phenomenological study with 11 nurses to gain a better understanding of the coping strategies utilized and feelings of nurses surrounding death of their patients. Four themes emerged from their analysis: reciprocal relationships transcend professional relations, initial patient

death events are formative, coping responses incorporate spiritual views and care rituals, and remaining professional requires compartmentalizing of the experience. Gerowetal concluded that as a coping strategy nurses create a *curtain of protection* to help mitigate the grieving process and allow them to continue to provide nursing care that is supportive and therapeutic.

Ashker et al. (2012) examined the work-related emotional stress and coping strategies that affect the wellbeing of nurses working in 6 outpatient hemo-dialysis units in the Midwest. They utilized survey methodology in this multicenter study and utilized the Ways of Coping (Folkman and Lazarus, 1980) to measure coping. They reported that problem-focused coping ($m=17.66, SD = 4.97$), self-control ($15.29, SD = 3.14$) and seeking social support ($14.49, SD = 3.85$) were the most frequently coping methods used by nurses in this specialty. The findings suggest that in order for nurses who are working with this chronic patient population to maintain overall wellbeing, positive coping techniques may provide some benefit.

Chipas et al. (2012) studied stress and coping mechanisms of 1,374 student registered nurse anesthetists (SRNA). They utilized a quantitative approach and survey methodology. A survey developed by the American Association of Nurse Anesthetists that measured stress, coping and overall wellness in this specialty was distributed. Internal consistency was determined for this tool by calculating the averages of split-half correlations, which resulted in a Cronbach alpha of 0.80. They found that 17.1% of the students were taking prescription medication to help them cope with the stress of their program. The overall reported stress was 7.2 ($t = 8.5, p < .05$). The participants reported experiences of stressful symptoms on a weekly

basis ($m= 1.9$, range 1-4) and negative coping effects such as increase use of sick days/avoidance, depression and decreased health and wellness.

Mark and Smith (2012) studied occupational stress, job characteristics, and coping in predicting anxiety and depression in nurses. The sample was made up of 870 nurses and survey design was utilized. The Ways of Coping tool (Folkman & Lazarus, 1980) was used to measure coping. The researchers reported that negative coping characteristics, such as self-blame ($r = .48, p < .01$), escape/avoidance ($r = 0.34, p < .01$) and wishful thinking ($r = 0.34, p < .01$) were positively correlated with anxiety and depression. They also found that job demands ($r = .33, p < .01$) and over-commitment ($r = .57, p < .01$) had positive correlations with increased levels of anxiety and depression. Conversely, positive coping skills such as social support ($r = -.34, p < .01$) and skill discretion ($r = -.21, p < .01$) were associated with lower levels of depression and anxiety in this sample.

More recently, Gillespie and Gates (2013) studied 137 emergency department (ED) nurses, who cared for trauma patients, recruited from an emergency nursing organization mailing list. The purpose of this study was to determine the relationship of effective proactive coping behaviors to the occurrence of traumatic stress experienced by trauma nurses. They utilized the Proactive Coping Inventory (Greenglass et al., 1999), which defines proactive coping behaviors as actions used by a person to manage personal stress before a severe stressor occurs to assess coping in this population. An overall low but positive correlation between active coping and traumatic stress ($r = .185, p = .015$) was found. This can be explained in that trauma nurses utilize planning and anticipation

as a coping strategy in patient's care and by being proactive during times of dealing with traumatic stress this will provide benefit to their practice.

In conclusion, this review of the empirical literature suggests that positive coping strategies can not only have a positive impact on patients and families during health and illness, but also on the nurses caring for them. Workplaces such as hospitals are complex environments and if nurses are unable to utilize positive coping with the daily stressors poor outcomes for the nurses and the organizations, such as mental health issues such as anxiety and depression and the use of excessive sick days may result.

The major gap in the coping literature is the overall lack of empirical examination of the effects of positive and negative coping strategies on nurses in the workforce especially in those environments that are more intense and demanding such as the ED.

Moral Distress and Coping

In 2008 the American Association of Critical Care Nurses (AACN) published a statement that charged nurses and hospitals to recognize and implement interventions that help to soften the effects of moral distress. The effects of moral distress is so broad that exploring its relationship to individual coping behaviors is needed to provide the direction necessary to plan theory based interventions to mitigate the unwanted effects of moral distress.

To date, one study has been published that examined the relationship between moral distress and coping. Wilson et al. (2013) studied the relationships between the level of moral distress, coping strategies and interventions in critical

care and transitional/step down nurses. They utilized a convenience sample (39 critical care and 23 transitional care/step down nurses; total $n = 62$) of predominately women who worked in an acute care hospital to complete MDS-R to measure moral distress and the Coping Strategies and Resource Questionnaire developed by the authors was used to measure coping. They reported a Cronbach 's alpha of 0.90 for the MDS-R. Overall the participants reported low levels of moral distress ($m = 119.3$, range = 10-253, $SD = 62.3$). There were no statistical differences noted between the two groups of nurses ($f = 0.57$, $p < .05$). Situations that created the highest levels of moral distress in both groups were those related to futile care ($f = 0.03$, $p < .05$). Questions specific to physicians' practice that proved to be significant were lack of informed consent ($f = 0.02$, $p < .05$) and physicians providing incompetent care ($f = 0.015$, $p < .05$). They also found that the sample used many resources to help them recognize and cope with moral distress and that distressing situations impacted their ability to cope at work as well as in their personal lives. Even though this study reported an overall low level of moral distress it does suggest that there is a relationship between coping and moral distress.

Stress and Emergency Nursing Practice

There are nearly 200,000 ED nurses in the US (US Department of Health and Human Services). ED's are highly charged environments that typically have patients with varying acuity, are notoriously overcrowded, short staffed and more often than not populated with the uninsured and those with poor access to health care impacting on deficits in primary prevention. Emergency nursing has workday characteristics unique to the specialty: constant change, unpredictability, increased

patient acuity and complexity combined with uncontrollable patient loads. They are required to care for patients of all ages and genders with a vast array of illness and injuries, while practicing under the scrutiny of peers, other emergency personnel, patients and family members (ENA, 2013). There have been a limited number of studies related to the ED work environment reported in the literature. This review includes studies from ED's in Ireland, United Kingdom (UK) and Brazil. The studies utilize qualitative and quantitative methods and analyze the effects of the practice environment.

Kilcoyne and Dowling (2007) performed a qualitative study in order to highlight nursing issues associated with overcrowding in the ED. They utilized a phenomenological approach with unstructured interviews of 11 ED nurses. They reported three central themes related to overcrowding: lack of space, elusive care and powerlessness. It was within the sub-theme of powerlessness that concepts like moral distress and stress and burnout were identified. This study clearly suggests that the ED environment contributes to the detrimental effects to nurses from moral distress and burnout.

Ferns (2012) studied the quality of record keeping by ED nurses following a violent incident in the United Kingdom (UK). The researchers used a mixed methods approach in which they retrospectively looked at records from violent incidents, and performed real time interviews and observations during the violent event. The findings were that 66% of the incidents reported were incomplete. The participants reported that they felt that violent incidents were frequently underreported and improperly reported, an assertion that was validated by the researcher's

observations. The participants reported that the primary motivator for proper completion of the incident forms was to ensure that evidence was adequate, to support professionalism and integrity of the staff, and to protect each other from future accusations of poor practice. Some participants reported that the lack of organizational response following completion of the labor-intensive forms precluded them from completing forms. This study suggests that violence that is experienced in the ED is complex and incidence reports may not properly capture the extent or effect of the violence on ED nursing staff.

Bandeira, Diniz and Sardinha (2012) examined the ergonomic constraints as defined as the physical environments effects that prevent injury and stress to the body in ED nurses in two hospitals in Brazil driven by a belief that the consequences of poor ergonomics may go beyond physical damage but lead to anxiety, frustration and feeling of unrest. They utilized a qualitative approach that included observations and a questionnaire. In general the most common reported ergonomic constraints reported were: patient handling, high ambient temperatures, cutting and piercing objects, stress, lack of equipment and insufficient workspace. This study suggests that when ED nurses are unable to cope in their environment there may be negative physical and psychological consequences.

Vasconcelos et al. (2013) looked at the morbidity among ED nurses and its association with work conditions and work organization. They utilized a cross-sectional design using a convenience sample of 272 ED nurses in Brazil. A total of 85.7% of the participants reported at least one or more disease/injury in the past 12 months. The most prevalent diseases reported were musculoskeletal (37.1%) and

digestive (28.7%) diseases and mental disorders (28.3%). The most common contributing work factors to morbidity were high work demands (OR 2.69), fatigue (OR 3.59) and night shift work (OR 6.55). This study clearly suggests that when nurses work in a highly charged department as the ED it may put them at risk for illnesses and the impact that coping has on wellness should be further explored.

Online journal (2013) studied the stressful incidents of physical violence against ED nurses. The author utilized a qualitative descriptive design with a national sample of ED nurses. Narrative descriptions were obtained from 177 ENA members. Four themes were identified from the data: personal worker factors, workplace factors, aggressor factors and assault situations. The knowledge obtained suggested that risk for violence comes from numerous sources and is exacerbated by environments that impede workflow, restrict egress and support when a situation arises. Furthermore, established ED policies are best suited to preventing violence and promoting collegial relationships with security staff, both factors identified as important to reducing risk for violence.

While these studies begin to help identify the negative impact that workplace environmental challenges has on ED nurses, none have yet to identify the short-term and long-term outcomes of these stressors as they relate directly to ED nurses.

Summary

Moral distress is a concept that has been well explored in intensive care nurses, while the same is not true in ED nurses. Both the ICU and the ED environment have complex patients and challenging situations that require nurses to overcome institutional obstacles and conflicts with values and morals.

Additionally, futile care has been demonstrated to create moral distress (Brazil et al., 2010; Elpern, Covert & Kleinpell, 2005; Hamric & Blackhall, 2007; Ohnishi et al., 2010; Pauly et al., 2009; Pavlish et al., 2011; Radzvin, 2011; Rice et al., 2008). The majority of the moral distress studies in this review have focused on the ICU environment and overlook nurses in the ED despite their recognized vulnerability (Brazil et al., 2010; Elpern, Covert & Kleinpell, 2005; Hamric & Blackhall, 2007; Pauly et al., 2009; Pavlish et al., 2011; Rice et al., 2008).

Coping, on the other hand, has been well studied in patients and families in various stages of illness and wellness. However, there are limited studies that evaluate nurses in all specialties in particular those engaged in ED nursing practice as they cope with stressful situations that have been reported to precipitate moral distress in other nursing specialties (Wilson, et al., 2013).

ED nurses work in highly charged environments, are subject to unpredictable working conditions, deal with vulnerable and challenging patients and are faced with moral dilemmas daily, thereby putting them at risk for experiencing moral distress. In addition to the one study that looked at the relationship between moral distress and coping (Wilson, Goettemoeller, Bevan & McCord, 2013) there is only one other study to date that has looked at moral distress in ED nurses (Fernandez-Parsons, Rodriguez & Goyal, 2013). Further research is undoubtedly necessary to explore the relationship between moral distress and coping in ED nurses.

By studying the relationship between moral distress and coping in nurses engaged in emergency care valuable information may be obtained to guide future

support, robust resources and interventions for this specialty group of nurses whom are providing care to a highly vulnerable patient population.

Chapter III

METHODS AND PROCEDURES

Introduction

This study was designed to test the theoretical and empirical relationship between moral distress and coping in ED nurses. A descriptive correlation design that includes measures of moral distress and coping was used to explore the relationship between moral distress and coping in ED nurses. The relationships between the variables was analyzed using Pearson's Product-moment correlations and among variables by multiple regression analysis. Exploratory analysis was conducted with selected demographic characteristics to determine their relationships to moral distress and coping. This chapter focuses on the study design and the procedures used in data collection. Each of the data collection instruments is described, including the reliability estimates achieved from this sample.

