COMPASSION FATIGUE IN CRITICAL CARE NURSING AND DEVELOPMENT OF AN EDUCATIONAL MODULE

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ABSTRACT

Compassion fatigue is a troubling phenomenon which affects those in care giving roles, and nurses are especially susceptible. The first purpose of this study was to determine the prevalence of compassion fatigue among critical care nurses. The study also examined which demographic characteristics would be associated with a higher level of compassion fatigue. Registered nurses (N=58) from two intensive care units completed the Professional Quality of Life Scale, Version 5 (ProQOL5) and a demographic questionnaire. Overall, the level of compassion fatigue was low as measured by the burnout and secondary traumatic stress subscales. The overall compassion satisfaction was low as well. Young (18-35 years old), less experienced nurses reported significantly higher compassion fatigue than older (36 years old and up), more experienced nurses. The second purpose was to design, implement, and evaluate an educational module on compassion fatigue. Participants found the module to be beneficial and an effective learning tool.

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CHAPTER ONE. THE RESEARCH PROBLEM

The profession of nursing has been defined by many as a blended art of nurturing and caring. Nurses around the world combine their technical skills with the daily interaction with patients and families in order to create a healing environment. Nursing is a unique and special profession which also has its challenges. Especially in critical care areas, nurses are frequently faced with difficult situations in which they are asked to provide emotional support and comfort to patients and families "experiencing significant emotional pain and/or physical distress" (Lombardo & Eyre, 2011, p.1). Consistent empathy and "feeling" of another person's distress, pain, and sorrow can lead to compassion fatigue (Abendroth & Flannery, 2006; Figley, 2002; Wenzel, Shaha, Klimmek, & Krumm, 2011).

Compassion fatigue was first identified by Joinson (1992) while studying the related concept of burnout in nurses working in an emergency department. The researcher noticed that some nurses seemed to have lost their "ability to nurture" (p. 119). Fatigue, short attention span, exhaustion, frequent headaches and/or stomachaches, low resistance to becoming ill, depression, and anger are all symptoms of compassion fatigue (Aycock & Boyle, 2009; Circenis & Millere, 2011; Joinson, 1992; Lombardo & Eyre, 2011; Maytum, Heiman, & Garwick, 2004).

Dr. Charles Figley expanded and more formally defined the concept of compassion fatigue in 1995. Figley explained compassion fatigue as a phenomenon experienced by those who help others in distress. He also synonymously called the phenomenon "helper stress" and "secondary traumatic stress" (Figley, 1995). By caring for the patient, the caregiver vicariously experiences the patient's traumatic event emotionally.

Compassion fatigue can be thought of by visualizing a thermometer. As a person's level of compassion fatigue increases, their ability to empathize with others decreases. The decreasing

ability to empathize can be visualized as the temperature on a thermometer dropping. The temperature (ability to empathize) continues to drop lower and lower as compassion fatigue rises eventually leading to a frozen heart.

Although the two concepts are similar, compassion fatigue differs from burnout in that compassion fatigue is unique to people working in caregiving professions (Joinson, 1992; Sabo, 2006; Todaro-Franceschi, 2013). Burnout can occur in any profession and is often attributed to environmental stressors (mandatory stays, negative work environment, inadequate resources to do one's work, etc.). Burnout can be considered general dissatisfaction with one's work (Sabo, 2006; Sabo, 2011; Todaro-Franceschi, 2013). Whereas compassion fatigue occurs in caregiving professions and is related to the repeated caring of patients and families who have experienced emotional/physical trauma, loss, or grievance. The onset of burnout is gradual, while the onset of compassion fatigue can be sudden (Jenkins & Warren, 2012; Lombardo & Eyre, 2011; Yoder, 2010).

Burnout is similar to a candle. As a person repeatedly experiences environmental stressors and other negative factors, their emotional/physical/spiritual/mental "wick" is gradually burning down. The wick continues to slowly burn down as long as the person is exposed to the causative factors until the wick is gone and the candle finally "burns out."

Statement of the Problem

Compassion fatigue is a problem in caregiving professions, including nursing, and even more specifically critical care nursing. The effects can be detrimental to the nurse and to the care provided to patients. While attempting to enhance a patient's quality of life, nurses may not even realize that their own quality of life may be at stake (Todaro-Franceschi, 2013). Without proper resources, nurses may not recognize the symptoms of compassion fatigue until it comes to a

point where their work productivity and satisfaction are affected due to depletion of their physical, emotional, mental, and spiritual reserves. Compassion fatigue can lead to less productivity and increased staff turnover, leading to costly financial consequences for healthcare institutions. Also, the personal and professional costs to the nurse can be profound (Lombardo & Eyre, 2011). Ultimately, the goal of nursing is to provide a therapeutic environment in which patients' healing can take place. If the nursing workforce is compassion fatigued and burned out, the ability to care suffers. According to Todaro-Franceschi (2013), nurses' professional quality of life impacts the quality of care received by patients, and how patients receive care can transform "their quality of living and dying" (p. 17).

Environmental Context

Intensive care units were first developed in the 1950s in response to a need for a specialized area in the hospital for critically ill patients requiring complex care (AACN, 2013). Today, over five million patients are admitted annually to adult intensive care units with the average mortality rate ranging from 10 to 29% (Society of Critical Care Medicine, 2013). Critical care nurses are frequently exposed to death and dying, traumatic events, and grieving family members. They are often looked to, by both patients and families, in times of distress to be a pillar of support, knowledge, and empathy. The increased exposure caused by the nature of the work environment (intensive/critical care) has the potential to increase rates of compassion fatigue among these nurses (Jenkins & Warren, 2012). The effects and symptoms of compassion fatigue can greatly impact the work a critical care nurse is expected to do. The physical and mental exhaustion has the potential to increase the likelihood of errors in medication administration and other adverse events for the patient (Meadors & Lamson, 2008). In an area where patient acuity runs high, there is little to no room for error. Critical care nurses need to be

able to use their mental, emotional, and physical abilities while caring for these patients who are facing life-threatening injuries and illnesses.

Although compassion fatigue has been studied in the field of nursing, the majority of studies are focused on compassion fatigue in nurses working in the areas other than critical care such as oncology, pediatrics, hospice/palliative care, and the emergency department (Fetter, 2012; Wenzel et al., 2011; Potter, Deshields, Divanbeigi, Berger, Cipriano, Norris, & Olsen, 2010; Maytum et al., 2004; Abendroth & Flannery, 2006; Melvin, 2012; Sabo, 2008; Slocum-Gori, Hemsworh, Chan, Carson, & Kazanjian, 2011; Hooper, Craig, Janvrin, Wetsel, Reimels, Anderson, Greenville, & Clemson, 2010; Joinson, 1992). Compassion fatigue has also been studied in the areas of social work, emergency services personnel, and counselors (Bourassa, 2009; Figley, 1995; Lawson & Myers, 2011). Few studies focus on compassion fatigue in critical care nursing. A knowledge gap exists regarding the prevalence of compassion fatigue in critical care nurses and also regarding an effective intervention to prevent and/or treat the problem. The current research study aimed to close the gap in knowledge by studying the prevalence of compassion fatigue in critical care nursing.

Purposes of the Study

There were two purposes of this research study. The first purpose was to explore the prevalence of compassion fatigue in registered nurses working in the critical care units, specifically the Cardiac Intensive Care Unit and the Main Intensive Care Unit, at a 500-bed hospital in the upper Midwest. The second purpose was to design, implement, and evaluate an educational module on the topic of compassion fatigue. The study aimed to answer three proposed research questions which would aid in accomplishing the two distinct purposes. The first two research questions related to the first purpose, and the third research question related to

the second purpose of the study. The research questions will be further elaborated in Chapter Two. The research questions for current study were as follows:

1. What is the prevalence of compassion fatigue among critical care nurses working at a hospital in the upper Midwest, specifically their level of burnout and secondary traumatic stress?
2. What demographic characteristics are associated with an increased level of compassion fatigue among the study participants?
3. Will the educational module on compassion fatigue be an effective learning tool for critical care nurses as measured by the following:
    a. An evaluation performed by study participants
    b. Analysis of pre-test and post-test scores from the module

Significance for Nursing

Our nation is experiencing a nursing shortage which is expected to grow due to an aging nursing workforce, more "baby boomers" becoming eligible for Medicare, and expanded insurance coverage under the Affordable Care Act (HRSA, 2014). In order to address an issue, we must first understand the prevalence. The study provides information on how prevalent compassion fatigue is among nurses working in critical care and is a pilot for future research related to the development of interventions to increase awareness of compassion fatigue. The study's significance for nursing is related to the need for increased nurse retention and increased professional quality of life among critical care nurses. Nursing as a profession cannot afford to lose current nurses due to the effects of compassion fatigue.

Summary

The study aimed to provide valuable research to the field of nursing with the potential to positively benefit nursing practice. Nurses play an integral role in healing, and nurses need to develop self-awareness regarding compassion fatigue in order to recognize it quickly. Nurses working in critical care units are exposed to death, dying, and traumatic events very frequently, and this can weigh heavily on the hearts and minds of the nurses. The demands placed on the critical care nurse not only include caring for the patient, but also comforting, consoling, and educating the patient's family.

The combination of multiple stressors in critical care nursing may place the nurses at an increased risk of developing compassion fatigue. The increased risk needs to be recognized, measured, and addressed in order to protect the physical, mental, emotional, and spiritual health of critical care nurses. Improved compassion fatigue awareness through an educational module and improved overall health of nurses is expected to result in less turnover, increased work satisfaction, increased patient satisfaction, and better patient outcomes.

Compassion fatigue is a troubling phenomenon which affects those in care giving roles, and nurses are especially susceptible. A gap in the literature exists regarding the prevalence of compassion fatigue in critical care nurses and also regarding an effective intervention to prevent and treat compassion fatigue in this population. The current research study made a contribution towards filling this gap in knowledge. The purposes were to understand the prevalence among critical care nurses and to design, implement, and evaluate an educational module on compassion fatigue. The study is of profound importance to the field of nursing and provided beneficial knowledge. In the next section, a literature review and exploration of a theoretical framework will provide a basis of the current knowledge on the important topic of compassion fatigue.

CHAPTER TWO. REVIEW OF LITERATURE

Background of Compassion Fatigue

A review of the literature on compassion fatigue leads one to believe that the topic has been identified as a problem and researched in not only nursing but also other helping professions. Wakefield (2000) provided a vivid explanation of compassion fatigue:

> For nurses who are regularly faced with caring for dying patients, grief is like a powder keg in that nurses may not be aware that they have been challenged by grief, but the effects of grief can be explosive and cause problems for practitioners at any time. Despite this, nurses are expected to carry on as normal once a patient has died. The notion of grief being like a powder keg is certainly appropriate for those nurses who have developed a close relationship with patient as a result of having nursed them over an extended period of time. (p. 247)

Joinson (1992) first coined the term which has been used to describe the lack of empathy experienced by nurses who have lost their ability to nurture. The 1992 article identified three core issues in compassion fatigue. The first issue is that caregivers provide themselves as a product to those they help, which can be taxing. Also, "the human need is infinite" (Joinson, 1992, p. 118). Caregivers may feel as though they can always do a little bit more. Finally, caregivers fill many roles (e.g. shifting from patient care to delegation of tasks to managing crisis situations) which can require a significant amount of energy. The core issues identified by Joinson (1992) were not found to be researched in other sources.

Symptoms of compassion fatigue include forgetting things, short attention spans, exhaustion, frequent physical ailments such as headaches and stomach aches, depression, and even anger (Aycock & Boyle, 2009; Circenis & Millere, 2011; Joinson, 1992; Lombardo & Eyre,

2011; Maytum et al., 2004). Aside from the physical effects, the emotional and social effects of compassion fatigue can be troublesome. Apathy, indifference, unresponsiveness, and callousness (Coetzee & Klopper, 2010; Maytum et al., 2004) along with irritability, oversensitivity, and anxiety (Jenkins & Warren, 2012; Lombardo & Eyre, 2011; Melvin, 2012) are some examples which can impede a nurse's ability to care for his or her patients. Circenis and Millere (2011) identified specific symptoms of compassion fatigue as re-experiencing the traumatic event, experiencing intrusive thoughts, avoiding reminders of the event, and sleep disturbances. Joinson (1992) recognized that the symptoms present in the nurses in her study correlated with the loss of the nurses' ability to express compassion to the people for whom they were caring (Romano, Trotta, & Rich, 2013).

Compassion fatigue has been studied extensively by Dr. Charles Figley, a psychologist specializing in traumatology. Figley's work did not focus on nursing, but rather on a multitude of helping professions (1995, 2002). Figley (1995) described compassion fatigue as the stress caused by helping or wanting to help a traumatized or suffering person. The term 'secondary traumatic stress' was the original phrase used to describe compassion fatigue, and in the literature it is, at times, used interchangeably. The broad explanation of the term compassion fatigue has been further clarified to describe compassion fatigue as tension along with preoccupation with the patient or multiple suffering patients manifested by re-experiencing the traumatic events, avoidance of reminders of the event, and a state of persistent arousal which may be combined with the effects of burnout (Sabo, 2008). Todaro-Franceschi (2013) described compassion fatigue as having a "heavy heart" which occurs suddenly after caring for suffering individuals or families (p.5).

Burnout vs. Compassion Fatigue

It is wise to appreciate the potential connectedness of burnout and compassion fatigue in the nursing profession. It is possible for one to contribute to the other. Contrast between the terms for six major facets is shown in Table 1.

Table 1

Differences between Burnout and Compassion Fatigue

Burnout	*Compassion Fatigue*
• Arises and subsides gradually	• Arises and subsides abruptly
• Can occur in any profession	• Specific to helping, caregiving professions
• Related to environmental factors (long hours, inadequate staffing, no breaks, poor pay)	• Related to the repeated exposure to traumatic events (caring for patients and their families near end of life)
• Accumulation of prolonged, multifactorial stressors in life	• Result of caring for suffering people
• Response to stressful work environment	• Response to the repeated witnessing of traumatic events, end of life patients, and grieving family members
• Generalized dissatisfaction with one's work	• Loss of ability to nurture and holistically care for patients

Joinson's (1992) study of emergency room nurses was actually intended to explore burnout, and the phenomenon of compassion fatigue was noticed. The differences and similarities between burnout and compassion fatigue are important to comprehend. Sabo (2006) succinctly described the difference between compassion fatigue and burnout by stating that compassion fatigue is the consequence of caring for suffering people rather than a response to

the work environment (burnout). Todaro-Franceschi (2013) described the difference as compassion fatigue being related to our connection with others and bearing witness to their suffering, whereas burnout is a more generalized dissatisfaction with work resulting from things like salary, workload, benefits, and organizational culture.

Burnout is work-related exhaustion associated with prolonged exposure to stressful work environment triggers such as powerlessness, role ambiguity, workload, low staffing, and lack of administrative or peer support (Bush, 2009; Sabo, 2006; Todaro-Franceschi, 2013). Sabo (2006) described burnout as the result of a disconnect between the expectations of the worker's performance and the level of organizational support in place to foster the achievement of those expectations. Burnout can also be described as the culmination of multiple prolonged stressors of life which leads to one's inability to cope (Potter et al., 2010). Most often the triggers for burnout are environmental job stressors such as increased patient to nurse ratios, increased patient acuity without adequate staffing, and long work hours (Sabo, 2011). Essentially, the fact that burnout can occur in nearly any occupation is one of the most important distinctions from compassion fatigue. Another important distinction is that compassion fatigue arises and subsides suddenly whereas burnout arises and subsides slowly (Figley, 1995; Hooper et al., 2010; Sabo, 2006; Todaro-Fransceschi, 2013; Yoder, 2010)

A study conducted by Meadors, Lamson, Swanson, White, and Sira (2009) examining the relationship between burnout, compassion fatigue, and secondary traumatic stress found that participants who indicated high levels of burnout also indicated high levels of compassion fatigue. The assumption can be made that there is a relationship between the two phenomena, but there is not enough evidence to support the theory by Figley (2002) that points to burnout as a cause of compassion fatigue.

Although the literature review indicates compassion fatigue and burnout are separate, the author of the tool used for the current study, ProQOL 5, defines burnout as one element of compassion fatigue (Stamm, 2010). The author describes burnout as being associated with feelings of hopelessness and difficulties with work life. Stamm's (2010) description of burnout as having a slow onset and possibility of being associated with a high workload or non-supportive work environment is congruent with other literature (Figley, 1995; Hooper et al., 2010; Sabo, 2006; Sabo, 2011; Todaro-Fransceschi, 2013; Yoder, 2010).

In the previous version of the ProQOL 5 tool, ProQOL IV, Stamm used the term compassion fatigue in place of secondary traumatic stress when naming the three subscales. The three subscales used in the ProQOL IV were compassion fatigue, burnout, and compassion satisfaction. Burnout and compassion fatigue were two separate subscales. Most of the current literature that utilized the ProQOL tool to measure compassion fatigue used version IV (Abendroth & Flannery, 2006; Hooper et al., 2010; Potter et al., 2010; Sabo, 2008; Slocum-Gori et al., 2011).

Stamm (2010) declared that burnout is the component of compassion fatigue concerned with feelings of being overwhelmed by work. These feelings come about gradually. Secondary traumatic stress is the second component of compassion fatigue. It has an abrupt onset and involves feelings of fear and preoccupation associated with work. Although the terms are similar, the literature did not echo Stamm's (2010) definition of compassion fatigue as being comprised of both burnout and secondary traumatic stress.

Contributing Factors

High levels of empathy, which is feeling of another's emotions, is often attributed to an increased vulnerability for experiencing compassion fatigue (Abendroth & Flannery, 2006;

Figley, 2002; Wenzel et al., 2011). Caring for patients with chronic conditions, seeing too many painful procedures, witnessing too much sadness and death, dealing with the emotional burdens of families, and becoming overly involved or crossing professional boundaries were cited as triggers for burnout and compassion fatigue in a qualitative study of pediatric nurses (Maytum et. al, 2004).

Nurses need support during and after caring for individuals and their families at end of life. A qualitative study conducted by Wenzel et al. (2011) examined oncology nurses' perspectives on bereavement experienced by professionals. Nurses in the study indicated that deterioration of a patient's health and patient death were especially difficult to deal with, and they did not feel that they always had adequate support to cope with the personal, physical, and psychological demands of the situation. Limited time to process the events and feelings was associated with exacerbated negative feelings.

Potter et al. (2010) conducted a study on the prevalence of compassion fatigue and burnout among oncology nurses in a large cancer institute. A trend for increased risk for burnout and compassion fatigue among nurses with higher levels of education was found but was not statistically significant. Also, staff nurses with 11-20 years of experience were found to have the highest percentage of high-risk compassion fatigue scores. The finding was contradicted by the study conducted by Burtson and Stichler (2010) on nursing work environments which found that compassion fatigue was likely to affect younger, less experienced nurses. Yoder's (2010) study of compassion fatigue in hospital and home care nurses found that nurses with the least experience (less than ten years) had significantly higher compassion satisfaction than nurses with moderate experience (10-19 years).

Abendroth and Flannery (2006) found that close to 80% of the hospice nurses they surveyed (N=216) were at moderate to high risk for compassion fatigue. Eighty-three percent of the nurses in the high risk for compassion fatigue category indicated that they self-sacrificed for others' needs. Also, the study found that unhealthy levels of empathy, trauma, anxiety, and life demands were key factors determining the risk for compassion fatigue.

Yoder's (2010) study of hospital and home care nurses found that compassion fatigue risk was significantly higher for nurses who worked eight hour shifts versus nurses who worked twelve hour shifts. The study also identified three categories of trigger situations for compassion fatigue and burnout. The three categories of triggers included caring for patients (patient condition/status, challenging behavior, futile care), system issues (high census, heavy patient assignments, high acuity of patients, overtime, extra work hours), and personal issues (inexperience, lack of energy, feelings of inadequacy).

Interventions

Identifying compassion fatigue as a problem in nursing is important, but it is also important to consider what we can do for prevention and treatment. A variety of interventions have been identified in the literature. Many focus on creating an 'awareness' of the holistic demands of end of life care and the potential effects of compassion fatigue on nurses (Boyle, 2011; Romano et al., 2013). Self-awareness and self-care are incredibly important for nurses' health and can prevent the negative effects of providing care, such as burnout and compassion fatigue, and improve professional quality of life (Aycock & Boyle, 2009; Boyle, 2011; Kravits, McAllister-Black, Grant, & Kirk, 2010; Lombardo & Eyre, 2011; McElligott, Siemers, Thomas, & Kohn, 2009).

Nurse educators and managers are in a unique position to help combat compassion fatigue. Providing informational sessions, opportunities for discussion, specialty training in end of life care which takes into account the emotional aspects, and support when compassion fatigue symptoms are recognized are valuable interventions that nurse educators and managers can employ (Boyle, 2011; Maytum et. al, 2004; Meadors & Lamson, 2008; Melvin, 2012). Nurse leaders should encourage nurse renewal practices and provide an emotionally supportive environment. Nurse leaders could accomplish this by exhibiting increased awareness for nurses who might be showing signs of compassion fatigue. They could also ensure nurses are taking time for healing and renewal and change workload demands to care for nurses' emotional well-being. Renewal practices such as reflection, rest, exercise, and hobbies should be frequently discussed and highly encouraged (Romano et al., 2013).

Debriefing sessions, offering pastoral care to nurses, and regular breaks (with the ability to leave the floor) are possible interventions to improve job satisfaction and prevent compassion fatigue as proposed by oncology nurses in a qualitative study by Wenzel et al. (2011). On site counseling, staff support groups, debriefing sessions, art therapy, massage, and attention to spiritual needs were identified by Boyle (2011) as other work related interventions to prevent and treat emotional distress and compassion fatigue.

A study conducted by Meadors and Lamson (2008) revealed that provider self-care is an important component of preventing compassion fatigue. Having a culture which promotes taking time off, allows providers to eat during their shift, and promotes achievements is "essential for minimizing the likelihood of compassion fatigue," (p. 33). The need for a supportive work environment is even more crucial during the holiday season when employees' stressors in their personal lives may compound the stressors at work. The study also explored the effects of

implementing an educational seminar with providers who work in intensive care units for children. A pre-test and post-test was administered to each seminar attendee. The findings indicated the seminar was successful in raising awareness on compassion fatigue, providing resources to prevent compassion fatigue, and reducing stress; the authors advocated that educational seminars on compassion fatigue be incorporated into all intensive care units with children (Meadors & Lamson, 2008).

In one study by Fetter (2012), an inpatient oncology unit with a compassion fatigue problem and a high turnover rate implemented two interventions. A magnet with a picture of a dove was placed on the door of the rooms where end of life care was being provided. The magnet signaled to all members of the interdisciplinary team that quiet and privacy were extremely important around these rooms, thus enabling nurses to provide the best, uninterrupted care to their end of life patients and their families. A bereavement care package was given to families which consisted of items which could be helpful in the end of life period (soothing music, bibles, and a stress-ball, among others) as another intervention. Eighty-eight percent of staff surveyed said the interventions were beneficial and helped give closure, and the unit's RN turnover rate decreased that year.