Participants

A convenience sample of 198 nurses was acquired utilizing email, social media (Facebook ©, Twitter ©) after having the study posted to statewide and national Emergency Nurses Association websites. This group of nurses was studied because moral distress has not fully been explored in this specialty and recommendations to study this at risk population have been supported in the literature (Fernandez-Parsons, Rodriquez & Goyal, 2013; McAndrews, Leske & Garcia, 2011).

Inclusion criteria included ED nurses who were currently practicing either full-time, part-time or per-diem in an ED environment and were fluent in English.

The number of participants is based on a power analysis in order to help reduce the risk of Type II errors; wrongly accepting the null hypothesis (Polit & Beck, 2012). The G-power program (Faul, Erdfelder, Buchner, & Lang, 2009) was used to determine how many participants were necessary to have adequate power to test study the hypotheses. One hundred ninety eight participants were determined to be adequate for correlational analyses and to have a 0.80 power to find a moderate effect size of 31% with an alpha of 0.05.

Setting

Data was collected electronically through Survey Monkey ©. Survey Monkey © is a web survey development cloud. Data was collected over a period of 4 weeks from July 1, 2014 to August 1, 2014. The setting was anywhere the ED nurse had access to a computer and the internet.

Recruitment

Participant recruitment began after receiving approval from the human subjects committee at Seton Hall University (SHU). A letter (Appendix A) with a link to the survey was emailed to state and the national Emergency Nurses Associations requesting that it either be distributed electronically to their membership or posted to their website(s). An introductory letter (Appendix B and C) was attached that described the purpose of the study and explained that it was an anonymous, voluntary study. The letter included the principal investigator's, dissertation chair's and the SHU IRB chair's contact information to be used if the participants have questions.

Data collection

Data collection was completed in one session. The Survey Monkey © survey included the letter invitation to participate (Appendix B and C), Moral Distress Scale Revised (MDS-R) (Appendix D), The COPE Inventory scale (Appendix E) and a demographic tool (Appendix F).

Instruments

Measurement tools were selected for this study based on several considerations: the appropriateness of the tool for operationalizing the intended constructs, its psychometric properties and availability.

Moral Distress Scale – Revised

Moral distress in this study was operationalized through the use of the Moral Distress Scale revised tool (MDS-R). The MDS-R (Appendix D) has three different parallel versions: adult, pediatric physician and adult other healthcare professional version. The adult version was used in this study. The MDS-R is a 21- item survey with a total score ranging from 0-336. Each of the 21 items is scored by the frequency and how disturbing the situation is or termed as the level of intensity. Items that have never been experienced or not seen as distressing do not contribute to the total MDS-R. The total MDS-R is determined by multiplying the frequency times the intensity and then calculating the sum. The authors suggest that scoring scheme provides a more accurate reflection of moral distress (Hamric, Borchers & Epstein, 2012).

Each individual response asks for the subject to rate both frequency and intensity. The responses range from 0 (never/none) to 4 (very frequently or great

extent). The tool focuses on the major root causes of MD that include: clinical situations, internal constraints and external constraints. There is also space at the end of the questionnaire for the respondent to add any other situations in which he or she has felt MD and then instructs the respondent to rank each added situation on both frequency and level of disturbance for that situation. There were two additional questions that the subjects were asked to complete pertaining to whether he or she has considered quitting the current or a previous job because of MD (Hamric, Borchers & Epstein, 2012).

Hamric, Borchers and Epstein (2012) reported reliability of the instrument by testing and calculating the Cronbach's alpha for critical care nurses (0.89) and physicians (0.67) and for the overall combined for both groups (0.88). In this study the calculated Cronbach's alpha for the MDS-R in this study was 0.95 and for each item was 0.95. Construct validity was evaluated through testing of 4 hypothesis. The first was that nurses with more experience in their current positions demonstrated higher moral distress ($r = .22, p = .005$). The second hypothesis that physicians had significantly lower moral distress than did nurses ($t = -5.786, p < .0001$) and the third that moral distress was negatively correlated with ethical climate ($r = -.402, p < .001$) were also supported. Lastly, MDS-R scores were significantly higher for those professionals who consider leaving their positions (ANOVA $F(1,197) = 48.392; p < .001$) as hypothesized. This tool has been used with critical care nurses and more recently in a study with ED nurses (Fernandez-Parsons, Rodriquez & Goyal, 2013), where its alpha was not provided, but the original authors did not claim that the instrument has demonstrated validity in other specialties, although

they recommended it be utilized in other specialties to expand research efforts (Hamric, Borchers & Epstein, 2012). Permission was granted from Dr. Hamric to use the survey in this study (Appendix G). The tool examines not only the clinical situations that could potentially lead to moral distress, but looks at both internal and external constraints which require coping, therefore making this measure most appropriate for use in this study of nurses in emergency care.

COPE Inventory

The COPE Inventory (Appendix E) is a self-completed questionnaire that measures coping strategies. It is made up of 15 subscales: self-distraction, active coping, denial, substance use, emotional support, behavioral disengagement, emotion focused coping, instrumental support, venting, positive reframing, planning, humor, acceptance, religion and self-blame. Each subscale is measured individually and utilizes a 4-point Likert scale response ranging from 1 (*I haven't been doing this at all*) to 4 (*I've been doing this a lot*). Each of the 15 subscales consists of 4 questions and has a total score ranging from 4-16. There is not an overall score for this inventory, the authors recommend examining each subscale as it relates to the variables being studied (Carver, Scheier, & Weintraub, 1989).

The COPE Inventory (Carver, Scheier, & Weintraub, 1989) was developed to assess a broad range of coping responses. Consistent with that goal the 60-question inventory includes examples that are dysfunctional, as well as functional. It also includes at least 2 pairs of polar-opposite questions per subscale.

The items are used in at least 3 different versions related to specific elements of coping. One is a dispositional or trait-like version in which respondents report the extent

to which they usually do the things listed when they are stressed. A second is a time-limited version in which respondents indicate the degree to which they actually did have each response during a particular period in the past. The third is a time-limited version in which respondents indicate the degree to which they have been having each response during a specified period up to the present (Carver, Scheier, & Weintraub, 1989).

Consequently, the formats differ in their verb forms: the dispositional format is present tense, the situational-past format is past tense, and the third format is either present tense progressive (I am ...) or present perfect (I have been ...).

For the purposes of this study only the dispositional or trait-like version will be used, in order to determine how nurses usually cope with work related situations when they are working. The Cronbach's alpha scores for the various subscales are listed in Table 1. Most supported by the coping literature as important to nurses' coping are denial, acceptance, emotional social support, instrumental social support, religion, positive reinterpretation (Ashker et al., 2012; Chipas et al., 2012; Dempster & Moutray, 2010; Gerowetal 2010; Gibbons, Gillespie & Gates, 2013; Mark & Smith 2012) This survey is posted on the internet and as per Dr. Carver it can be used freely (Appendix E). The COPE Inventory was chosen for this study for its measurement of 15 dimensions of coping which will allow greater depth of analysis and understanding of the coping mechanisms used by ED nurses.

Table 1

Cronbach's Alpha Reliability for the COPE Inventory

Subscale	Cronbach's Alpha* College Student Sample (N= 978)	Cronbach's Alpha for this study (N=198)
Suppression of competing activities	.68	.81
Acceptance	.65	.85
Substance use	**	.96
Use of emotional social support	.85	.94
Restraint	.75	.98
Behavioral disengagement	.63	.85
Religious coping	.92	.98
Denial	.71	.75
Active coping	.62	.85
Use of instrumental social support	.75	.91
Focus on and venting of emotions	.77	.80
Mental disengagement	.63	.75
Positive reinterpretation and growth	.68	.89
Planning	.80	.91

*Note:** College students were used by the author to help develop the foundation for reliability and validity. **The author recommends that substance use be collected as a point of reference despite no demonstrated reliability (Carver, Scheier & Weintraub, 1989).

Demographics of ED Nurses

Several ED nurse characteristics including age, sex, specialty certification and employment status (Papathanassoglou et al., 2012), educational level (Elpern, Covert & Kleinpell, 2005; Hamric & Blackhall, 2007; Ohnishi et al., 2010; Pauly et al., 2009), years of nursing experience (Radzvin, 2011), years of ED experience (Fernandez-Parsons, Rodriquez & Goyal, 2013) as well as the type of ED in which employed (Fernandez-Parsons, Rodriquez & Goyal, 2013) have been found to effect the experience of moral distress. Additionally the frequency with which contemporary issues in which ED nurses face daily were also collected and include the following: abuse and neglect (ENA, 2010), drug seeking behavior (McCaffery, et al, 2005), ED overcrowding (Moskop, 2009), family presence (Jabre, P. et al, 2013), gay, lesbian, bisexual, transgender, queer care (Chapman et al, 2012), language interpreters (Bagchi, et al, 2011), poor access to healthcare (National Center for Health Statistics, 2012), prisoners (Schaenman, Davies, Jordan, & Chakraborty, 2013), psychiatric/mental health (ENA, 2013), recidivism/frequent flyers (Miller, Ghaemmaghami & O'Connor, 2012), religious preferences affecting healthcare (Brezina & Moskop, 2007), substance abuse (McCaffery, et al, 2005), uninsured (National Center for Health Statistics, 2012) and violence (Gacki-Smith et al, 2009). Therefore information related to these variables was included on the demographic part of the tool.

Data Analysis

To assess for normal distribution of the sample, demographic data was analyzed using descriptive statistics for continuous variables including frequency,

percentage, means and standard deviation and chi-square analysis for categorical variables. Descriptive statistics was used to analyze scores for main variables including possible range of scores for each measure, the actual range of scores, mean, mode and median scores as well as standard deviations. Baseline descriptive data for ED nurses sample was analyzed using descriptive statistics. Cronbach's alpha coefficients were calculated for internal consistency reliability for all psychometric measures used for data collection. Inferential statistics was used to assess correlations among and between variables using the Pearson's product-moment correlations in order to ensure that there is no evidence of multicollinearity to effect the multiple regression and to ensure greater generalizability (Grove, Burns & Gray, 2013). The main variable relationships related to the demographic data for the sample was examined using Pearson's correlation and multiple regression analyses when appropriate.

Statistical significance was set at $p \leq .05$. The data was examined for skewness and outliers. Data was analyzed using the Statistical Package for the Social Sciences Software, version 21 (IBM, Armonk, NY).

Plan for data analysis

The analytic approaches were as follows:

Research question testing

Research question 1 and 2. Frequency was determined by measures of central tendency (mean, median and mode) to analyze the following:

RQ1: What is the frequency with which nurses who practice in emergency departments experience moral distress?

RQ2: What is the level of disturbance of morally distressing situations for nurses who work in emergency departments?

Research question 3 and 4. Bivariate correlation and multiple regression was used to analyze interactive relationships among the following:

RQ3: What is the relationship between the frequency and level of disturbance related to moral distress in nurses who practice in emergency departments?

RQ4: What is the relationship between coping and moral distress in nurses who practice in the emergency department?

Hypothesis testing:

Hypothesis 1 and 2. Frequency and measures of central tendency was used to support or not support these hypotheses:

H1: Nurses who practice in emergency departments frequently experience moral distress.

H2: Nurses who work in emergency departments experience disturbance as related to morally distressing situations.

Hypothesis 3. Pearson's product-moment correlation coefficient was used to analyze data among variables for the following:

H3: Nurses who work in emergency departments and frequently experience moral distress have higher levels of disturbance related to moral distress.

Hypothesis 4. Multiple regression was used to analyze data among variables for the following:

H4: There is an inverse relationship between moral distress and four specific coping behaviors (humor, denial, social support, positive reinterpretation and growth) demonstrated in nurses practicing in emergency care.