Romano et al. (2013) described an approach to combat compassion fatigue among nurses at a hospital in Pennsylvania. A "center for nursing renewal" was created which was a soothing environment housing a large space for yoga, multiple massage chairs, a library, refreshment area with coffee and tea, and a computer area. Low lighting, candles, guided imagery videos, and soothing music accompanied the relaxing space. Nurses were encouraged to take breaks, relax, connect, and eat their lunch there. Wellness classes were also offered at the center. The response was very positive, with a reported 42% reduction in stress levels. Nurses' level of reported job

satisfaction increased, and there were fewer nurses planning to leave direct patient care (Romano et al., 2013). Lombardo and Eyre (2011) described a similar intervention of implementing a relaxation center for nurses which also offered massage, yoga, and a soothing atmosphere. Another intervention proposed (which may be more feasible for most hospitals) is designating a special area on the nursing unit which is comfortable and relaxing with a CD player, low lighting, and comfortable chairs.

Finally, adequate preparation may help to prevent the problem of compassion fatigue all together. Lombardo and Eyre (2011) described one hospital's development of a Nurse Residency program which emphasized mentorship, decision making skills, reflection, and self-care. The goal of the program was to ease transition into the RN role and promote nurses' health and retention.

Theoretical Framework

The theoretical framework for the study was provided by the combination of Carper's (1978) Fundamental Patterns of Knowing in Nursing and the Theory of Integral Nursing by Barbara Dossey (2008). Both theories are congruent with the purposes of the study. The current study links the Theory of Integral Nursing and Carper's patterns of knowing by emphasizing holistic care and personal awareness as components impacting a nurse's risk for developing compassion fatigue. Nurses' health is an important thread between both theories and is central to the current study. The theories will be briefly explained, and their significance for the study presented.

Fundamental Patterns of Knowing

Carper (1978) developed four fundamental patterns of knowing after analyzing the body of nursing knowledge, and how the ways of knowing could be used in theory-based nursing

practice. The four ways of knowing described by Carper include empirical, personal, ethical, and esthetic. Comprehension of the patterns of knowing is essential in guiding new research and understanding what is already known in the field of nursing (Carper, 1978; Parker & Smith, 2010). The four patterns of knowing by Carper serve as an important underpinning for and contributor of a major content component of the Theory of Integral Nursing by Barbara Dossey (2008).

Empirical knowing involves the science of nursing and is the most familiar to nursing because it includes concepts, theories, research findings, laws, and principles which guide our practice. Personal knowing is essential to caring for patients, and it can be the hardest to teach and master. The patient is not seen as just a patient, but rather as a person moving toward the fulfillment of his or her potential (Carper, 1978). This component of personal knowledge focuses on the interpersonal relationships between nurses and patients. Also, personal knowledge is concerned with knowing oneself. Ethical knowing is vital in nursing work because it is concerned with moral and ethical actions in practice. Ethical knowing guides nurses through the complexities of health care by guiding us to what is right and what we ought to do (Parker & Smith, 2010). Lastly, the esthetic way of knowing is described as the art of nursing and involves the creative use of knowledge in practice. Empathy is an important component to the esthetic way of knowing (Carper, 1978).

All four components of Carper's ways of knowing had influence on the study. Empirical knowing was related to the research, data collection, concepts, and findings of the current study. Empirical knowing involves the development of a body of knowledge for the nursing profession. The current study aimed to narrow the gap in knowledge related to compassion fatigue in critical care nursing.

The component of personal knowledge was important to the study because it focuses on being aware of oneself and stresses the importance of a quality interpersonal relationship between the nurse and the patient. Carper points out that the phrase "therapeutic use of self" indicates that in order to have a therapeutic relationship, the nurse must be aware of self and the patient as an individual. The patient is seen as an integrated whole moving to fulfill his or her potential (Carper, 1978). Many aspects of the personal way of knowing are applicable to the importance of the study on the prevalence of compassion fatigue in critical care nursing and the development of an intervention. Compassion fatigue can be influenced by a lack of personal knowing, and compassion fatigue can have an effect on the relationships between patients and nurses. In critical care, nurses must be aware of their own selves (physically, spiritually, mentally, and emotionally) in order to provide empathetic care to their patients.

The ethical way of knowing focuses on the morality of nurses' actions. The ethical way of knowing was important to the current study because caring for patients and their families in the critical care environment often involves moral dilemmas and situations which call for ethical judgments. End-of-life care in critical care environments is a common occurrence which can have significant effects on nurses. When ethical or moral dilemmas are added to the situation, the comprehensive toll on the nurse can be profound.

The esthetic way of knowing involves empathy, which is the feeling of another's pain and suffering. The central theme to the current study is compassion fatigue which results after prolonged, stressful, and empathetic care of traumatized individuals. Carper indicated that nurses need empathy and with increased empathy nurses can gain insight and knowledge into different ways of perceiving reality (1978). Studying compassion fatigue is important in order to preserve empathetic care provided by nurses.

Theory of Integral Nursing

Barbara Dossey's Theory of Integral Nursing is a grand theory which incorporates holistic concepts into a comprehensive, integral worldview. The connectedness of mind, body, and spirit is acknowledged and encourages nurses to be more comprehensive in their knowing, doing, and being. The theory is based on five content components including healing, the metaparadigm of nursing (nurse, person, health, environment), Carper's patterns of knowing, Wilber's four quadrants, and Wilber's "all quadrants, all levels, all lines" (Dossey, 2008). The theory model is an overlapping depiction of the content components (Figure 1; Appendix A; Appendix B).

Healing is the first component and is in the center because it is seen as central to nursing care. The second component, the metaparadigm of nursing, is depicted as a Venn diagram. The Venn diagram implies connectedness and interrelation between the four metaparadigm concepts. The six patterns of knowing comprise the third component of the model. The six components start in the center and branch out. The four original patterns developed by Carper (1978) include the personal, ethical, empirical, and esthetic patterns. Sociopolitical and not knowing were added by different authors in 1993 and 1995 (Dossey, 2008). The four quadrants represent four different perspectives of reality, and the dotted lines which separate the quadrants illustrate the permeability of each quadrant experience. "I," "We," "It," and "Its" explain how we experience the world. The final component of the Theory of Integral Nursing model is Wilber's "all quadrants, all levels, all lines." The final component is depicted with lines coming from the center of the model (Parker & Smith, 2010). The model can appear complex, but the purpose is to present the interconnectedness of the components.

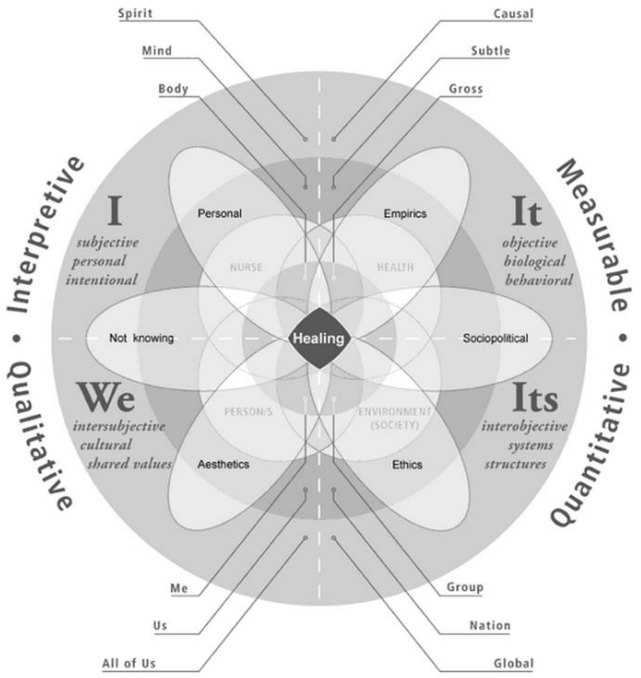

Figure 1. Theory of Integral Nursing Model by Barbara Dossey (2008).

The Theory of Integral Nursing was important to the development of the current study because attention and concern is given to the health and wellbeing of the nurse. Adopting an integral worldview can help a nurse to increase his or her self-awareness and awareness of how his or her actions affect others. If nurses can discover and understand their innate healing within, they can model self-care to others, including their patients (Parker & Smith, 2010). Critical care nurses can benefit from increased self-awareness which could potentially reduce the risk of compassion fatigue. The concepts and relationships presented in the Theory of Integral Nursing provided a solid foundation to the development of an educational module on compassion fatigue.

Dr. Barbara Dossey was personally contacted by the researcher for the current study, and permission was granted for use of the Theory of Integral Nursing as a guiding framework. Appendix C is the email communication from Dr. Dossey giving permission to use her theory and the diagram of the Theory of Integral Nursing (Appendix A).

Research Questions

The first purpose of the study was to explore the prevalence of compassion fatigue in registered nurses working in the two critical care units at a 500 bed hospital in the upper Midwest. The demographic characteristics of the participants were also analyzed. The first purpose of the study (determining the prevalence of compassion fatigue in selected population) was accomplished by administering a demographic profile (Appendix D) and a survey tool (Appendix E), which will be explained thoroughly in following sections. The survey was intended to determine participants' level of compassion fatigue and compassion satisfaction through three subscales at one point in time.

The second purpose of the study was to design, implement, and evaluate an educational module on the topic of compassion fatigue. The second purpose was accomplished by administering a pre-test examining level of knowledge on compassion fatigue prior to completing an online module on the topic. A post-test was administered after completion of the module to determine knowledge obtained. A survey was administered at the end of the module to obtain participants' feedback as well.

The two purposes of the study were separate and analyzed using separate data. The study purposes were accomplished by two different methods, and there were different participants for each. The data collected to achieve each purpose did not have any effect on the other. The research questions for the current study were as follows:

1. What is the prevalence of compassion fatigue among critical care nurses working at a hospital in the upper Midwest, specifically their level of burnout and secondary traumatic stress?

2. What demographic characteristics are associated with an increased level of compassion fatigue among the study participants?
3. Will the educational module on compassion fatigue be an effective learning tool for critical care nurses as measured by the following:
    a. An evaluation performed by study participants
    b. Analysis of pre-test and post-test scores from the module

Conceptual and Operational Definitions

Conceptual definitions provide an understanding of terms used in the study, and operational definitions provide an understanding of how the terms are measured. The conceptual definitions were derived from the literature review. The operational definitions were total scores and sub-scores on the ProQOL 5 tool (Stamm, 2010), the data collection tool used in this study. All definitions are congruent with the theoretical framework.

Compassion Fatigue

The conceptual definition of compassion fatigue is a negative phenomenon with rapid onset affecting those in care giving professions, especially nurses who have repeated, continuous, intense exposure to the stress created by caring for very ill patients near end of life, patients who have died, and the traumatic events patients have experienced. The effects of compassion fatigue on nurses are physical, mental, emotional, and spiritual, and the effects can lead to the nurse's inability to effectively care for him/herself or others. Compassion fatigue in nursing occurs when the nurse's emotional reserves for caring are depleted. Symptoms of compassion fatigue include forgetfulness, shortened attention span, exhaustion, frequent headaches and stomachaches, depression, anger, apathy, indifference, unresponsiveness, irritability, anxiety, and oversensitivity (Aycock & Boyle, 2009; Circenis & Millere, 2011;

Coetzee & Klopper, 2010; Jenkins & Warren, 2012; Joinson, 1992; Lombardo & Eyre, 2011; Maytum et al., 2004; Melvin, 2012).