Protection of Human Subjects

Approval for the study was obtained from the Institutional Review Board (IRB) of Seton Hall University. Steps to protect confidentiality include maintaining that all data will be kept on an external drive in a locked cabinet in the researcher's office; no personal identifiers were collected in this study. This study was considered minimal risk because the participants may experience some distress when completing the surveys. Participation in this study is voluntary and participants did not receive any incentives or compensation for participating. When the participant opened the link and completed the survey this action was considered as implied consent to participate in the study (Dillman, 2014).

Chapter IV

FINDINGS

Introduction

In this chapter, the findings resulting from the data analysis are presented. The chapter is divided into three sections. The first will include a description of the subjects, followed by the analysis procedures and ending with the study results.

Participants

A total of 198 ED nurses who met the inclusion criteria completed the questionnaires that provided the study-subject data. Of the 198 participants 85.4% ($n = 169$) were female, 13.1% ($n = 26$) were male and 1.5% ($n = 3$) were transgender. This sample differs from US national statistics that report 9.1% of nurses are male (HRSA, 2013). The mean age of the sample was 43.44 years ($SD = 11.69$) and the range was from 23 to 66. Participant's ages differs from the latest US reports, where the mean age for nurses was 46 (US Department of Health and Human Services, 2010). The mean years of general nursing experience was 17.93($SD = 12.58$), while the mean years of ED experience was 14.15 ($SD = 10.85$).

A bachelor's degree in nursing was most frequently identified by sample participants' as their highest degree (44.9% [$n = 89$]). The participant's education level differed from a national survey that found 48.4% of RN's hold a bachelor's degree and 51.6% hold an associates degree in nursing (HRSA, 2013). The participant's education level is summarized in Table 2. A total of 62.6% ($n = 124$) participants held a certification in their specialty, while 34.7% ($n = 74$) did not.

Table 2

Highest Level of Education

	Frequency	Percent
Diploma	9	4.5
Associates	37	18.7
Bachelor's in nursing	89	44.9
Bachelor's other	12	6.1
Master's in nursing	36	18.2
Master's other	11	5.6
Doctorate in nursing	2	1.0
Doctorate other	2	1.0
Total	198	100

The most reported ED setting of employment was Level 1 Trauma Center (38.9%, $n = 77$), followed by community hospital (31.8%, $n = 63$), urban center (17.2%, $n = 34$), freestanding children's hospital (10.1%, $n = 20$) and rural hospital (1.5%, $n=3$). The majority of the participants worked full-time (76.8%, $n = 152$), while the remainder worked either part time (13.6%, $n=27$) or per diem (9.6%, $n = 19$).

The religious preferences reported by participants were Christian (76.8%, $n=152$) followed by 13.6% ($n=27$) selecting the option, no religious preference, 6.6%, ($n=13$) selecting other and 3% ($n = 6$) selecting Jewish.

In response to the question inquiring whether participants were actively practicing their religion 50.5% ($n = 100$) responded yes, while 39.9% ($n = 79$) replied no, and 9.6% ($n = 19$) responded that the question was not applicable to them since they did not have a religious preference.

Participants reported frequency of ED specific clinical moral/ethical experiences on an investigator-designed survey using a 4-point Likert scale ranging from 0 (never) to 4 (very frequently). The highest frequencies of these encounters were overcrowding ($M = 3.65, SD = .72$), caring for the uninsured ($M = 3.61, SD = .76$), caring for frequent flyers/recidivism ($M = 3.59, SD = .87$) and caring for patients with psychiatric/mental illness ($M = 3.58, SD = .72$). Detail of all ED experiences queried is provided on Table 3.

Table 3

Frequency of Perceived Exposure to Emergency Department Environment

	Mean	Standard Deviation
Abuse and neglect	2.23	1.07
Violence within the ED	2.56	1.11
Drug seeking behavior	3.23	1.17
ED overcrowding	3.65	0.72
Family presence during procedures	2.81	1.11
Family presence during CPR	2.62	1.14
Queer care	2.29	1.04
Family/Friends as interpreters	2.61	1.27
Non-credentialed interpreters	1.92	1.45
High nurse to patient ratio	2.90	1.17
Poor access to primary care	2.94	1.14
Poor access to specialty services	2.62	1.19
Prisoners	2.07	1.31
Psychiatric/mental illness	3.58	0.72
Recidivism/frequent flyers	3.58	0.82
Religious preferences affecting care	1.51	0.87
Substance abusers	3.17	1.21
Uninsured	3.61	0.76

Note: $N=198$. Frequency was measured using a 4-point Likert scale ranging from 0 (never) to 4 (very frequently).

Data Analysis Procedures

The data for moral distress and coping was examined for skewedness and outliers. As illustrated in Figures 3, 4, 5, there was skewedness noted in the amount of intensity and total moral distress experienced, but the reported frequency of distressing experiences was more normally distributed. Preliminary analysis were conducted with descriptive statistics including possible range of scores for each measure, the actual range of scores, mean, mode and median scores as well as standard deviations. The main variables' relationship with the demographic data for the sample was examined using Pearson's product-moment correlation and multiple regression analyses. Statistical significance was set at $p < .05$. Data was analyzed using the Statistical Package for the Social Sciences Software, version 21 (IBM, Armonk, NY).

Figure 3. Histogram of sum of moral distress frequency

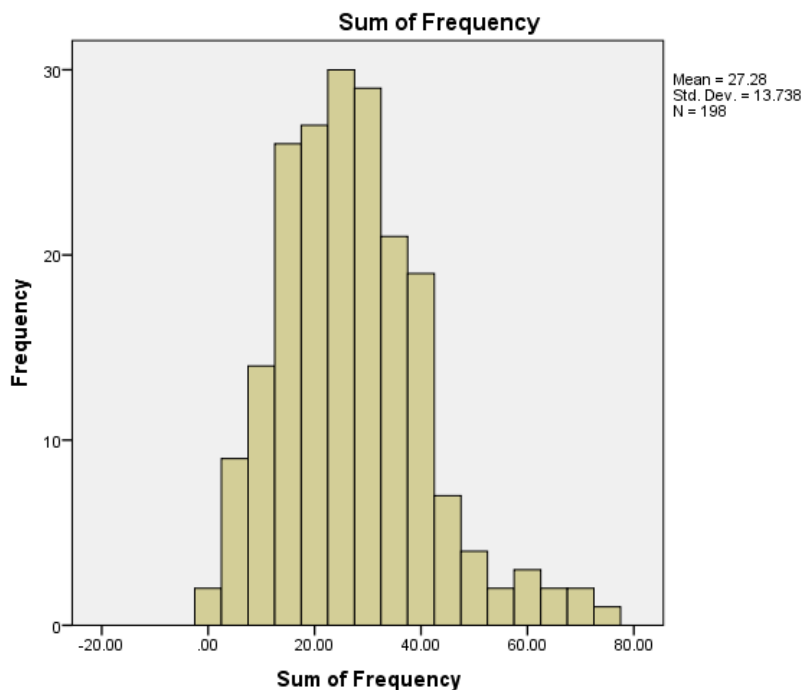


Figure 4. Histogram of sum of moral distress intensity

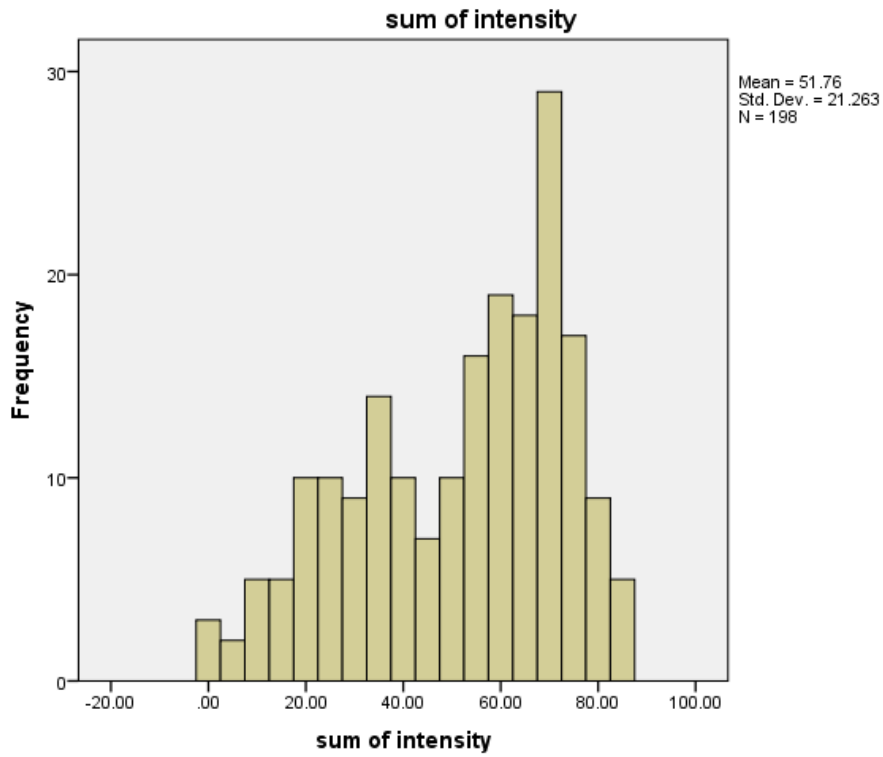
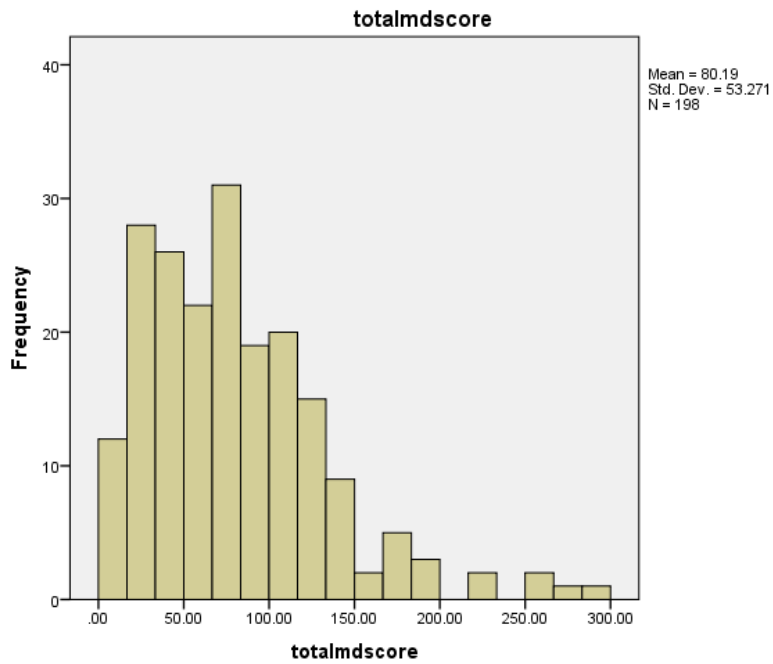


Figure 5. Histogram of total moral distress score



Preliminary Analysis of Variables

This section will describe the overall reported scores of the two variables studied. The dependent variable in this study is moral distress, which was measured by the frequency of the experience of moral distress, the intensity of moral distress as well the total MDS-R. The total MDS-R is a score that is calculated by multiplying the frequency and intensity of each response and then adding each question for a final sum or score. The independent variable consisted of coping and was operationalized by the use of the COPE Inventory.

Moral Distress

Table 4

Total MDS-R scores

	Mean	Standard Deviation
Total MDS-R	80.18	53.27
Total mean frequency of MDS-R	27.26	13.74
Total mean level of disturbance of MDS-R	51.76	21.26

Note: N=198. (Hamric, Borchers & Epstein, 2012).

In response to the question on the MDS-R that asked the participants about their job status 51% ($n = 101$) reported they had neither considered leaving nor have ever left a position because of moral distress, while 36.9% ($n = 73$) had considered leaving and 12.1% ($n = 24$) had left a previous position due to moral distress. When asked if they were considering leaving their current position because of moral distress 30.3% ($n = 60$) responded yes. Tables 5, 6, 7 and 8 show a more in depth analysis regarding this question. Nurses who considered leaving their jobs had higher total MDS-R.

Table 5

Mean total MDS-R and Status of Quitting Related to Moral Distress

Job status	Mean total-MDS-R	N	Standard Deviation
No, I've never considered quitting or left a position	61.3861	101	40.72443
Yes, I considered quitting but did not leave	104.6712	73	59.1295
Yes, I left a position	84.8333	24	51.69952

Note: N=subjects. (Hamric, Borchers & Epstein, 2012).

Table 6

ANOVA for total MDS-R and Considering Leaving Position in the Past

	Sum of Squares	df	Mean Square	F	Significance
Between Groups	79980.702	2	39990.351	16.278	.000
Within Groups	479057.384	195	2456.705		

Note: df= degrees of freedom. F= F score. ANOVA=Analysis of Variance. (Hamric, Borchers & Epstein, 2012).

Table 7

Mean total MDS-R and Status of Leaving Current Position Now

Are you considering leaving your position now?	Mean	N	Standard Deviation
Yes	92.2167	60	52.51282
No	74.9565	138	52.93445
Total	80.1869	198	53.27060

Note: N=sample size. (Hamric, Borchers & Epstein, 2012).

Table 8

ANOVA for total MDS-R and Considering Leaving Position Now

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	12458.163	1	12458.163	4.467	.036
Within Groups	546579.922	196	2788.673		

Note: df= degrees of freedom. F= F score. ANOVA=Analysis of Variance. (Hamric, Borchers & Epstein, 2012).

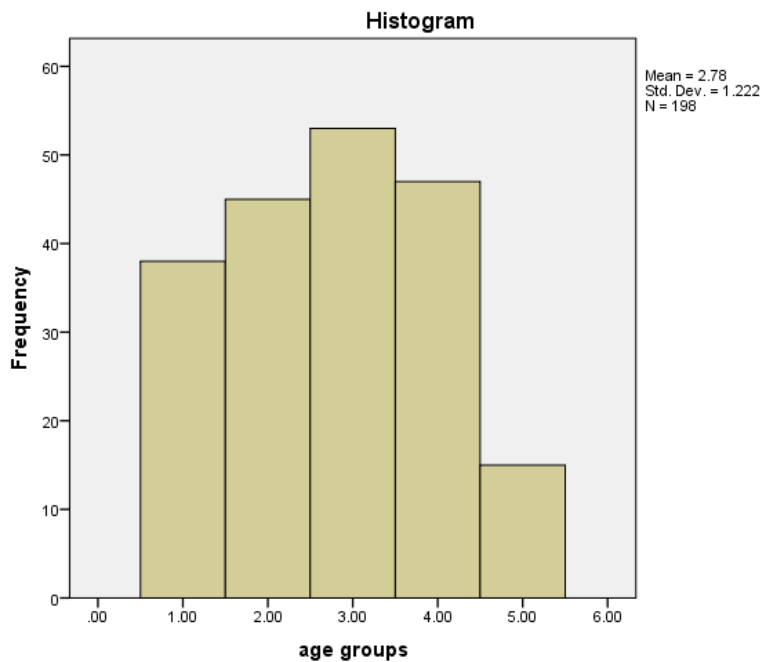
Table 9

Total MDS-R and Age

Age in years	N	Mean Total MDS-R
20-30	38	88.16
31-40	45	80.38
41-50	53	74.36
51-60	47	84.23
Greater than 60	15	67.33

Note: N=198. (Hamric, Borchers & Epstein, 2012)

Figure 6. Histogram of age in years as separated by groups



Note: 1 = 20-30 years, 2 = 31-40 years, 3 = 41-50 years, 4 = 51-60 years, 5 = >60 years.

Table 10
One Way ANOVA for age groups and total MDS-R

	Sum of Squares	df	Mean Square	F	Significance
Between Groups	1154.260	3	384.753	.134	.940
Within Groups	551975.944	192	2874.875		
Total	553130.204	195			

Note: N=198. (Hamric, Borchers & Epstein, 2012).df= degrees of freedom. F=

Table 11
Amount of ED Experience and Total MDS-R

Years of ED Experience	N	Mean	SD
1-2	87	80.10	46.09
3-4	48	83.19	66.92
5-10	44	81.98	54.33
>10	17	74.06	44.61

Note: N = 198. (Hamric, Borchers & Epstein, 2012).

Table 12
One Way ANOVA with Years of ED Experience and Total MDS-R

	Sum of Squares	df	Mean Square	F	Significance
Between Groups	7464.508	4	1866.127	.653	.625
Within Groups	551573.578	193	2857.894		
Total	559038.086	197			

Note: $N=198$. (Hamric, Borchers & Epstein, 2012). df = degrees of freedom. F= F -statistic.

Coping

The COPE Inventory does not yield a total score, but has 15 separate subscales all of which were measured in this sample. The possible individual sub-scale totals range is from 4-16. The most frequently reported coping mechanisms used by this sample were as follows: positive reframing and growth ($M = 11.70, SD = 2.36$), social support ($M = 11.55, SD = 2.89$) and planning ($M = 11.59, SD = 2.77$). A complete list of the subscales with means and standard deviations is listed in Table 9.

Table 13

COPE Inventory sub-scales mean scores

	Mean	Standard Deviation
Positive reframing and growth	11.69	2.36
Mental disengagement	8.77	2.36
Ventilation of emotion	9.48	3.14
Social support	11.55	2.89
Active coping	10.95	2.50
Denial	5.30	1.87
Religious coping	8.80	4.47
Humor	8.73	3.34
Behavioral disengagement	6.18	2.24
Restraint coping	9.40	2.29
Emotional social support	10.90	3.30
Substance abuse	4.88	2.01
Acceptance	10.41	2.53
Suppression of competing activity	8.82	2.33
Planning	11.59	2.77

Note: $N=198$. Measurement was done using a 4-point Likert scale ranging from 1 (I haven't been doing this at all) to 4 (I have been doing this a lot). The possible range for each subscale is 4-16 (Carver, Scheier & Weintraub, 1989).

Table 14 is a correlational matrix that shows the relationship between the total moral distress score and the 15 sub-scales of the COPE Inventory. Pearson product-moment correlation was performed on the total MDS-R scale and all 15 sub-scales of the COPE inventory. Statistically significant positive correlations between moral distress and the following coping subscales: mental disengagement ($r = .29, p \leq .001$) ventilation of emotion ($r = .265, p \leq .001$), denial ($r = .267, p \leq .001$), behavioral disengagement ($r = .348, p \leq .001$), substance abuse ($r = .282, p \leq .001$), acceptance ($r = .186, p \leq .001$), suppression of competing activity ($r = .188, p \leq .001$), humor ($r = .155, p \leq .05$). No correlation met the level of multicollinearity as defined by Burns and Grove (2012).

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Table 14

A correlation matrix between the total MDS-R and the COPE Inventory

	Total MDS-R	PR&G	Mental Disengagement	Ventilation Emotion	Social Support	Active Coping	Denial	Religious Coping	Humor	Behavioral Disengagement	Restraint Coping	Emotional Social Support	Substance Abuse	Acceptance	Suppression of competing Activity	Planning
Total MDS-R	1	.109	.290**	.265**	.011	.090	.267**	.033	.155*	.348**	.135	.135	.282**	.186**	.188**	.043
PR&G	.109	1	.132	.073	.561**	.635**	.088	.315**	.220**	-.023	.403**	.372**	.021	.320**	.603**	.727**
Mental Disengagement	.290**	.132	1	.167*	.021	.058	.279**	.203**	.291**	.377**	.174*	.116	.225**	.167*	.274**	.035
Ventilation Emotion	.265**	.073	.167*	1	.312**	.194**	.239**	.163*	.171*	.147*	.030	.527**	.120	.130	.238**	.111
Social Support	.011	.561**	.021	.312**	1	.701**	.116	.251**	.265**	-.032	.339**	.661**	-.076	.196**	.541**	.698**
Active Coping	.090	.635**	.058	.194**	.701**	1	.147*	.273**	.180*	.015	.356**	.435**	-.044	.270**	.611**	.785**
Denial	.267**	.088	.279**	.239**	.116	.147*	1	.207**	.311**	.523**	.259**	.173*	.202**	.043	.261**	.042
Religious Coping	.033	.315**	.203**	.163*	.251**	.273**	.207**	1	-.036	.141*	.167*	.220**	-.011	.155*	.244**	.307**
Humor	.155*	.220**	.291**	.171*	.265**	.180*	.311**	-.036	1	.160*	.294**	.206**	.144*	.283**	.215**	.150*
Behavioral Disengagement	.348**	-.023	.377**	.147*	-.032	.015	.523**	.141*	.160*	1	.330**	.093	.290**	.173*	.171*	-.096
Restraint Coping	.135	.403**	.174*	.030	.339**	.356**	.259**	.167*	.294**	.330**	1	.228**	.008	.475**	.469**	.366**
Emotional Social Support	.135	.372**	.116	.527**	.661**	.435**	.173*	.220**	.206**	.093	.228**	1	-.032	.163*	.426**	.394**
Substance Abuse	.282**	.021	.225**	.120	-.076	-.044	.202**	-.011	.144*	.290**	.008	-.032	1	.117	.048	-.124
Acceptance	.186**	.320**	.167*	.130	.196**	.270**	.043	.155*	.283**	.173*	.475**	.163*	.117	1	.336**	.276**
Suppression of competing Activity	.188**	.603**	.274**	.238**	.541**	.611**	.261**	.244**	.215**	.171*	.469**	.426**	.048	.336**	1	.624**
Planning	.043	.727**	.035	.111	.698**	.785**	.042	.307**	.150*	-.096	.366**	.394**	-.124	.276**	.624**	1

*Note: N=198. *p < .05. **p < .001. (Hamric, Borchers & Epstein, 2012; Carver, Scheier & Weintraub, 1989)*

Supplemental Analysis

The following section describes additional analysis that, although not a formal part of the analysis plan, adds substance to the study by looking at situations specific to the ED nurse not included in the established moral distress measure. There is a strong relationship between moral distress, as measured by the total moral distress score, and the frequency of ED specific experiences (Table 15). According to the correlation matrix the only three items that did not have a statistically significant relationship with moral distress were the following: caring for victims of abuse and neglect, family presence during CPR as well as family presence during invasive procedures, and caring for the uninsured (Table 15). Table 12 shows the results of a simultaneous multiple regression of the ED experiences and the total MDS-R. This analysis showed that poor access to specialty services and high patient to nurse ratios were predictors of moral distress.