For this study, compassion fatigue was measured using the Professional Quality of Life Scale, Version Five (ProQOL5) developed by Stamm (2010). The two phenomena which comprise compassion fatigue, burnout and secondary traumatic stress, were measured using separate subscales. The operational definition of compassion fatigue is the combined interpretation of the burnout and secondary traumatic stress subscale scores from the ProQOL5. The current study examined the level of compassion fatigue at one point in time. Administering the survey at a different point in time would likely provide different results because compassion fatigue arises and subsides abruptly.

Burnout

For this study, burnout was defined as one of the two components of compassion fatigue which is characterized by a gradual onset of work dissatisfaction and feeling of being overwhelmed with the work being done. Burnout is not limited to helping professions. Burnout occurs when a person experiences significant environmental work stressors and has symptoms of hopelessness, feelings of not being able to perform his or her job effectively, and physical, mental, and emotional exhaustion.

Burnout was measured in the current study by using the ProQOL5. The operational definition of burnout is the score from the burnout subscale from the ProQOL5 (Stamm, 2010). Stamm (2010) defines burnout as one component of compassion fatigue which is concerned with work environmental aspects such as exhaustion, frustration, and anger possibly associated with high workload or unhealthy work environment.

Compassion Satisfaction

The conceptual definition of compassion satisfaction is the pleasure one gets from helping others (Todaro-Franceschi, 2013). Compassion satisfaction is the positive feeling a person experiences when doing caring work in a helping profession and is characterized by a feeling of pleasure from being able to do his or her work well.

For the current study, compassion satisfaction was measured by using the ProQOL5 tool. The operational definition of compassion satisfaction is the score from the compassion satisfaction subscale in the ProQOL5 (Stamm, 2010). Compassion satisfaction is seen as the opposite of compassion fatigue.

Secondary Traumatic Stress

The conceptual definition of secondary traumatic stress is the emotional distress a person experiences when he or she hears about the traumatic experiences of others. Although the person has not personally experienced the trauma, he or she feels the emotional pain as if he or she had. Secondary traumatic stress arises from secondary, work-related exposure to the stressful or traumatic events which care recipients have experienced. Secondary traumatic stress is one of the two elements of compassion fatigue. Secondary traumatic stress involves feelings of fear and preoccupation regarding the person he or she has helped.

Secondary traumatic stress was measured in the current study by using the ProQOL5 tool. The operational definition of secondary traumatic stress was the score from the secondary traumatic stress subscale from the ProQOL5 (Stamm, 2010). Secondary traumatic stress is the second component of compassion fatigue.

Assumptions

The assumptions were as follows:

1. Critical care nurses are exposed to death, dying, and traumatic events frequently.
2. Repeated exposure to death, dying, and traumatic events can lead to compassion fatigue in nurses.
3. Compassion fatigue is a problem in nursing, especially critical care nursing.
4. Integral health is a holistic experience which involves development toward personal growth and enhanced consciousness which allows for deeper understanding of one's own physical, mental, emotional, social, and spiritual health (Dossey, 2008).
5. Integral nursing involves knowledge development and multiple ways of knowing (personal, ethical, empirical, and esthetic) (Dossey, 2008).

Summary

A literature review was performed on compassion fatigue in critical care nursing. By exploring what is already known about the topic, the knowledge gap regarding the prevalence of compassion fatigue in critical care nursing was confirmed. A background of compassion fatigue, differences between burnout and compassion fatigue, contributing factors to compassion fatigue, and interventions were explored after a review of the literature. Conceptual and operational definitions were provided. The theoretical framework for this study was a combination of Carper's Fundamental Patterns of Knowing in Nursing and the Theory of Integral Nursing by Barbara Dossey. Both were introduced and significant components from each were identified. The three research questions for this study were presented along with conceptual and operational definitions for compassion fatigue. Assumptions for the research study were also provided. In the next section, the methodology for the study is discussed.

CHAPTER THREE. METHODOLOGY

Overview

This chapter will present the methodology used in the study. First, the research design will be discussed, including both the compassion fatigue survey and the educational module. The population and sample will be defined as well as how the participants' anonymity and rights were protected. Finally, data collection and data analysis methods will be described for the compassion fatigue survey and the educational module.

Research Design

Compassion Fatigue Survey

The research study was comprised of two components. The first component was a descriptive, exploratory study using a questionnaire (ProQOL 5) and a demographic profile distributed to registered nurses working in the critical care units at a hospital in the upper Midwest. Descriptive study designs allow the researcher to obtain information about characteristics in a particular field of study and identify problems with current practice (Grove, Burns, & Gray, 2013). Using this research design, new information was sought in an attempt to narrow the current gap in knowledge regarding the prevalence of compassion fatigue in critical care nursing. The purpose of the first component was to determine the prevalence of compassion fatigue and compassion satisfaction in critical care nurses at one point in time.

Educational Module

The second component of the study was development and evaluation of an online educational module using Qualtrics software through the NDSU Group Decision Center. Slides from the module can be found in Appendix F. The educational module on compassion fatigue provided information on prevention, recognition of symptoms in self and others, and resources

for help. The module was created in a format which allowed for participant interaction in the form of self-tests. The online module was administered separately from the questionnaire used for the first component of the study. Nurses who participated in completing the ProQOL5 tool for the first component of the study were not required to complete the online module, and vice versa. The two components were completely separate.

Participants were asked to take a five question pre-test, within the online module, which tested their compassion fatigue knowledge. Immediate feedback on pre-test answers was not provided, but correct answers were shown after the post-test. A five question post-test (using the same questions) was administered immediately following the delivery of the content in the module. Participants were surveyed at the end of the module for their feedback on the module's content and delivery, information they found beneficial, and what newly acquired knowledge they planned to incorporate into their current nursing practice.

Population and Sample

All registered nurses (full-time and part-time) working in two critical care units at a hospital in the upper Midwest who had completed their orientation at least three months prior to the time of the survey were invited to participate in the study. Participants represented a convenience sample from the target population of all critical care registered nurses invited to participate. One hundred and fifty RNs were invited to participate in the study. Fifty-eight RNs (39%) completed the survey and demographic profile. All nurses working on the two critical care units (161) were invited to participate in the online educational module. Thirty-five RNs (22%) completed the module.

Institutional Review Board Approval

Institutional review board (IRB) approval was obtained from North Dakota State University and from the hospital at which the data collection took place (Appendices F and G). Informed consent was obtained from all participants in the survey. Examination of personal feelings, emotions, and past traumatic experiences posed a potential psychological risk for study participants. Within the informed consent document, available resources were presented (nurse management, chaplaincy, and employee health assistance). The researcher explained that the participant was able to withdraw from the study at any time. Participants' anonymity was protected by not collecting any identifying data. Results are reported in aggregate only. The completed survey materials were kept in a locked box. The computer used to store data and files was password protected and in the researcher's locked office.

Participant confidentiality was protected while administering the educational module by not asking for any identifiers. Confidentiality was also protected through the assistance of the unit educator who forwarded the online module link to the email addresses of nurses working on the two units. The researcher did not see the email addresses to which the link was sent.

Data Collection

Compassion Fatigue Survey

Study materials were provided to participants in paper form with an envelope. Materials were placed in each nurse's mailbox and included an informed consent form, the ProQOL 5 tool, and a demographic questionnaire. Participants' anonymity was protected, and they were informed that their responses would remain confidential. Instructions were provided for participants to complete the forms, place in sealed envelope, and return sealed envelope to a

locked box. The materials and locked boxes were available in both critical care units' break rooms. Locked boxes were checked and emptied weekly by the researcher.

In order to encourage participation, a poster was designed and placed in both break rooms indicating the study and asking for participation. In addition, clinical care supervisors (who frequently work as charge nurses on the units) were given a script and asked to read to nurses at times they saw as appropriate. Answers to anticipated questions from the participants were provided in the script.

ProQOL 5. The instrument used in the study was the ProQOL5 (Appendix E). Figley (1995) originally developed a measurement tool for compassion fatigue which was called the Compassion Fatigue Stress Test. The tool was revised and renamed the Professional Quality of Life Scale by Stamm in 2005. Multiple revisions have taken place, but the final and most current scale, the ProQOL 5, is a thirty item questionnaire. Participants indicate, using a five-point Likert scale of (1 never, 2 rarely, 3 sometimes, 4 often, and 5 very often), how frequently they have experienced certain feelings in the last thirty days. The ProQOL 5 responses are divided into three separate 10-item subscales: compassion satisfaction, burnout, and secondary traumatic stress. Each subscale measures different constructs. The three subscales are scored separately. The burnout and secondary traumatic stress subscales represent the two components of compassion fatigue and are interpreted as a combination to determine risk of compassion fatigue. The ProQOL 5 questions vary from "I am happy" to "I feel depressed because of the traumatic experiences of the people I help" (Stamm, 2010, p. 26).

The ProQOL 5 has been extensively tested and has been found to be reliable and valid (Hooper et al., 2010). According to the tool's author, Stamm (2010), the construct validity is good with "more than 200 published papers and more than 100,000 articles on the internet," (p.

13). Alpha reliability of the three scales is as follows: Compassion Satisfaction: alpha = 0.88; Burnout: alpha = 0.75; Secondary Traumatic Stress: alpha = 0.81. Between Compassion Fatigue and the Secondary Traumatic Stress scale there is a 2% shared variance (r=0.23; co-σ = 5%; n=1187). A 5% shared variance (r = -0.14; co-σ = 2%; n=1187) exists between Compassion Fatigue and the Burnout scale. The shared variance between the Burnout and Secondary Traumatic Stress scales is 34% (r = 0.58; co-σ = 34%; n = 1187), which is due to the scales measuring different constructs while reflecting distress inherent in both conditions (Stamm, 2010). Permission is given for the ProQOL 5 to be freely copied as long as the author is credited, no changes are made, and it is not sold is indicated in the footer of the instrument (Appendix E; Stamm, 2010).

Demographic Profile. The second tool used for data collection was a demographic profile (Appendix D). The profile included categories as analyzed by Stamm (2010) utilizing a data bank of 1,289 cases from multiple studies. The profile included questions related to gender (male/female); age group (18-35, 36 and up); race (white, non-white); income group (up to $45,000 USD, $46,000-$75,000 USD, more than $75,000); years worked at current healthcare facility (<5 years, 5-15 years, >15 years); and years worked in critical care (<5 years, 5-15 years, >15 years), (Stamm, 2010). The profile also asked about length of shifts worked (eight hours, twelve hours, combination); type of shift worked (day, evening, night, combination); and number of hours worked each week (<24 hours, 24-36 hours, >36 hours).

Educational Module

All nurses working in the two critical care units were contacted by email and asked to participate in an online educational module (Appendix F) on the topic of compassion fatigue. A link to the online module was provided in the email. Confidentiality was protected by not asking

for any identifiers in order to complete the module. Instructions for completion as well as an overview of what to expect were provided in detail in the email. The module began with a pre-test to test compassion fatigue knowledge prior to the content. The content on compassion fatigue followed. A post-test to assess compassion fatigue knowledge after the content delivery was included. The last step was a survey for participants' feedback on content and delivery, what they intended to implement, and perceived benefits of completing the module. Estimated time to complete the module was also provided. Results from the pre-tests, post-tests, and surveys were collected and analyzed.

To promote participation, reminder emails were sent asking participants to complete the module. Posters were hung in the units' break rooms which encouraged nurses to participate. Nurse managers and clinical care supervisors from the units were given information related to the potential benefits of enhanced awareness of compassion fatigue on the units and were asked to announce the module to the nurses.