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Table 15

A correlation matrix of frequency of ED experiences and the total MDS-R

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1.Total MDS-R	1	-.050	.274**	.238**	.185**	-.047	-.076	.180*	.171*	.302**	.374**	.354**	.342**	.395**	.344**	.142*	.243**	.198**	.348**	.127
2.Abuse and neglect (Child/Elder/Intimate Partner Violence)	-.050	1	.066	-.289**	-.038	.335**	.372**	.109	-.074	.199**	-.127	.025	-.003	.019	.033	.178*	-.030	.113	.240**	.168*
3.Violence within the Emergency Department	.274**	.066	1	.475**	.300**	-.066	.007	.354**	.159*	.109	.316**	.271**	.288**	.301**	.541**	.480**	.430**	.268**	.469**	.248**
4.Drug seeking behavior	.238**	-.289**	.475**	1	.357**	-.184**	-.279**	.364**	.282**	.290**	.391**	.301**	.387**	.449**	.535**	.249**	.461**	.172*	.821**	.263**
5.ED overcrowding	.185**	-.038	.300**	.357**	1	.004	.062	.219**	.207**	.145*	.450**	.246**	.145*	.179*	.310**	.479**	.437**	.111	.336**	.305**
6.Family presence during invasive procedures	-.047	.335**	-.066	-.184**	.004	1	.691**	.261**	.009	-.164*	-.073	.035	.048	.005	-.095	.063	.003	.043	.219**	.076
7.Family presence during resuscitation	-.076	.372**	.007	-.279**	.062	.691**	1	.175*	-.022	-.184*	-.069	-.041	-.067	-.121	-.047	.101	-.015	.049	.259**	.004
8.Gay, Lesbian, Bisexual, Transgender, Queer Care	.180*	.109	.354**	.364**	.219**	.261**	.175*	1	.280**	.085	.279**	.295**	.304**	.344**	.432**	.330**	.338**	.134	.368**	.265**
9.Having family/friends as interpreters	.171*	-.074	.159*	.282**	.207**	.009	-.022	.280**	1	.648**	.254**	.296**	.275**	.277**	.287**	.148*	.241**	.120	.254**	.312**
10.Having non-credentialed staff as interpreters	.302**	-.199**	.109	.290**	.145*	-.164*	-.184*	.085	.648**	1	.371**	.283**	.279**	.277**	.334**	.150*	.171*	.208**	.302**	.241**
11.High Patient to Nurse Ratios	.374**	-.127	.316**	.391**	.450**	-.073	-.069	.279**	.254**	.371**	1	.393**	.297**	.345**	.446**	.424**	.378**	.160*	.457**	.215**
12.Poor access to primary health care for follow up	.354**	.025	.271**	.301**	.246**	.035	-.041	.295**	.296**	.283**	.393**	1	.730**	.787**	.424**	.268**	.344**	.210**	.382**	.355**
13.Poor access to specialty services for current treatment	.342**	-.003	.288**	.387**	.145*	.048	-.067	.304**	.275**	.279**	.297**	.730**	1	.864**	.420**	.163*	.323**	.184**	.416**	.297**
14.Poor access to specialty services for follow up	.395**	.019	.301**	.449**	.179*	.005	-.121	.344**	.277**	.277**	.345**	.787**	.864**	1	.458**	.201**	.363**	.224**	.493**	.344**
15.Prisoners	.344**	.033	.541**	.535**	.310**	-.095	-.047	.432**	.287**	.334**	.446**	.424**	.420**	.458**	1	.395**	.456**	.302**	.588**	.313**
16.Psychiatric/mental illness	.142*	.178*	.480**	.249**	.479**	.063	.101	.330**	.148*	.150*	.424**	.268**	.163*	.201**	.395**	1	.553**	.142*	.323**	.421**
17.Recidivism/frequent flyers	.243**	-.030	.430**	.461**	.437**	.003	-.015	.338**	.241**	.171*	.378**	.344**	.323**	.363**	.456**	.553**	1	.250**	.576**	.529**
18.Religious preferences affecting healthcare	.198**	.113	.268**	.172*	.111	.043	.049	.134	.120	.208**	.160*	.210**	.184**	.224**	.302**	.142*	.250**	1	.238**	.168*
19.Substance abusers	.348**	-.240**	.469**	.821**	.336**	-.219**	-.259**	.368**	.254**	.302**	.457**	.382**	.416**	.493**	.588**	.323**	.576**	.238**	1	.358**
20.Uninsured	.127	.168*	.248**	.263**	.305**	.076	.004	.265**	.312**	.241**	.215**	.355**	.297**	.344**	.313**	.421**	.529**	.168*	.358**	1

Note: * $p < 0.05$. ** $p < 0.01$. (Hamric, Borchers & Epstein, 2012, ED experiences was researcher developed).

Multiple Regression Analysis Describes Relationships between the Total MDS-R and frequency of ED experiences

Variables	ED Experiences	
	Model 1	Model 2
	β (SE)	β (SE)
Constant	35.981	12.120
Poor access to specialty services for follow up	(8.883) 17.89*** (3.080)	(10.065) 13.039*** (3.215)
High nurse to patient ratio		12.342*** (3.218)
R^2	.158	.220
F	33.692	25.158
N	198	198

Note: *** $p < .001$. (Hamric, Borchers & Epstein, 2012, ED experiences was researcher developed).

Study results

The purpose of this section is to answer the research questions and hypotheses using data collected and analyzed in this study.

Question1: What is the frequency with which nurses that practice in emergency departments experience moral distress?

The researcher performed frequency distribution and the total mean for the frequency with which moral distress was reported in the MDS-R was 27.26 ($SD =$

13.74) with a range of 0-73. Each item score ranged from never (0) to very frequently (4), with a possible total score range 0 - 84. The most frequently reported MDS-R experience that caused moral distress in this sample was carrying out physician orders for what is considered to be unnecessary treatments (($M = 2.48$, $SD=1.14$)). Table 17 shows the mean score of each individual response.

Table 17

Frequency of Specific Experiences Related to Moral Distress

	Mean	Standard Deviation
Less than optimal care r/t cost	1.44	1.30
Witness providers give false hope	1.12	1.06
Following families wishes	2.20	1.21
Initiate lifesaving to prolong death	2.33	1.19
Follow family wishes to not discuss death	1.14	1.10
Carry out MD order for unnecessary care	2.48	1.14
Care for hopelessly ill on a vent	1.66	1.33
Avoid taking action in medical error	0.64	0.82
Assist incompetent MD	1.08	0.97
Not qualified to care for patients.	0.91	1.00
Medical students performing	0.97	1.14
Care that does not relieve suffering	0.89	1.08
Follow MD order to not discuss diagnosis with family	0.71	0.94
Increase the doses of sedatives for death	0.49	0.86
Take no action on ethical issue	0.43	0.83
Follow family wishes to avoid lawsuits	1.15	1.23
Work with incompetent nurses	1.16	1.11
Witness poor team communication	1.73	1.13
Ignore situations with no patient consent	0.75	0.97
Watch care suffer because of lack of continuity	1.66	1.21
Work with unsafe staff	1.92	1.38

Note: $N=198$. The responses range from 0(never/none) to 4 (very frequently/great extent. r/t=related to. Vent=ventilator. MD=Medical Doctor. (Hamric, Borchers & Epstein, 2012).

Question 2: What is the level of disturbance of morally distressing situations for nurses who work in emergency departments? The three highest reported disturbances were Work with unsafe staff ($M = 2.96, SD = 1.36$), Witness poor team communication ($M = 2.84, SD = 1.24$) and Assist incompetent MD ($M = 2.77, SD = 1.38$). Table 18 includes the mean scores and standard deviations for all of the responses.

Table 18

Level of Disturbance Specific to Experiences Related to Moral Distress

	Mean	Standard Deviation
Less than optimal care r/t cost	2.53	1.47
Witness providers give false hope	2.22	1.39
Following families wishes	2.59	1.22
Initiate lifesaving to prolong death	2.66	1.17
Follow family wishes to not discuss death	2.49	1.42
Carry out MD order for unnecessary care	2.47	1.10
Care for hopelessly ill on a vent	2.35	1.32
Avoid taking action in medical error	2.27	1.57
Assist incompetent MD	2.77	1.38
Not qualified to care for pts.	2.40	1.57
Medical students performing	2.49	1.47
Care that does not relieve suffering	2.37	1.45
Follow MD order to not discuss diagnosis with family	2.24	1.50
Increase the dose of sedatives for death	1.72	1.51
Take no action on ethical issue	2.48	1.65
Follow family wishes lawsuit	2.23	1.46
Work with incompetent nurses	2.76	1.21
Witness poor team communication	2.84	1.24
Ignore situations with no patient consent	2.36	1.49
Watch care suffer because of continuity	2.60	1.28
Work with unsafe staff	2.96	1.36

Note: $N=198$. The responses range from 0 (never/none) to 4 (very frequently/great extent). R/T=related to. MD=Medical Doctor. (Hamric, Borchers & Epstein, 2012).

Question 3: What is the relationship between the frequency and level of disturbance related to moral distress in nurses who practice in emergency

departments? Pearson product-moment correlation was performed and showed a moderate positive correlation of .44, which was significant at the $p < .01$ level (2 tailed).

Questions 4: What is the relationship between coping and moral distress in nurses who practice in the emergency department? Pearson product-moment correlation was performed on the total MDS-R scale and all 15 sub-scales of the COPE inventory and statistically significant positive correlations were found between moral distress and mental disengagement ($r^2 = .29$), ventilation of emotion ($r^2 = .27$), denial ($r^2 = .27$), behavioral disengagement ($r^2 = .35$), substance abuse ($r^2 = .28$), acceptance ($r^2 = .19$), suppression of competing activity ($r^2 = .19$) and humor ($r^2 = .16$) (Table 14).

Table 19

A Correlation Matrix Between the Total MDS-R, Sum of Frequency and Sum of Intensity

	Total Score	Sum of Frequency	Sum of Intensity
Total Score	1.0	.933**	.610**
Sum of Frequency	.933**	1.0	.439**
Sum of Intensity	.610**	.439**	1.0

Note: ** $p < .001$. (Hamric, Borchers & Epstein, 2012).

Hypothesis

H1: Nurses who practice in emergency departments frequently experience moral distress. The mean frequency of moral distress reported for this sample was 27.26 ($SD = 13.74$). The individual frequencies can be seen in table 13. This hypothesis was supported.

H2: Nurses who work in emergency departments experience disturbance as related to morally distressing situations. The mean level of disturbance/intensity reported was 51.76 ($SD = 21.26$). The hypothesis in which ED nurses experience disturbance related to moral distress is supported.

H3: Nurses who work in emergency departments and frequently experience moral distress have higher levels of disturbance related to moral distress. Pearson's product-moment correlations were run between the total MDS-R score and the sum of frequency and intensity and a strong positive correlation was found between total distress and frequency and intensity (Table 19). There was also a moderate correlation between sum of intensity and sum of frequency ($r = .44, p = .00$). This hypothesis was supported.

Table 20

Multiple Regression Analysis Describes Relationships between the Total MDS-R and Coping Behaviors

Variables	Coping Behaviors			
	Model 1	Model 2	Model 3	Model 4
	β (SE)	β (SE)	β (SE)	β (SE)
Constant	29.051 (10.453)	-1.445 (13.729)	-15.008 (14.437)	-31.345 (16.546)
Behavioral Disengagement	8.272*** (1.590)	7.510*** (1.568)	6.320*** (1.606)	5.245*** (1.685)
Ventilation of Emotion		3.712** (1.119)	3.471** (1.106)	3.225** (1.104)
Substance Abuse			4.757** (1.778)	4.330** (1.778)
Mental Disengagement				3.124** (1.582)
R^2	.121	.168	.198	.214
F	27.070	19.726	15.951	13.118
N	197	197	197	197

Note: B-Beta unstandardized coefficients. Standard errors are in parentheses.

* $p < .05$. ** $p < .01$. *** $p \leq .001$. (Hamric, Borchers & Epstein, 2012; Carver, Scheier & Weintraub, 1989).

H4: There is an inverse relationship between moral distress and four specific coping behaviors (humor, denial, social support, positive reinterpretation and growth) demonstrated in nurses practicing in emergency care. A statistically significant positive relationship (Table 20) was found between the total moral distress score and coping with humor ($r^2 = .16$) and denial ($r^2 = .27$). There was no

statistically significant relationship found between total moral distress and social support or positive reinterpretation and growth (Table 20). This hypothesis was not fully supported.

Chapter V

Discussion of Findings

This chapter includes a discussion of the findings with specific attention to the relationship between moral distress, coping and various groups of the study's participants. The strengths and weaknesses of the study will be reviewed and a discussion of theoretical conclusions will conclude the chapter.

Overview of the study

The relationships between moral distress and coping have not been well studied in ED nursing. There has been one study to date that has closely looked at moral distress in ED nurses, but it was done in a small homogeneous sample (Fernandez-Parsons, Rodriquez, & Goyal, 2013). This is consistent with the fact that the concept of coping has not been well studied in nurses, let alone ED nurses, but to date there has been one study that examined the relationship between coping and moral distress and it did show that using positive coping skills will help to mitigate the unwanted effects of moral distress (Wilson, Goettemoeller, Bevan, & McCord, 2013).

Moral distress

The overall experience of moral distress ($M = 80.19$, $SD = 53.27$, range 0-292) in this study's sample of ED nurses can be considered moderate. It can be compared to the only other moral distress study of ED nurses by Fernandez-Parsons, Rodriquez, and Goyal (2013) that also utilized the MDS-R tool and reported an overall moral distress score of 3.18, with a range of 0.90 to 5.35. In Hernandez-Parsons, Rodriquez, and Goyal's study they did not perform a composite score,

instead they opted to use the frequency X intensity (fxi) score, which ranges from 0-16. The moral distress results from both of these studies, although using different measurements, found it to be present in this specialty. There were some other differences noted between the two studies in addition to the measurement tool. The sample in the Fernandez-Parsons, Rodriguez, and Goyal study was small ($n = 51$) and included a homogeneous group of nurses who worked in one community hospital. This study was larger ($n = 198$) with nurses from a variety of hospital settings (community, rural, level 1 trauma center, urban center, urgent care center, free standing children's hospital) across the entire US. The results of moral distress in this study are more consistent with other studies that have examined the level of moral distress experienced in various other nursing specialties, such as critical care and nurse anesthetists (Brazil et al., 2010; Elpern, Covert & Kleinpell, 2005; Fernandez-Parsons, Rodriguez & Goyal, 2013; Hamric & Blackhall, 2007; Ohnishi et al., 2010; Pauly et al., 2009; Pavlish et al., 2011 Radzvin, 2011; Rice et al., 2008).

Responses to the MDS-R questions asking respondents about leaving their job also showed some differences between the findings of this study and that of Fernandez-Parsons et al. (2013). The participants in this study reported that 36.9% ($n = 73$) had considered leaving a position due to moral distress compared to 20% in the Fernandez-Parsons et al. study and 12.1% ($n = 24$) reported leaving a position because of moral distress compared to 6.6% in the Fernandez-Parsons et al. study. When asked if they were currently considering leaving their position because of moral distress 30.3% ($n = 60$) responded yes, compared to 13.3% in the Fernandez-Parsons et al. study. The differences could be explained through several

approaches. For the nurses who practice in a small community hospital, such as in the Fernandez-Parsons et al. study there may be limited options for employment, therefore a job change is less feasible. The participants in the Fernandez-Parsons et al. study were from a small community hospital where there may be less turnover and more camaraderie that fosters more supportive personal relationships. Additionally the acuity was likely to have been lower and the pace may be slower, which very likely have impacted the responses (Aiken, 2010).

In this study an ANOVA (Tables 6, 8) was calculated and means were compared (Tables 5, 7) to see if relationships existed between the total MDS-R and job status. There was a statistically significant difference noted between the total MDS-R between those participants who considered leaving their job either currently or in the past because of moral distress and those who were not considering leaving. These results were very similar to the results reported in other studies (Brazil et al., 2010; Hamric & Blackhall, 2007; McAndrew, Leske & Garcia, 2011; Pauly et al., 2009; Pavlish et al., 2011; Radzvin, 2011; Rice et al., 2008) which showed that higher levels of moral distress were reported for clinicians who responded that they were considering leaving their jobs, compared to who were not considering leaving their jobs currently.

While there was no statistically significant findings noted between the total MDS-R score, age and level of experience in this study, when the groups were separated into age and experience categories there were findings that are worth noting (Tables 9,10,11,12). The age categories were separated into 10 year spans in order to ensure that an adequate amount of participants were in each age group to

allow comparison. The results did suggest that as nurses' age and progress to expert ED nurses they experience less moral distress.

The relationship between moral distress and years of critical care nursing was previously studied by Elpern, Covert and Kleinpell (2005) and Rice et al. (2007). They found that moral distress is common in this specialty and that a positive correlation existed between years of experience and the frequency and intensity of moral distress. Their findings did differ from the population of ED nurses in this study, which found that as ED nurses aged and gained more experience the total MDS-R score decreased. While the practices do share some similarities there are many differences in the ED environment (i.e., unpredictability, fast pace, nurse to patient ratio, recidivism) that may help to explain the difference. The difference in the results suggests that the practice of critical care and ED nursing may be very different and comparisons should be done with caution.

In looking at the results of the frequency and disturbance (Tables 17 and 18) of the MDS-R some findings for this sample are worth noting. The three highest ranked frequencies were carrying out MD orders for unnecessary care (2.48), initiating lifesaving interventions that prolong death (2.33) and following family's wishes because of fear of a lawsuit (2.20). While many of the responses were reported as disturbing to this sample of ED nurses, they were almost equally matched to the level of frequency: carrying out MD orders for unnecessary care (2.47), initiating lifesaving interventions that prolong death (2.66) and following families wishes because of fear of a lawsuit (2.59). The results suggest that unnecessary treatment and testing occurs frequently in ED nursing practice and is

disturbing. When combined with the results from the frequency of perceived ED experiences (Table 3) this clearly displays an environment that has many challenges and has the potential to cause moral issues on a daily basis, therefore making positive coping strategies a crucial part of the ED nurses practice.

The participants were also invited to provide short responses if they had other experiences that they believed contributed to their experience of moral distress. The following themes were identified from the qualitative remarks: lack of insurance, poor staffing, behavioral health patient management, child abuse, end of life care, poor leadership, physician/mid-level provider incompetence, financial constraints and poorly functioning equipment. Each of these themes was rated as being high in frequency as well as in level of disturbance. The qualitative responses provided in this study were unique to the specialty of ED nursing as compared to the reported responses in the other specialty studies, which included responses related to their specialty such as safety and manipulation of families, poor/ineffective family education (Hamric, Borchers, & Epstein, 2012). Upon further analysis of the results and reviewing the qualitative responses with the most common reported level of disturbance (Table 18) many similarities were found between the types of responses.

The qualitative findings can be grouped into three general themes: unsafe working conditions, the importance of teamwork, and competent colleagues. These qualitative findings are supportive of this study's statistically significant quantitative findings, namely the correlations between moral distress and carrying out physician orders for what is considered to be unnecessary ($M = 2.48$, $SD = 1.14$)

as well as the following disturbing situations: working with nurses/care providers who are unsafe ($M = 2.96$, $SD = 1.36$), poor communication ($M = 2.84$, $SD = 1.24$) and incompetent physicians ($M = 2.77$, $SD = 1.38$). These study findings are congruent with the findings reported in the Papathanassoglou et al. (2012) study, which found that high nurse autonomy and nurse/physician collaboration were inversely related to moral distress.

Coping

The relationship between moral distress and the coping mechanisms utilized by this sample of ED nurses varied (Table 14). This was the first study of its kind to use the Cope Inventory in ED nurses and there is little to compare it to, but it is worth noting that there was a moderate and statistically significant positive relationship between moral distress and some of the subscale items on the COPE inventory: mental disengagement ($r = .29$), ventilation of emotion ($r = .27$), denial ($r = .27$), behavioral disengagement ($r = .36$), substance abuse ($r = 0.28$), acceptance ($r = .19$), suppression of competing activity ($r = .20$) and humor ($r = .16$) (Table 10).

A linear multiple regression was performed (Table 11) and based on those results the three coping skills found to be significant predictors of moral distress were: ventilation of emotions ($p=0.01$), 95% CI [0.59, 5.11], behavioral disengagement ($p = 0.02$), 95% CI [.60, 8.18] and substance abuse ($p = .02$), 95% CI [0.68,7.78]. According to Carver, Scheier and Weintraub (1989) and others (Ashker et al. 2012; Gerowetal , 2010; Gibbons, Dempster & Moutray , 2010; Gillespie & Gates , 2013; Turte et al., 2012; Wilson, et al., 2013) these types of coping strategies are considered negative and can lead to maladaptive behaviors.

Additional factors that influence moral distress

As noted above, there were no statistically significant differences ($p > 0.05$) between the levels of moral distress and age, gender, years of experience, certification status, level of education, type of ED, employment status, religious preferences or practice of religion. However, it must be noted that this is a sample that had a good deal of general nursing experience ($M = 17.93, SD = 12.59$) as well as accompanying ED experience ($M = 14.15, SD = 10.85$).

In terms of the ED frequency of ED experiences and how they relate to the total moral distress score there were many that correlated to the experience of moral distress in this study (Table 15). These experiences are rooted in ED nursing practice and the positive correlation is worth noting. As noted earlier, no other study to date has looked at these critical elements of ED nursing as they relate to moral distress.

However the elements of the ED practice environment have shown to have a relationship to/impact on the experience of moral distress in other studies (Brazil et al., 2010; Elpern, Covert & Kleinpell, 2005; Fernandez-Parsons, Rodriguez & Goyal, 2013; Hamric & Blackhall, 2007; Ohnishi et al., 2010; Pauly et al., 2009; Pavlish et al., 2011; Radzvin, 2011; Rice et al., 2008). In each of these studies, if the practice environment was perceived as negative then the level of moral distress was higher.

Methodological Strengths of the Study

The strengths of the study include the sample size and the variety in the sample's demographics. It is estimated that there are over 40,000 nurses who belong to the Emergency Nurses Association and that over 90,000 ED nurses are

employed throughout the United States (ENA, 2014). The diversity of the sample will allow for greater generalizability of the findings. The sample had both longevity and a substantial amount of ED experience ($M = 14.15, SD = 10.85$), which suggest that the participants were able to respond with an understanding of what is required day to day to be an ED nurse.

The study was administered electronically, which made it convenient for participants to complete and share with other colleagues and it was easily posted to the ENA website for all members to access. The order of the questions in the survey was set up intentionally to remind the participants that the purpose of the study was to examine ED nursing practice as it relates to moral distress and coping. Placing the demographic questions prior to the MDS-R and COPE Inventory may have been helpful in reminding the participants of the need to answer the questions based on their ED nursing practice.

Methodological Weaknesses of the Study

A limitation of this study was that the sample was not asked about specific demographics. Demographics, such as marital status and ethnicity are known for having some influence on moral distress (Burston & Tuckett, 2012) and this was not taken into account with this study. By expanding the demographic information collected in this study it may have shown to have an impact or relationship to coping strategies and moral distress.

An additional limitation was that the sample was not asked to identify what area of the country they were currently practicing in. This is important because health care practices do differ from state to state and region to region, and this may

have an impact on the amount of moral distress experienced (Frakt, 2014). For example, it may have been helpful to compare regions or states to see if the amount of moral distress varied with the contemporary health care challenges, such as uninsured patients and high rates of violence that each state is faced with. Therefore due to missing regional information generalizability to ED nurses all over the country may be limited.

This study required the participants to voluntarily complete a survey and simply by the title of the study it may have attracted more people to participate whom may believe that they experience moral distress and felt the need to express this. On the other hand, some ED nurses may have not been interested in participating in the study because they found the topic of moral distress much too difficult to think about. Therefore through this type of sampling method the amount of moral distress experienced may have been skewed and generalizations should be done with caution.