Data Analysis

Compassion Fatigue Survey

The three separate subscales of the ProQOL 5 (compassion satisfaction, burnout, secondary traumatic stress) were scored by the researcher using the ProQOL 5 scoring and interpretation tools (Appendix I, Appendix J). The responses of 1, 2, 3, 4, or 5 in the designated number slots for each subscale were summed, with the sum indicating the participant's score for that particular subscale. Information by Stamm (2010) provided in Appendix J indicates what the score means and the level of compassion satisfaction, burnout, or secondary traumatic stress. Levels are reported as low, average, or high for each of the three subscales.

The average score for the compassion satisfaction subscale is 50 (standard deviation: 10, alpha scale reliability: 0.88). The average score for the burnout subscale is 50 (standard deviation: 10, alpha scale reliability: 0.75). The average score for the secondary traumatic stress subscale is 50 (standard deviation: 10, alpha scale reliability: 0.81). Typically for each subscale participants complete, 25% score higher than 57, and 25% score lower than 43 (Stamm, 2010). Scores were coded and entered into SAS. Mean scores were calculated for each subscale within each demographic.

The statistical analysis of the data was performed with assistance from North Dakota State University Statistical Consulting Department. Descriptive statistics were used to analyze demographic information provided by participants and inferential statistics were used to explain the relationships between scores of subscale per demographic variables. T-tests were performed to find differences between scores of subscales by demographic variables with two levels. A post-hoc test using Fisher's least significant difference (LSD) method was used to detect pairwise differences among the variables with three or more levels, after an initial one-way analysis of variance (ANOVA).

Educational Module

Results from the pre-tests and post-tests were analyzed to determine how many participants scored higher on the post-test than the pre-test. The participants' narrative responses from the survey were analyzed for themes. The results from the pre-test/post-test analysis will be covered in the following chapter. The prominent themes from the survey responses will also be described in Chapter Four.

CHAPTER FOUR. RESULTS

Compassion Fatigue Survey

Demographic Information

A total of 58 nurses completed the demographic profile and survey out of the 150 who were invited to participate. The response rate was 38.7%. All participants completed all sections of the demographic profile and ProQOL survey. The following are demographic characteristics of the study participants.

The majority (81%) of study participants were female. Also, a large majority, 56 of the 58 participants (97%), reported their race as white while only two of the 58 participants (3%) reported their race as non-white. Most (74%) of the study participants fell into the 18-35 year old age bracket. Fifteen participants (26%) reported their age as 36 years and up. Participants were asked to report their personal, annual income level. Twenty-six of the 58 participants (45%) were in the annual income group of up to $45,000. The largest percentage, 50%, of participants reported their annual income as between $46,000 and $75,000. Three of the 58 participants (5%) reported their annual income as more than $75,000. After data collection was completed, the researcher realized the income categories as defined by Stamm (2010) left a gap between $45,000 and $46,000. The income group categories are published in the ProQOL 5 manual (Stamm, 2010) and reflect data collected from 1,289 cases. The distribution of the participants' gender, race, age range, and income group is shown in Table 2.

Table 2

Distribution of Participants' Gender, Race, Age Group, and Income Group

Variable	*N*	Percentage
Gender		
Male	11	19%
Female	47	81%
Race		
White	56	97%
Non-White	2	3%
Age Group		
18-35 years old	43	74%
36 years old and up	15	26%
Income Group		
Up to $45,000/year	26	45%
$46,000-$75,000/year	29	50%
More than $75,000/year	3	5%

Study participants were asked to answer demographic questions related to their years of nursing experience. The majority, 33 of the 58 study participants (57%), had been employed with their current employer for less than five years. This demographic question did not differentiate between the different roles the participants may have had during the years employed with their current employer. The next question asked about the number of years the participants had worked as an RN. Twenty-eight of the 58 participants (48%) had worked as an RN for less than five years. Nineteen participants (33%) had worked as an RN for between five and 15 years, and 11 (19%) participants had worked as an RN for more than 15 years. The participants were also asked how many years they have worked in critical care. A large majority, 35 of the 58 participants (60%), had worked in critical care for less than five years. Fourteen of the 58 participants (24%) had worked in critical care between five and 15 years, and nine of the 58

participants (16%) had worked in critical care for more than 15 years. The experience levels of the nurses who participated in the study are displayed in Table 3.

Table 3

Years of Experience of Study Participants

Variable	*N*	Percentage
Years at Current Employer		
Less than 5 years	33	57%
5-15 years	15	26%
More than 15 years	10	17%
Years as an RN		
Less than 5 years	28	48%
5-15 years	19	33%
More than 15 years	11	19%
Years in Critical Care		
Less than 5 years	35	60%
5-15 years	14	24%
More than 15 years	9	16%

The length of the shifts nurses work varies. The participants were asked if they worked eight-hour shifts, twelve-hour shifts, or a combination. No participants reported that they work eight-hour shifts. Fifty-five of the 58 participants (95%) reported that they worked twelve-hour shifts, and only three participants (5%) reported that they worked a combination of eight-hour and twelve-hour shifts. The participants were also asked to report the typical type of shift they work (day shift, evening shift, night shift, or combination). The majority, 35 of the 58 participants (60%) work a combination of day shifts and night shifts. Twelve of the 58 participants (21%) work the day shift, and 11 of the 58 participants (19%) work the night shift. The last demographic question asked participants the number of hours they work each week. No

participants reported working less than 24 hours per week. Thirty-two of the 58 participants (55%) worked between 24 and 36 hours each week. Twenty-six of the 58 participants (45%) worked more than 36 hours each week. The type and length of shifts study participants worked as well as number of hours worked each week are shown in Table 4.

Table 4

Type and Length of Shifts Worked and Number of Weekly Hours Worked by Participants

Variable	*n*	Percentage
Length of Shift		
8 hours	0	0
12 hours	55	95%
Combination	3	5%
Type of Shift		
Day	12	21%
Evening	0	0
Night	11	19%
Combination	35	60%
Hours per Week		
Less than 24 hours	0	0
24-36 hours	32	55%
More than 36 hours	26	45%

ProQOL 5 Survey Results

A total of 58 RNs, of the 150 RNs invited, participated in the survey and completed the ProQOL5 survey tool to measure compassion satisfaction and compassion fatigue for a response rate of 39 percent. Compassion fatigue is broken into two components, burnout and secondary traumatic stress. Using the ProQOL5 Scoring Tool (Appendix J), the overall level of compassion satisfaction among study participants was found to be low (M=38.03, SD=3.92). The overall

level of burnout was low (M=24.78, SD=4.54), and the overall level of secondary traumatic stress was low as well (M=22.31, SD=4.69). The total means and standard deviations of the ProQOL5 subscale results are presented in Table 5.

Table 5

Total Means and Standard Deviations of ProQOL5 Subscale Results

	n	Mean Score	Standard Deviation
Compassion Satisfaction	58	38.03	3.92
Burnout	58	24.78	4.54
Secondary Traumatic Stress	58	22.31	4.69

The following paragraphs and tables will describe the various statistical tests that were performed to analyze the scores of each subscale by each demographic variable. A t-test procedure was performed for the demographic variables with only two levels. A one-way ANOVA was performed for the demographic variables with more than two levels. A post-hoc test using LSD method was performed to assess for pairwise differences. A significance level of 0.05 was used for all tests.

Using results from the t-test procedure, the researcher was able to conclude there was no statistical evidence to support that there was a difference in the level of compassion satisfaction, burnout, or compassion fatigue between males and females, whites and non-whites, those who work twelve hour shifts or a combination, or between nurses who work 24-36 hours per week or more than 36 hours per week. The p-value for “age” in the burnout subscale was significant at 0.0142. Participants in the 18-35 year old age group scored higher on the burnout subscale than

participants in the 36 years and up age group. The overall burnout subscale across the two different age groups can be found in Table 6. The t-test comparison data of age groups regarding burnout subscale can be seen in Table 7.

Table 6

Overall Burnout Subscale Across Age Groups

Age Group	*n*	Mean Score	Standard Deviation
18-35 years old	43	25.63	4.6138
36 years old and up	15	22.33	3.3947

Table 7

Comparison Data of Age Groups Regarding Burnout Subscale

Method	Variances	DF	*t* value	Pr > *t*
Pooled	Equal	56	2.53	0.0142

The p-value for "age" in the secondary traumatic stress subscale was also significant at 0.0081. Participants 18-35 years old reported higher levels of secondary traumatic stress than participants 36 years old and up. The researcher concludes that there is a statistically significant difference in the level of compassion fatigue, as measured by the burnout and secondary traumatic stress subscales, between the age groups of 18-35 years old and those 36 years old and up. The overall secondary traumatic stress subscale across the two different age groups can be found in Table 8. The t-test comparison data of age groups regarding secondary traumatic stress subscale can be seen in Table 9.

Table 8

Overall Secondary Traumatic Stress Subscale Across Age Groups

Age Group	*n*	Mean Score	Standard Deviation
18-35 years old	43	23.26	4.7313
36 years old and up	15	19.60	3.4184

Table 9

Comparison Data of Age Groups Regarding Secondary Traumatic Stress Subscale

Method	Variances	DF	*t* value	Pr > *t*
Pooled	Equal	56	2.75	0.0081

Using a one-way ANOVA, demographic variables with three or more levels were compared regarding the mean scores of the burnout, secondary traumatic stress, and compassion satisfaction subscales. The differences in means of the burnout subscale across the varied years of experiences at participants' current employer can be seen in Table 10. The LSD method was used to detect pairwise differences. Although no statistically significant difference was detected by ANOVA (p=0.1309), the LSD detected statistically significant difference at 0.05 between nurses with 5-15 years at current employer and those with more than 15 years (p=0.0449). The pairwise comparisons can be seen in Table 11.

Table 10

Comparison of Burnout Subscale Across Number of Years at Current Employer

Years at Current Employer	*n*	Mean Score	Standard Deviation
Less than 5 years	33	24.73	4.28
5-15 years	15	26.33	5.31
More than 15 years	10	22.60	3.50

Table 11

Pairwise Comparison of Burnout P-Values (Number of Years at Current Employer)

	Less than 5 Years	5-15 Years	More than 15 Years
Less than 5 Years		0.2521	0.1915
5-15 Years	0.2521		0.0449
More than 15 Years	0.1915	0.0449	

A statistically significant difference in secondary traumatic stress subscale means across the number of years at participants' current employer was found (p=0.0425), see Table 12. There is a statistically significant difference between those who have worked less than five years at their current employer and those who have worked more than 15 years at their current employer (p=0.0225). A statistically significant difference was also found on the secondary traumatic stress subscale between participants who have been at their current employer 5-15 years and those who have been there for more than 15 years (p=0.0202). The pairwise comparisons of secondary traumatic stress p-values can be seen in Table 13.

Table 12

Comparison of Secondary Traumatic Stress Across Years at Current Employer

Years at Current Employer	*n*	Mean Score	Standard Deviation
Less than 5 years	33	22.82	4.60
5-15 years	15	23.40	5.14
More than 15 years	10	19.00	2.79

Table 13

Pairwise Comparison of Secondary Traumatic Stress P-Values (Number of Years at Current Employer)

	Less than 5 Years	5-15 Years	More than 15 Years
Less than 5 Years		0.6800	0.0225
5-15 Years	0.6800		0.0202
More than 15 Years	0.0225	0.0202	

Statistically significant differences were found across the number of years as an RN in all three subscales. The differences in means from the compassion satisfaction subscale was significant at 0.036. A pairwise comparison revealed a statistically significant difference in the mean compassion satisfaction scores of nurses who have been an RN for less than five years and those who have been an RN for 5-15 years (p=0.0137). The means and comparison of p-values are shown in Table 14 and Table 15.