Theoretical Conclusions

Although the specific components of Roy's adaptation model (2009) was not directly examined it was clear in this study that emergency department nurses receive stimulation from patients, families, colleagues and the practice environment, that provokes a response. That response may be positive and or negative and may change or vary according to the circumstances facing the nurse in the ED. Roy refers to coping as being adaptive or maladaptive.

In this study there was a statistically significant relationship between moral distress and three coping mechanisms (ventilation of feelings, behavioral

disengagement and substance abuse). Carver, Scheier, and Weintraub (1989) identify the aforementioned coping mechanisms as potentially maladaptive. For instance, the routine use of alcohol may result in serious health problems such as alcoholism or liver disease and ventilation of feelings may result in misplaced sympathy or may act as a distraction from the issue at hand serving to prevent the individual from moving beyond the moral distress experience (Ashker et al., 2012; Carver, Scheier, & Weintraub, 1989; Gerowetal, 2010; Gibbons, Dempster & Moutray, 2010; Gillespie & Gates, 2013; Turte et al., 2012; Wilson, et al., 2013). When a person uses behavioral disengagement as a coping mechanism, as in this sample, it reduces the person's needed effort to deal with the distress, so in a sense the individual simply gives up and thereby eliminates the ability to properly deal with the distress. The responses reported in this study suggest that there is a positive association with maladaptive coping mechanisms and moral distress in ED nurses.

This study also showed that there is a strong correlation between the ED practice environment and the experience of moral distress (Tables 3,15). Roy (2009) defines human behavior as internal or external actions and reactions, innate or acquired under specific circumstances. Underlying this study is the process that begins when a nurse is faced with a given situation in the ED practice environment that causes a feeling of uneasiness, creating the need to adapt to the given situation after coping processes are utilized. The influence that the practice environment had on the moral distress experienced was very similar to other studies in other practice environments (Brazil et al., 2010; Hamric & Blackhall, 2007; McAndrew, Leske & Garcia, 2011; Pauly et al., 2009; Pavlish et al., 2011; Radzvin, 2011; Rice et al., 2008).

Therefore, utilizing Roy's adaptation model to guide this study was helpful in distinguishing the impact that the ED environment itself and the utilization of maladaptive coping can have on humans, represented in this study as the ED nurse.

Chapter VI

Summary, Recommendations, Implications, Conclusions

Introduction

This study is the first study to examine moral distress and its relationship to coping strategies in Emergency Department (ED) nurses. A convenience sample of 198 ED nurses residing in the United States and representing a variety of emergency settings was recruited to provide information about these two variables. Since the relationship between these two concepts has not been previously studied in emergency nursing practice, findings from this study will contribute unique knowledge to nursing. While there was one recent study (Fernandez-Parsons, Rodriquez & Goyal, 2013) that did explore moral distress in ED nurses, those results should be viewed with caution as the sample size was small and it was done with a homogenous group of nurses from the same ED. In this chapter a summary of the study will be provided with a discussion regarding the recommendations and implications for nursing practice and future research based on the findings and a conclusion.

Summary

The results of this study demonstrated that moral distress is present in ED nurses and there was no difference in the experience despite personal, professional and religious differences. Furthermore, these results suggested that all ED nurses are at risk for experiencing moral distress (total MDS-R=80.18). Significant correlations were found between the level of moral distress and patient-related ED experiences, such as treating prisoners ($r = .34$) or drug abusers ($r = .24$), and

decreased resources, such as poor interpreter services ($r = .30$) or increased nurse to patient ratios ($r = .37$). When comparing the level of frequency and level of disturbance in the MDS-R there are similarities noted in which unnecessary treatment that takes place in the ED was reported as being both common and unsettling for participants. These disturbing clinical situations and systems related issues will very likely continue to persist in ED nursing practice through time, therefore ED nurses of the future will still be faced with these challenges. This reality suggests that there is a continued need to study concepts like moral distress and coping to help make this specialty workforce stronger for the future.

While exploring the relationship between coping and moral distress and various forms of coping it was determined that this sample of ED nurses used a variety of coping mechanisms. Some of those could be considered adaptive (e.g., acceptance, humor) and others maladaptive (e.g., mental disengagement, substance abuse). It was through the final analysis that maladaptive coping skills/techniques such as ventilation of emotion, substance abuse and behavioral disengagement were identified as having a relationship to moral distress. It should be noted that in the only study to date that looked at the relationship between coping and moral distress (Wilson, Goettemoeller, Bevan & McCord, 2013) found that nurses might benefit from resources to help them deal with moral distressing situations in a positive way.

The benefits of positive coping strategies may have a positive impact on patients and families during health and illness, and may also be important for the ED nurses who care for them. Workplaces such as hospitals are complex environments and as was demonstrated in this study, when nurses utilize negative coping

behaviors to deal with daily stressors poor personal outcomes, such as moral distress are associated. While this study was unable to identify any positive coping strategies associated with lower moral distress in ED nurses, that possibility should be explored in future studies using a larger population.

In 2008 the American Association of Critical Care Nurses (AACN) published a statement that charged nurses and hospitals to recognize and implement interventions that help to soften the effects of moral distress. Strategies to help mitigate the unwanted effects of moral distress have been suggested in the literature to be a gap that needs to be explored (McAndrew, Leske & Garcia, 2011; Wilson, Goettemoeller, Bevan & McCord, 2013) and it is possible that positive coping strategies may be effective.

Recommendations and Implications

ED nursing is a highly charged specialty that requires nurses to be able to deal with rapidly changing situations while at the same time caring for some of health care's most vulnerable and compromised patient populations.

Recommendations and implications for education and research are evident.

Education

ED nurses as a workforce requires support and skills in dealing with everyday morally and ethically distressing situations in order to help maintain a healthy working environment and an overall personal sense of wellbeing. This can be accomplished through the exploration of concepts like coping and moral distress and interventions that can help to lessen the effects. This exploration and analysis should not only be done with staff nurses, but also be done in collaboration with

nursing leaders. Collaboration between staff nurses and nurse leaders will help to develop a better understanding of the staff's experiences and facilitate partnerships to help prevent or lessen the unwanted effects of moral distress, such as managing turnover and vacancy rates and employee satisfaction. Hamric, Borchers and Epstein, 2012 recommend that moral distress consultation services be developed and tested for efficacy. This strategy should be studied in order to determine if it is helpful in mitigating the negative effects of moral distress.

While this study did not find prove that specific coping strategies can mitigate the negative effects of moral distress it does suggest that there is a relationship between these two concepts. This study found that moral distress affects ED nurses regardless of the years of ED experience. Therefore it may be beneficial to include topics like moral distress and coping in undergraduate curriculum not only to provide awareness, but at the same time help those student nurses who are opting to specialize in high risk areas, like the ED, better prepare for a morally challenging practice environment that they will encounter daily.

This study's findings suggest that staff's coping mechanisms should be screened prior to beginning working in an ED and assessed at various intervals during their employment in order to help determine if the ED is an appropriate work environment for them. Professional development opportunities that discuss concepts like moral distress and offer strategies for mitigating the negative effects should be offered to staff nurses and leaders. Curriculums like AACN's (2008) "The 4 A's to Rise Above Moral Distress" has been demonstrated to be helpful and can be useful to most specialties, not just critical care nurses. It may be beneficial to

develop a curriculum that more specifically addresses ED practice issues since this study suggests that experiences specific to the ED environment itself has an impact on moral distress.

Based on the results of this study the ENA, similarly to AACN, should advocate for research and educational and research initiatives that can help to prevent moral distress in ED nurses. Additionally the ENA should propose new health policies, which recognize and take into account that ED nurses are faced with moral issues frequently and lead to the experience of moral distress. It is through this experience of moral distress that human suffering occurs in the workforce with which the national ENA represents. An example of a beneficial health policy change may include that hospitals must provide mandatory debriefing sessions following high-risk events such as a traumatic death of a child or a mass casualty event.

Future research

This is the second study to date that has closely examined moral distress in ED nurses and it is clear through the results of this study that this concept is worthy of further investigation. The study's findings also suggest that the practice environment due to its unique characteristics is a crucial element in ED nursing and perhaps should be used as a variable whenever this population is being studied. It may also be beneficial to longitudinally follow ED nurses who experience moral distress longitudinally to see what personal and professional influences impact the experience over time. This study suggests that there may be some differences in ED nurses' experience of moral distress according to their years of experience. It is likely that having a more complete understanding of nurses overall experience as

they progress through their career from a broader perspective that includes moral distress, would be worthy of study.

This study also found that there was a significant amount of variability in the frequency and sum of intensity of the experience of moral distress in ED nurses. This suggests that there may be individual factors that heighten vulnerability to moral distress. These differences are not easily explained and should be further studied in order to help determine what if any ED specific environmental and personal characteristics impact the experience of moral distress.

Conclusion

This study's findings suggest that ED nurses experience moral distress no less frequently than nurses in other specialties (critical care and palliative care) do and could receive some benefit from utilization of appropriate coping skills. This study also suggests that the environment with which ED nurses practice has a significant impact on the experience of moral distress. The ED practice environment, which is influenced by current health policy and individual coping behaviors, may have an impact on the experience of moral distress in ED nurses. Since health care is continuing to evolve it is critical that issues like these be studied in ED nurses to help eliminate human suffering and determine the effects of life long educational and other preventative interventions has on moral distress, nursing practice and patient outcomes.

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Appendices

Appendix A

Arrangement with emergency nurse related organizations for web/social media/email distribution

3/30/14

To Whom It May Concern,

I am delighted to be working with ED RN's for the completion of my research interest. I am requesting that you place the attached invitational letter and corresponding link to any email, social media and web site that will reach emergency nurses.

I agree with the following terms:

1. That I provide you with a short description of my research project, and some information about myself (workplace/institution, education/title) as follows:

Dissertation Title/working title: Exploring the Relationship between Moral Distress and Coping in Emergency Nursing

Purpose: The purpose of this study is to examine moral distress in ED nurses and its relationship to coping in that specialty group. Since the relationship between these two concepts has never been studied together in emergency nursing practice findings from this study will contribute unique knowledge to nursing.

Design: This study will utilize survey design, which will utilize Survey Monkey ©. The survey consists of three surveys the first is the Moral Distress Scale Revised (MDS-R) survey, which is a 21 -item Likert-type scale with one optional open-ended question and two yes and no questions (Hamric, Borchers & Epstein, 2012). The second survey is the COPE Inventory, which is a 60 item-Likert-style scale (Carver, Scheier & Weintraub, 1989). The third is a short questionnaire pertaining to demographic and work-related items.

Personal information:

Name: Kathleen Evanovich Zavotsky

Address: 4 Grange Court East Brunswick, NJ 08816

Contact number: (h) 732-613-8051(c) 732-567-6936

See attached CV for additional details.

University Information:

Seton Hall University

400 South Orange Ave, East Orange, New Jersey 07079

Contact number: 973-761-9607

Supervisor information and contact details:

Pamela Galehouse, PhD, RN, PMHCNS-BC

Associate Professor, Graduate Department

College of Nursing, Seton Hall University

400 South Orange Avenue, South Orange, NJ 07079

Office: (973) 761-9294

Fax: (973) 761-9607

2. I agree to provide you with a summary of the study upon completion.

Respectfully submitted,

Kathleen Evanovich Zavotsky MS, RN, CCRN, CEN, ACNS-BC

PhD Student Seton Hall University

Appendix B

Recruitment Letter to be used in Social Media and Email for a Moral Distress and Coping Study in Emergency Nurses

Hi, my name is Kathleen Evanovich Zavotsky I am a doctoral student in the PhD program in the College of Nursing at Seton Hall University in NJ. I am conducting a research study to evaluate the relationship between moral distress and coping in nurses who practice in emergency care. In this study moral distress is defined as when an individual knows the right thing to do, but institutional restraints make it impossible to do the right thing. Coping is defined as how an individual responds to a threat or stress.