Table 14

Comparison of Compassion Satisfaction Across Years as RN

Years as RN	*n*	Mean Score	Standard Deviation
Less than 5 years	28	39.00	3.59
5-15 years	19	36.16	3.29
More than 15 years	11	38.82	4.83

Table 15

Pairwise Comparison of Compassion Satisfaction P-Values (Years as RN)

	Less than 5 Years	5-15 Years	More than 15 Years
Less than 5 Years		0.0137	0.8923
5-15 Years	0.0137		0.0669
More than 15 Years	0.8923	0.0669	

The difference in means from the burnout subscale across the number of years as an RN was statistically significant at 0.0332. Nurses who have been an RN for 5-15 years and those who have been an RN for more than 15 years reported statistically significant different levels of burnout (p=0.0100). The means and comparison of p-values can be seen in Table 16 and Table 17.

Table 16

Comparison of Burnout Across Years as RN

Years as RN	*n*	Mean Score	Standard Deviation
Less than 5 years	28	24.57	4.57
5-15 years	19	26.58	4.27
More than 15 years	11	22.18	3.82

Table 17

Pairwise Comparison of Burnout P-Values (Years as RN)

	Less than 5 Years	5-15 Years	More than 15 Years
Less than 5 Years		0.1260	0.1281
5-15 Years	0.1260		0.0100
More than 15 Years	0.1281	0.0100	

Lastly, although there was not a statistically significant difference recognized by ANOVA for the secondary traumatic stress subscale across years as an RN (p=0.0659), the post-hoc test recognized a statistically significant difference between nurses who have been an RN for less than five years and those who have been a nurse for more than 15 years (p=0.0300). The post-hoc test also recognized a statistically significant difference between nurses who have been an RN for 5-15 years and those who have been an RN for more than 15 years (p=0.0365). The means and comparison of p-values can be seen in Table 18 and Table 19.\

Table 18

Comparison of Secondary Traumatic Stress Across Years as RN

Years as RN	*n*	Mean Score	Standard Deviation
Less than 5 years	28	22.96	4.82
5-15 years	19	23.05	4.96
More than 15 years	11	19.36	2.54

Table 19

Pairwise Comparison of Secondary Traumatic Stress P-Values (Years as RN)

	Less than 5 Years	5-15 Years	More than 15 Years
Less than 5 Years		0.9481	0.0300
5-15 Years	0.9481		0.0365
More than 15 Years	0.0300	0.0365	

No statistically significant difference was found among the means of the three subscales across type of shift worked. No statistically significant difference was found among the means of the compassion satisfaction and burnout subscales across the number of years worked in critical care. An ANOVA test did not find a difference in the means of the secondary traumatic stress subscale across the number of years in critical care, however a pairwise comparison found a statistically significant difference between the secondary traumatic stress means of nurses who had worked in critical care for less than five years and those who had worked in critical care for more than 15 years ($p=0.0297$). The differences in means of the secondary traumatic stress

subscale across the number of years worked in critical care can be seen in Table 20. Pairwise comparisons are shown in Table 21.

Table 20

Comparison of Secondary Traumatic Stress Across Years in Critical Care

Years in ICU	*n*	Mean Score	Standard Deviation
Less than 5 years	35	22.91	4.74
5-15 years	14	22.86	4.97
More than 15 years	9	19.11	2.67

Table 21

Pairwise Comparison of Secondary Traumatic Stress P-Values (Years in Critical Care)

	Less than 5 Years	5-15 Years	More than 15 Years
Less than 5 Years		0.9685	0.0297
5-15 Years	0.9685		0.0597
More than 15 Years	0.0297	0.0597	

Educational Module

Demographic Information

A total of 35 RNs participated in the online educational module on compassion fatigue. Twenty-seven participants completed the five question pre-test, and 23 participants completed the five question post-test. No demographic information was collected for module participation.

Educational Module Results

In order to determine if the educational module was an effective learning tool, participants were asked to complete a pre-test, post-test, and survey.

The mean score of the pre-test was 3.42 (SD=1.75). The mean score of the post-test was 3.36 (SD=2.29). Twenty-two participants completed the survey after the module which included five questions related to the participants' feelings toward the module. Ninety-five percent of survey participants agreed or strongly agreed that the module was beneficial and that they would use the knowledge obtained from the module in their nursing practice. One hundred percent of survey participants agreed or strongly agreed that they understood the available resources, risk factors for compassion fatigue, and interventions to prevent compassion fatigue after viewing the educational module.

Seven participants completed the text response questions at the end of the module. When asked what they found beneficial about the module, the answers were positive. Responses stated there was good information about what compassion fatigue was, the resources available, and the importance of self-care. When asked what newly acquired knowledge the participants planned to incorporate into their current practice, the answers included an awareness of compassion fatigue in themselves and others. All participants responded "yes" when asked if the module design was conducive to learning. All participants also responded "yes" when asked if they found the content in the module interesting or relevant to their lives.

CHAPTER FIVE. DISCUSSION AND CONCLUSION

The purposes of the study were to determine the prevalence of compassion fatigue in critical care nurses, determine demographic variables which were associated with an increased level of compassion fatigue, and to design and evaluate an educational module on the topic. Chapter Five will discuss the researcher's interpretation of the results and limitations of the study. A focus was to look at prevalence of the phenomenon of compassion fatigue within the population of critical care nurses. Implications for nursing and recommendations for further research are also presented.

Interpretation of Results

Compassion Fatigue Survey

Critical care nurses are frequently exposed to traumatic events and care for patients with a high level of acuity. The research aimed to study the prevalence of compassion fatigue among critical care nurses. The overall means of burnout (M=24.78, SD=4.54) and secondary traumatic stress (M=22.31, SD=4.69) subscales, the two components of compassion fatigue, were considered "low" according to Stamm's (2010) scoring interpretation (Appendix I). The overall compassion satisfaction mean score was low as well. Although the study participants did not report a high level of compassion fatigue at the time of the study, a low compassion satisfaction score could indicate the participants find problems with their job or they might derive satisfaction in life from activities other than their job (Stamm, 2010).

The two components of compassion fatigue measure separate negative phenomena. The overall low burnout score is interpreted by the researcher as meaning the participants were not experiencing dissatisfaction with their work environment at the time of the survey. Long hours,

high patient acuity, and an unsupportive work environment are possible contributors to burnout (Sabo, 2011).

The overall low secondary traumatic stress score may be due to its abrupt nature. Secondary traumatic stress is the component of compassion fatigue which involves the fear and preoccupation with thoughts about patients the participants have helped. The ProQOL 5 tool only measures the level of secondary traumatic stress at one point in time. If the participants completed the survey a day, week, or month later, the results would likely be different. Thus, the overall secondary traumatic stress score may not speak to the continual, long-term emotional health of the participants, but rather the immediate feelings being experienced at the time of the survey.

The overall low compassion satisfaction score was an interesting finding. Just because a sample population reports low compassion fatigue does not necessarily mean they have compassion satisfaction. In other words, the participants may not be experiencing the negative feelings associated with burnout and secondary traumatic stress. However, they also may not feel satisfied with the helping work they do. Compassion satisfaction is the antithesis of compassion fatigue and is important to be recognized. Compassion satisfaction is thought to be protective against compassion fatigue and restorative in nature (Coetzee & Klopper, 2010; Thieleman & Cacciatore, 2014).

The researcher also aimed to understand which demographic characteristics would be associated with an increased level of compassion fatigue. The demographic results showed that there was a lack of diversity among the participants. Most of the participants were white, female, and between 18 and 35 years old. The race and gender results are congruent with the Health Resources and Services Administration (HRSA)'s (2013) report on the U.S. nursing workforce.

HRSA (2013) found that 67 percent of the nursing workforce is white. This is compared with 97 percent in the current study. Males made up nine percent of the total RN workforce according to HRSA (2013). Males accounted for 19% of the current study's participants. Twenty-six percent of the RN workforce in the nation is between 18 and 35 years old according to HRSA (2013). The current study is exactly opposite of that, with 76% of participants being between 18 and 35 years old and 26% being 36 years old and up.

Also, the majority of participants had been RNs for less than five years. No participants reported working only eight-hour shifts. No part-time RNs, those who worked less than 24 hours each week, responded to the survey. These demographic results are of importance to note because the length of shifts was found to be a contributing factor to compassion fatigue by Yoder (2010). Nurses who worked eight-hour shifts had higher levels of compassion fatigue than nurses who worked twelve-hour shifts. Nurses who work eight-hour shifts typically work more days of the week than nurses who work twelve-hour shifts. Nurses are usually assigned a new patient each day he or she works. A nurse who works eight-hour shifts would care for more patients over time than a nurse working twelve-hour shifts. The increased number of patients could potentially increase the chances that the nurse would be subjected to death, dying, and the traumatic events of his or her patients. More exposure to these events could lead to an increased risk of developing compassion fatigue. Another possibility is that nurses who work eight-hour shifts do not have the time to properly debrief after traumatic events or patient deaths.

Young, less experienced nurses reported significantly higher levels of burnout and secondary traumatic stress than older nurses who had more experience. This finding is congruent with Burtson's and Stichler's (2010) study on nursing work environments which found that compassion fatigue is likely to affect younger, less experienced nurses. The difference in the

overall burnout scores between the 18-35 year old age group and 36 years and up was significant at 0.0142. The difference in overall secondary traumatic stress scores between the two age groups was significant at 0.0081. The difference is potentially due to the less experienced nurses' lack of coping skills. Experienced nurses have dealt with more traumatic events, patient deaths, and grieving families in their careers. It is possible that the experienced nurses had developed methods of coping which have shielded them from compassion fatigue. Newer, less experienced nurses may be witnessing death and grieving for the first time in their careers, possibly their lives. Each person has a unique perspective on death and dying, and some may be more prone than others to be significantly affected by it.

The group with the highest overall burnout and secondary traumatic stress scores were participants with 5-15 years of experience (M=26.58, SD=4.27; M=23.05, SD=4.96, respectively). The difference in burnout scores was statistically significant (p=0.0100) between participants with 5-15 years of RN experience and those with more than 15 years of RN experience. A post-hoc test determined a statistically significant difference between the secondary traumatic stress scores of participants with 5-15 years of RN experience and those with more than 15 years of RN experience (p=0.0365). These findings are congruent with Potter et al.'s (2010) study which found nurses with 11-20 years of experience had the highest compassion fatigue scores.

Since the large majority of study participants were in the young, less experienced category, the need for enhanced awareness and prevention of compassion fatigue is important in order to protect the holistic health of the nursing workforce and improve nurse retention. Recognizing nurses' experience level could be important in targeting interventions to prevent burnout and compassion fatigue. Assessing the unique learning needs and emotional needs of

nurses would be beneficial. Education on recognition of symptoms, coping methods, and resources for help is crucial to prevention and timely intervention.

Educational Module

The educational module was evaluated for effectiveness by analyzing the pre- and post-test results as well as the participants' survey responses. Overall, the researcher believes the educational module was an effective learning tool. The pre-test scores and post-test scores were nearly the same, with the post-test scores being slightly lower. The mean pre-test score was 3.42 (SD= 1.75), and the mean post-test score was 3.36 (SD=2.29). Poorly phrased questions could have been a possible contributor to the difference in mean scores. Another possible cause could have been the participants' lack of available time to complete the module. The participants may have felt rushed to complete the module near the end. The similar pre-test and post-test scores may indicate the participants had a good baseline knowledge of compassion fatigue prior to viewing the module's content.