The research study involves completing three short questionnaires. The first is the Moral Distress Scale-Revised, the second is the COPE Inventory tool and the third is a demographic tool. Each of these tools are included in the link and each survey is entered into Survey Monkey ©. To complete all of the tools will take approximately 20 minutes. In order to be eligible you must be a nurse who is practicing in an emergency department (ED) as a full time, part time or per diem status.

The study is completely voluntary, meaning that do not have to participate in the study unless you want to. You may withdraw from the study at any time. All data will be coded when it is entered into the computer, and your responses will be anonymous. There will be no way to identify your responses in that only aggregate data will be published.

The link to the questionnaires contains a letter of solicitation describing the research study, my contact information and the three questionnaires. You may complete the questionnaires wherever you have access to a computer and internet.

Thank you for agreeing to participate. If, at any time, you feel uncomfortable with any of the questions, please let me know. All of the information provided on the questionnaires will be kept anonymous and secure. Completed study packet materials will be kept in a downloaded to a memory key that will kept in a locked, secure file cabinet in my home office. Please remember that your participation is voluntary and if you choose to participate please click on the link provided.

Link: <https://www.surveymonkey.com/s/728N5XR>

Appendix C Participant Recruitment Letter

Dear Fellow Emergency Department Nurse:

I am a doctoral candidate at Seton Hall University in New Jersey and I would like to invite you to participate in a study I am conducting about the relationship between moral distress and coping in Emergency Department (ED) nurses. Your responses will add new and important information to understanding the effect that coping has on moral distress in ED nurses.

The survey consists of three surveys the first is the Moral Distress Scale Revised (MDS-R) survey, which is a 21 -item Likert-type scale with one optional open-ended question and two yes and no questions (Hamric, Borcehers & Epstein, 2012). The second survey is the COPE Inventory, which is a 60 item-Likert-style scale (Carver, Scheier & Weintraub, 1989). The third is a short questionnaire pertaining to demographic and work-related items. You should be able to complete these surveys in approximately 20 minutes and submit them electronically within Survey Monkey©.

The Survey Monkey format is designed to ensure that your data will be confidential and submitted anonymously. Submitted data will not be able to be traced back to participants. To ensure further confidentiality of all responses, the data submitted will be stored only on a memory key and kept in a locked, secure file cabinet in my home office. It will only be available to myself. If you have any questions or concerns, you can contact me at Kathleen.zavotsky@student.shu.edu and/or via my cell number, at 732-567-6936 or Dr. Pamela Galehouse via email at: Pamela.Galehouse@shu.edu or 973-761-xxxx. If you have any questions related to your rights as a research participant, you can contact the Director of the Seton Hall University Institutional Review Board, Dr. Mary Ruzicka at xxx-xxx-xxx or via email at xxxxxxxx@shu.edu

I hope you decide to participate in this research. If you decide to participate, please click on the link at the bottom of this message. This will provide access to the study materials. Please try to complete the study materials in a one session however, if an interruption is necessary, just, "save and return" and use the same link to access your survey to complete at a later time. Your consent to participate in this study will be implied by your completing and submitting the online survey materials.

Thank you for your time and consideration in helping with this important work! In return for your participation in this study, you will be given access to the study results after completion of the study.

Kathleen Evanovich Zavotsky MS, RN, CCRN, CEN, ACNS-BC
PhD Student
Seton Hall University
South Orange, NJ
Kathleen.zavotsky@student.shu.edu
732-567-6936
Link: <https://www.surveymonkey.com/s/728N5X>

Appendix D
Moral Distress Scale Revised (MDS-R) MDS-R

Nurse Questionnaire (ADULT)

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

	Frequency					Level of Disturbance				
	Never		Very frequently			None		Great extent		
	0	1	2	3	4	0	1	2	3	4
1. Provide less than optimal care due to pressures from administrators or insurers to reduce costs.										
2. Witness healthcare providers giving “false hope” to a patient or family.										
3. Follow the family’s wishes to continue life support even though I believe it is not in the best interest of the patient.										
4. Initiate extensive life-saving actions when I think they only prolong death.										
5. Follow the family’s request not to discuss death with a dying patient who asks about dying.										
6. Carry out the physician’s orders for what I consider to be unnecessary tests and treatments.										
7. Continue to participate in care for a hopelessly ill person who is being sustained on a ventilator, when no one will make a decision to withdraw support.										
8. Avoid taking action when I learn that a physician or nurse colleague has made a medical error and does not report it.										
9. Assist a physician who, in my opinion, is providing incompetent care.										
10. Be required to care for patients I don’t feel qualified to care for.										
11. Witness medical students perform painful procedures on patients solely to increase their skill.										

	Frequency					Level of Disturbance				
	Never		Very frequently			None		Great extent		
	0	1	2	3	4	0	1	2	3	4
12. Provide care that does not relieve the patient's suffering because the physician fears that increasing the dose of pain medication will cause death.										
13. Follow the physician's request not to discuss the patient's prognosis with the patient or family.										
14. Increase the dose of sedatives/opiates for an unconscious patient that I believe could hasten the patient's death.										
15. Take no action about an observed ethical issue because the involved staff member or someone in a position of authority requested that I do nothing.										
16. Follow the family's wishes for the patient's care when I do not agree with them, but do so because of fears of a lawsuit.										
17. Work with nurses or other healthcare providers who are not as competent as the patient care requires.										
18. Witness diminished patient care quality due to poor team communication.										
19. Ignore situations in which patients have not been given adequate information to insure informed consent.										
20. Watch patient care suffer because of a lack of provider continuity.										
21. Work with levels of nurse or other care provider staffing that I consider unsafe.										
If there are other situations in which you have felt moral distress, please write them and score them here:										

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

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

Yes, I considered quitting but did not leave _____

Yes, I left a position _____

Are you considering leaving your position now? Yes No

Appendix E

The COPE Inventory

We are interested in how people respond when they confront difficult or stressful events in their lives. There are lots of ways to try to deal with stress. This questionnaire asks you to indicate what you generally do and feel, when you experience stressful events. Obviously, different events bring out somewhat different responses, but think about what you usually do when you are under a lot of stress.

Then respond to each of the following items by blackening one number on your answer sheet for each, using the response choices listed just below. Please try to respond to each item separately in your mind from each other item. Choose your answers thoughtfully, and make your answers as true FOR YOU as you can. Please answer every item. There are no "right" or "wrong" answers, so choose the most accurate answer for YOU--not what you think "most people" would say or do. Indicate what YOU usually do when YOU experience a stressful event.

1 = I usually don't do this at all

2 = I usually do this a little bit

3 = I usually do this a medium amount

4 = I usually do this a lot

1. I try to grow as a person as a result of the experience.
2. I turn to work or other substitute activities to take my mind off things.
3. I get upset and let my emotions out.
4. I try to get advice from someone about what to do.
5. I concentrate my efforts on doing something about it.
6. I say to myself "this isn't real."
7. I put my trust in God.
8. I laugh about the situation.
9. I admit to myself that I can't deal with it, and quit trying.
10. I restrain myself from doing anything too quickly.
11. I discuss my feelings with someone.
12. I use alcohol or drugs to make myself feel better.
13. I get used to the idea that it happened.
14. I talk to someone to find out more about the situation.
15. I keep myself from getting distracted by other thoughts or activities.

16. I daydream about things other than this.
17. I get upset, and am really aware of it.
18. I seek God's help.
19. I make a plan of action.
20. I make jokes about it.
21. I accept that this has happened and that it can't be changed.
22. I hold off doing anything about it until the situation permits.
23. I try to get emotional support from friends or relatives.
24. I just give up trying to reach my goal.
25. I take additional action to try to get rid of the problem.
26. I try to lose myself for a while by drinking alcohol or taking drugs.
27. I refuse to believe that it has happened.
28. I let my feelings out.
29. I try to see it in a different light, to make it seem more positive.
30. I talk to someone who could do something concrete about the problem.
31. I sleep more than usual.
32. I try to come up with a strategy about what to do.
33. I focus on dealing with this problem, and if necessary let other things slide a little.
34. I get sympathy and understanding from someone.
35. I drink alcohol or take drugs, in order to think about it less.
36. I kid around about it.
37. I give up the attempt to get what I want.
38. I look for something good in what is happening.
39. I think about how I might best handle the problem.
40. I pretend that it hasn't really happened.

41. I make sure not to make matters worse by acting too soon.
42. I try hard to prevent other things from interfering with my efforts at dealing with this.
43. I go to movies or watch TV, to think about it less.
44. I accept the reality of the fact that it happened.
45. I ask people who have had similar experiences what they did.
46. I feel a lot of emotional distress and I find myself expressing those feelings a lot.
47. I take direct action to get around the problem.
48. I try to find comfort in my religion.
49. I force myself to wait for the right time to do something.
50. I make fun of the situation.
51. I reduce the amount of effort I'm putting into solving the problem.
52. I talk to someone about how I feel.
53. I use alcohol or drugs to help me get through it.
54. I learn to live with it.
55. I put aside other activities in order to concentrate on this.
56. I think hard about what steps to take.
57. I act as though it hasn't even happened.
58. I do what has to be done, one step at a time.
59. I learn something from the experience.
60. I pray more than usual.

Appendix F

Demographic Information Tool

1. What is your age in years? _____
2. What is your sex? Male/Female
3. How many years of nursing experience do you have? _____
4. How many years of emergency department experience do you have? _____
5. Do you hold a specialty certification? i.e.: CEN, CCRN, RNC Yes/No
6. What is your highest level of education? Associates/Bachelors in Nursing/
Bachelors other/Diploma/Doctorate/Masters in Nursing/Masters other
7. How would you describe the Emergency Department that you currently work
in? Community Hospital/Rural Hospital/Level 1 Trauma Center/Urban
Hospital/ Free Standing Urgent Care Center/Free Standing Children's
Hospital
8. What is your employment status? Full-time/Part-Time/Per-diem
9. What is your religious preference?
Christian/Jewish/Buddhist/Muslim/Hindu/None/Other

10. Place a check in the box that describes the frequency with which you experience the following situations in your emergency department practice:

	Never 0	1	2	3	Very frequently 4
Abuse and neglect					
Drug seeking behavior					
ED overcrowding					
Family Presence during Invasive Procedures					
Family Presence during Resuscitation					
Gay, Lesbian, Bisexual, Transgender, Queer Care					
Having Family/Friends as Interpreters					
Having non-credentialed staff as interpreters					
Poor access to primary health care for follow up					
Poor access to specialty services for current treatment					
Poor access to specialty services for follow up					
Prisoners					
Psychiatric/mental illness					
Recidivism/frequent flyers					
Religious preferences affecting healthcare					
Substance abusers					
Uninsured					
Violence					

Appendix G

Email permission from Dr. Hamric to use the MDS-R

Dear Ms. Zavotsky,

Thank you for your interest in the Moral Distress Scale – Revised (MDS-R). There are six versions of this scale: nurse, physician and other healthcare professional versions for adult settings (including ICUs and other inpatient units), and parallel versions for healthcare providers in pediatric settings. The MDS-R shows evidence of reliability and validity, and a publication describing the instrument and its testing has been published in the *American Journal of Bioethics: Primary Research*:

Hamric, A.B., Borchers, C.T., & Epstein, E.G. (2012). Development and testing of an instrument to measure moral distress in healthcare professionals. *AJOB Primary Research*, 3(2), pp. 1-9.

You should read this article (attached) before deciding whether the MDS-R will be appropriate for your project.

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

If you agree to adhere to this condition for use, I am happy to give you permission to use the scales. Let me know which versions of the instrument you are interested in. If you decide to change items for particular specialty purposes or for different settings or outside the USA, Dr. Corley and I request that you keep us informed of the changes you make and the results you obtain.

Best wishes for success with your research!

Ann Hamric

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