Only two of the five questions were answered incorrectly by two participants in the post-test. The first question asked the participant to choose the answer which best described the difference between burnout and compassion fatigue. Content in the module covered the differences between the two terms. The close, sometimes overlapping, nature of the two negative phenomena may have been confusing to participants. The second incorrectly answered question in the post-test asked participants to identify which of the options was not a risk factor for compassion fatigue. Incorrect participants answered "high empathy," while the correct answer was "desire to work with end-of-life patients and their families." Content in the module discussed risk factors for compassion fatigue. The researcher believes participants may have been confused by the wording of the question since it included the negative term "not."

The pre-test and post-test could be enhanced by providing a different set of pre-test and post-test questions to nurses on orientation and experienced nurses. The questions and module content could be tailored to best suit the learning needs of the participants. Newer, less experienced nurses may benefit from a more comprehensive approach. Experienced nurses' motivation to learn may be more internal, and they may be more problem-centered rather than content-centered (Billings & Halstad, 2012). Creating content and questions which are focused and meaningful would be important. Use of case studies may be especially beneficial for nurses with all experience levels.

The participants' text responses provided positive feedback about the module's design and importance of the content provided. Participants reported an enhanced awareness of compassion fatigue after completing the module. This feedback aided the researcher in concluding that an educational module on compassion fatigue was a beneficial, effective tool to implement with critical care nurses. The importance of such a module is supported by the literature which states that self-awareness and awareness of the demands presented by providing end-of-life care can lead to less burnout and compassion fatigue and an increased professional quality of life (Aycock & Boyle, 2009; Boyle, 2011; Kravits, McAllister-Black, Grant, & Kirk, 2010; Lombardo & Eyre, 2011; McElligott, Romano et al., 2013Siemers, Thomas, & Kohn, 2009).

The theoretical framework for the study was provided by Carper's (1978) Fundamental Patterns of Knowing in Nursing and the Theory of Integral Nursing by Dr. Barbara Dossey (2008). Both components of the theoretical framework were useful in interpreting the results from the study. Carper (1978) described personal knowledge as the most problematic pattern of knowing because it is "the most difficult to master and teach" (p.22). The young, less

experienced nurses in the study may have had a lack of personal knowledge. This may have affected the interpersonal process between nurses and patients as well as nurses' self-awareness. Personal knowledge promotes achievement of engagement with another person. As a nurse's emotional "thermometer" begins to drop and he or she begins experiencing compassion fatigue, his or her ability to attain personal knowing may be decreased.

Empathy is an important component of the esthetic pattern of knowing, often described as the art of nursing. Through nurse-patient interactions, nurses gain knowledge of patients' unique felt experiences. According to Carper (1978), "the more skilled the nurse becomes in perceiving and empathizing with the lives of others, the more knowledge or understanding will be gained of alternate modes of perceiving reality" (p. 22). The nurse then has more "tools" in his or her toolbox to design and provide comprehensive and meaningful nursing care. Perhaps the older, more experienced nurses in the study were able to use their experience and knowledge to develop protective mechanisms against compassion fatigue.

The ethical way of knowing involves navigating moral dilemmas and ascertaining right from wrong (Carper, 1978). In the complex environment of critical care, nurses are frequently faced with moral dilemmas. Often times, the morally challenging situations involve end-of-life care. Ethical knowing focuses on what ought to be done and relies on knowledge of morality (Carper, 1978). The older, more experienced nurses in the study may have had more ethical knowledge and understanding of morality than the younger, less experienced nurses. Enhanced understanding of morality could result in enhanced satisfaction and comfort with providing end-of-life care which could lead to less compassion fatigue. The younger, less experienced nurses in the study may have reported higher levels of compassion fatigue than the older, more experienced nurses because they had not experienced as many moral dilemmas in their careers.

Carper (1978) states that although it is essential to understand ethical norms, knowledge of ethical codes alone will not answer moral questions or eliminate the need to make moral choices. The knowledge must be uniquely adapted and applied to each individual situation. Older, more experienced nurses should be deliberate about explaining the norms which guide their moral decision making. Experienced nurses are in an important position in which they are able to educate and inspire less experienced nurses to become competent moral decision makers with an understanding of the ethical component of nursing practice.

Dossey's (2008) Theory of Integral Nursing focuses on connectedness of mind, body, and spirit as well as holistic comprehensiveness in nursing care. Dossey (2008) urges nurses to develop an integral worldview which incorporates a significant level of self-awareness. An integral worldview examines beliefs, values, meaning, and purpose related to how people perceive reality. An integral worldview can help nurses understand the complexities within healing and "enhances nurses' capacities for empowerment, leadership, and being change agents for a healthy workplace and healthy world" (p. E56). The more experienced nurses in the study may have reported lower levels of compassion fatigue because they had adopted an integral worldview. By seeing their work through an integral lens, they may have experienced potentially negative or traumatic factors differently than those who had not yet developed an integral worldview. The need for enhanced self-awareness and integral self-care among nurses is supported by the Theory of Integral Nursing and provided the foundation to the development of the educational module.

Limitations

Compassion Fatigue Survey

A number of limitations were identified in the study. The response rate for the compassion fatigue survey was only 39 percent. The larger majority of the population did not participate in the study. Also, the lack of diversity in the sample limits the ability to generalize the results. Most of the participants were young (18-35 years old), white, and female. Another limitation is that the ProQOL5 tool measures the level of compassion fatigue and compassion satisfaction at only one point in time. Due to the nature of compassion fatigue having an abrupt onset, the results would likely be different if the survey was taken on a different day. Finally, the study was conducted on only two units at one hospital.

Educational Module

Limitations were noted with the educational module portion of the study as well. A low percentage of those invited actually participated in the module, and an even lower percentage completed both the pre-test and post-test. The analysis of pre- and post-test scores may not provide an accurate reflection of the module's effectiveness due to the low response rate. Also, the module was not implemented as an intervention in the current study. In other words, the prevalence of compassion fatigue was not studied before and after the module was implemented. In order to assess the module's effectiveness in preventing compassion fatigue, a longitudinal design would be needed to study the participants over a longer period of time.

Implications

The most important contribution of this study to the field of nursing is to enhance awareness of the negative phenomenon of compassion fatigue and the detrimental effects it can have on nurses, especially critical care nurses. The current study found that younger, less

experienced nurses had higher levels of burnout and secondary traumatic stress. Nurse educators and nurse managers are in a unique position to help prevent compassion fatigue and enhance self-awareness in this at-risk population of nurses. As the nursing workforce continues to age, young nurses need to develop the skills to holistically care for themselves. The nursing shortage is expected to grow due to an aging nursing workforce, increasing numbers of "baby boomers" becoming eligible for Medicare, and expanded insurance coverage under the Affordable Care Act (HRSA, 2014). The time is now to ensure young nurses stay in their chosen career.

The researcher encourages nurse educators to incorporate content on self-awareness, burnout, and compassion fatigue into curricula to arm new nurses with the tools needed to holistically care for themselves when they enter the workforce. Nurse managers are encouraged to create an environment which encourages self-care and renewal practices to combat compassion fatigue (Aycock & Boyle, 2009; Romano et al., 2013). Self-care is a crucial skill for new nurses to develop in order to provide holistic nursing care (Aycock & Boyle, 2009; Boyle, 2011; Kravits, McAllister-Black, Grant, & Kirk, 2010; Lombardo & Eyre, 2011; McElligott, Siemers, Thomas, & Kohn, 2009). Teaching students and new nurses to care for themselves and to recognize these feelings in themselves and others, nurse leaders can encourage healthy behaviors which will empower nurses to embrace healing and holistic health.

Current nurses, no matter their level of experience, should also be aware of compassion fatigue. Having an awareness of what the symptoms are and how to treat it can help protect the health of the nursing workforce. If more experienced nurses are aware of the problem, they can become ambassadors for awareness and role models of protective behaviors. Young nurses look up to and often times seek advice from experienced nurses. The researcher encourages current nurses to develop an awareness of compassion fatigue and strategies to protect their holistic

health. A healthy nurse can have a positive impact on the patient care he or she provides as well as on less experienced nurses who are modeling his or her behavior.

Recommendations for Further Research

The small sample size and limited diversity of the sample population was a limitation to the current study. Surveying a larger number of critical care nurses from a variety of healthcare institutions could provide more generalizable information about the prevalence of compassion fatigue among critical care nurses. Also, since the ProQOL5 survey tool is designed to capture the level of compassion fatigue at one point in time, a qualitative approach in the form of focus groups could be highly beneficial in understanding nurses' perspectives of compassion fatigue and may also open the window to discover the true prevalence of compassion fatigue even if the participant is not cognizant of experiencing it. Quality data and insight could be gained through this approach which could be compared to other qualitative studies on compassion fatigue (Maytum et al., 2004; Melvin, 2012).

A large scale study of compassion fatigue among nurses working in various units at a number of hospitals could provide rich, valuable data. Comparing various nursing units could possibly help researchers better understand causative factors. Also, if certain nursing units consistently score low on compassion fatigue, researchers could investigate if there are protective measures being taken on the units to promote nurses' health.

Another interesting potential research study could examine the relationship between compassion fatigue levels and percentage of dying patients cared for by nurses. Surveying nurses at regular intervals to determine their level of compassion fatigue while taking into account recent patient deaths could provide valuable insight. A longitudinal, qualitative approach may be

beneficial in order for the researcher to more fully comprehend the situational factors experienced by the nurses.

In order to truly understand the impact of implementing an educational module on compassion fatigue, the researcher recommends implementing a longitudinal study which would study nurses' level of compassion fatigue at various points in time including prior to module implementation and at several points after module implementation. A longitudinal approach would provide valuable data on the prevalence of compassion fatigue in critical care nurses and the benefit of implementing an educational module on the topic. The data collected could assist researchers in refining a module to best meet the needs of the nurses. By studying participants' experiences with compassion fatigue, the researcher could refine the module to best meet the needs of the recipients. Various modules could be implemented in different areas of nursing in order to best meet the learning needs of the nurses.

Conclusion

Nursing is a unique profession in which nurses provide holistic care to patients through skilled interventions and compassionate nurturing. Critical care nurses often care for patients and families during times of crisis and grief, and often times use "self" as a therapeutic tool to aid in healing. The consistent empathy and "feeling" of another person's distress, pain, and sorrow can lead to compassion fatigue. The negative phenomenon of compassion fatigue affects those in caregiving roles, and can have negative physical, emotional, and psychological effects. It is crucial to enhance awareness of compassion fatigue and work on prevention as well as interventions. The time is now to protect the holistic health of the nursing workforce to ensure quality patient care and improved nurse retention.

In conclusion, the current study looked at the prevalence of compassion fatigue among critical care nurses from two critical care units at a hospital in the upper Midwest. Overall, the level of compassion fatigue was low, but the level of compassion satisfaction was also low. Young, less experienced nurses reported a significantly higher level of compassion fatigue than older, more experienced nurses. An educational module on the topic of compassion fatigue was designed, implemented, and evaluated by participants. While the module did not show improved scores in the post-test as compared to the pre-test, nurses reported the module was a useful and effective learning tool to enhance awareness of compassion fatigue.

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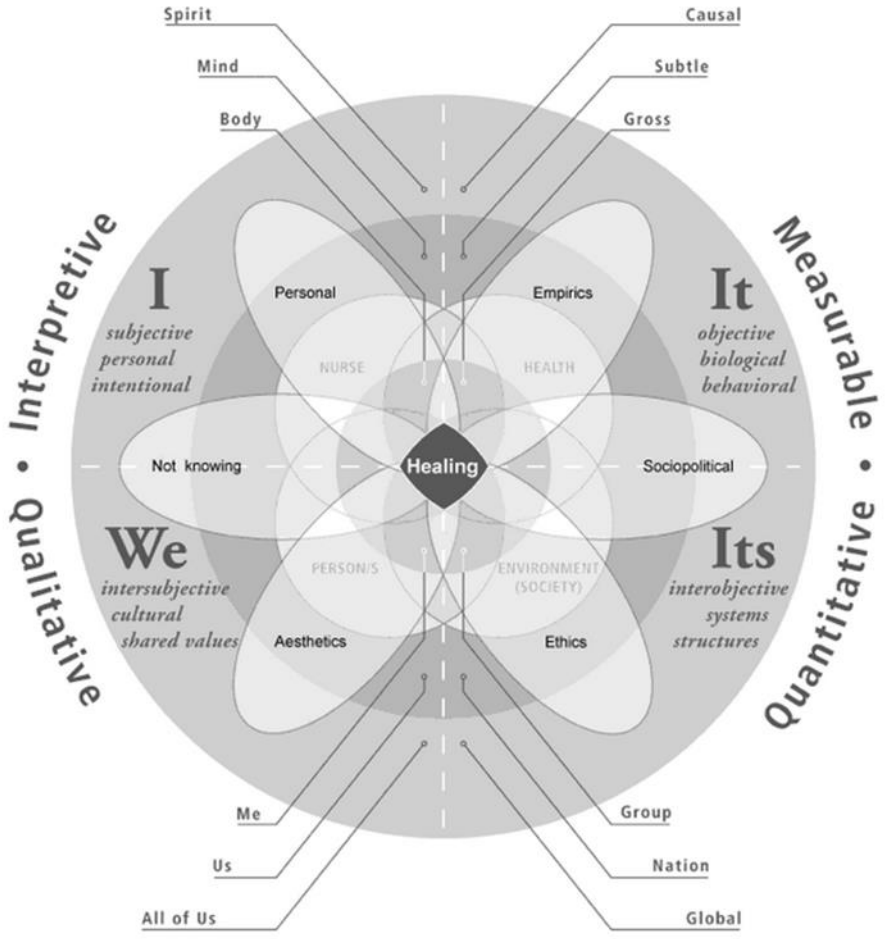
APPENDIX A. BARBARA DOSSEY'S THEORY OF INTEGRAL NURSING MODEL



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APPENDIX B. THEORY OF INTEGRAL NURSING HANDOUT

Theory of Integral Nursing

Barbara Dossey, PhD, RN, AHN-BC, FAAN © 2007

Figure 1.1a. Healing

Figure 1.1b. Healing and Meta-Paradigm of Nursing
(Nurse, Person/s, Health, Environment)

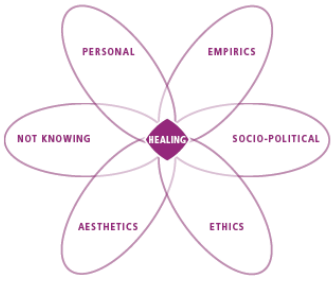


Figure 1.1c. Healing and Patterns of Knowing in Nursing
(Personal, Aesthetics, Empirics, Ethics, Not Knowing, Socio-Political)
Adapted from B. Carper (1978)

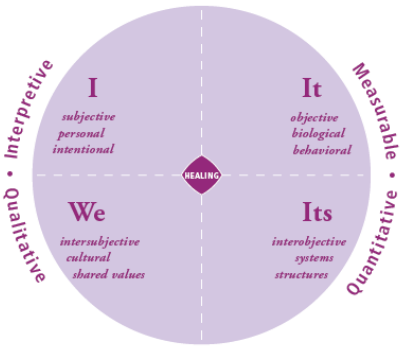


Figure 1.1d. Healing and Four Quandrants
(I, We, It, Its)
Adapted from K. Wilber (2000)

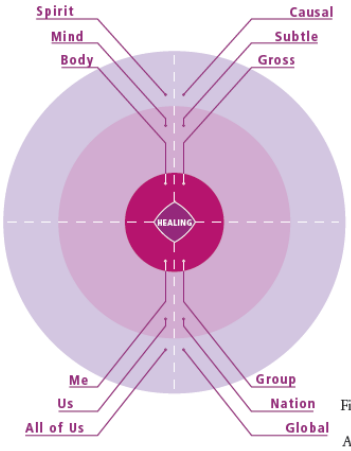
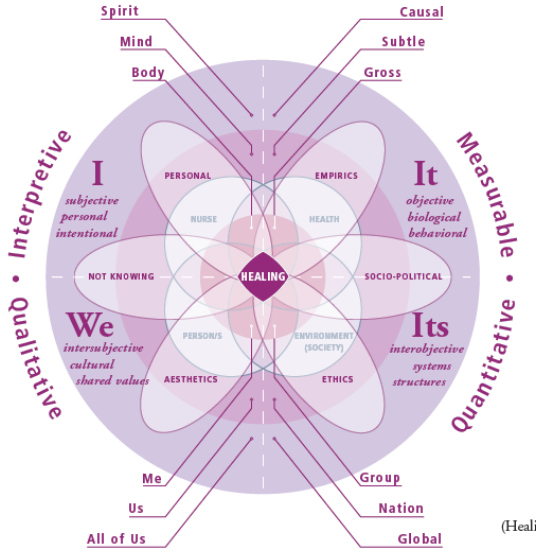


Figure 1.1e. Healing and AQAL
(All Quadrants, All Levels)
Adapted from K. Wilber (2000)



B. M. Dossey (2008).
Integral and Holistic Nursing: Local to Global.
In B. M. Dossey & L. Keegan.
Holistic Nursing: A Handbook for Practice (5th ed.)
Sudbury, MA: Jones & Bartlett

Figure 1.1f. Theory of Integral Nursing
(Healing, Meta-Paradigm, Patterns of Knowing
in Nursing, Four Quadrants and AQAL)

APPENDIX C. EMAIL COMMUNICATION FROM DR. BARBARA DOSSEY

Gmail by Google

Keshia Kotula <keshia.kotula@gmail.com>

Theory of Integral Nursing

Barbara Dossey <barbara@dosseydossey.com> Mon, Nov 5, 2012 at 6:06 PM
To: Keshia Kotula <keshia.kotula@gmail.com>

Dear Keshia,

Thanks for you exciting words about my Theory of Integral Nursing. I am thrilled that you are using it in your graduate work.Your topic on Compassion Fatigue is so important!

I love the AACN Healthy Work Environment Standards that can be used as well in your work.
http://www.aacn.org/WD/HWE/Docs/HWEStandards.pdf

See my website http://www.dosseydossey.com/barbara/tin.html
for the TIN one-page handout and a PPTX, and a book chapter in Holistic Nursing: A Handbook for Practice 6th ed.

Yes I started critical care in 1965 and that was my focus for 25 years. I published books in critical care and cardiovascular nursing from 1982-1997. This is still my lens along with health and wellness. Visit www.inursecoach.com as well.

Please stay in touch with me as you move forward and let me know if I can assist you in any way.

Best,

Barbie

"Health is not only to be well, but to use well every power we have." Florence Nightingale, 1893

Barbara Dossey, PhD, RN, AHN-BC, FAAN
E-Mail: barbara@dosseydossey.com
www.dosseydossey.com

Co-Director, International Nurse Coach Association
Huntington, New York
www.inursecoach.com

International Co-Director, Nightingale Initiative for Global Health
Ottawa, Ontario, Canada and Washington, DC
www.nightingaledeclaration.net

APPENDIX D. DEMOGRAPHIC PROFILE

1. What is your gender?
    a. Male
    b. Female

2. What is your race?
    a. White
    b. Non-White

3. What is your age group?
    a. 18-35 years old
    b. 36 years old and up

4. What is your personal income group?
    a. Up to $45,000/year
    b. $46,000-$75,000/year
    c. More than $75,000/year

5. How many years have you worked at Sanford Health?
    a. Less than 5 years
    b. 5-15 years
    c. More than 15 years

6. How many years have you worked as an RN?
    a. Less than 5 years
    b. 5-15 years
    c. More than 15 years

7. How many years have you worked as an RN in critical care?
    a. Less than 5 years
    b. 5-15 years
    c. More than 15 years

8. What is the typical length of the shifts you work?
    a. 8 hours
    b. 12 hours
    c. Combination

9. What is the typical type of shift you work?
    a. Day
    b. Evening
    c. Night
    d. Combination

10. How many hours do you typically work each week?
    a. Less than 24 hours
    b. 24-36 hours
    c. More than 36 hours

APPENDIX E. PROFESSIONAL QUALITY OF LIFE SCALE, VERSION FIVE

PROFESSIONAL QUALITY OF LIFE SCALE (PROQOL)

COMPASSION SATISFACTION AND COMPASSION FATIGUE

(PROQOL) VERSION 5 (2009)

When you *[help]* people you have direct contact with their lives. As you may have found, your compassion for those you *[help]* can affect you in positive and negative ways. Below are some-questions about your experiences, both positive and negative, as a *[helper]*. Consider each of the following questions about you and your current work situation. Select the number that honestly reflects how frequently you experienced these things in the *last 30 days*.

1=Never	2=Rarely	3=Sometimes	4=Often	5=Very Often

_____ 1. I am happy.
_____ 2. I am preoccupied with more than one person I *[help]*.
_____ 3. I get satisfaction from being able to *[help]* people.
_____ 4. I feel connected to others.
_____ 5. I jump or am startled by unexpected sounds.
_____ 6. I feel invigorated after working with those I *[help]*.
_____ 7. I find it difficult to separate my personal life from my life as a *[helper]*.
_____ 8. I am not as productive at work because I am losing sleep over traumatic experiences of a person I *[help]*.
_____ 9. I think that I might have been affected by the traumatic stress of those I *[help]*.
_____ 10. I feel trapped by my job as a *[helper]*.
_____ 11. Because of my *[helping]*, I have felt "on edge" about various things.
_____ 12. I like my work as a *[helper]*.
_____ 13. I feel depressed because of the traumatic experiences of the people I *[help]*.
_____ 14. I feel as though I am experiencing the trauma of someone I have *[helped]*.
_____ 15. I have beliefs that sustain me.
_____ 16. I am pleased with how I am able to keep up with *[helping]* techniques and protocols.
_____ 17. I am the person I always wanted to be.
_____ 18. My work makes me feel satisfied.
_____ 19. I feel worn out because of my work as a *[helper]*.
_____ 20. I have happy thoughts and feelings about those I *[help]* and how I could help them.
_____ 21. I feel overwhelmed because my case [work] load seems endless.
_____ 22. I believe I can make a difference through my work.
_____ 23. I avoid certain activities or situations because they remind me of frightening experiences of the people I *[help]*.
_____ 24. I am proud of what I can do to *[help]*.
_____ 25. As a result of my *[helping]*, I have intrusive, frightening thoughts.
_____ 26. I feel "bogged down" by the system.
_____ 27. I have thoughts that I am a "success" as a *[helper]*.
_____ 28. I can't recall important parts of my work with trauma victims.
_____ 29. I am a very caring person.
_____ 30. I am happy that I chose to do this work.

APPENDIX F. COMPASSION FATIGUE EDUCATIONAL MODULE

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STUDENT FOCUSED • LAND GRANT • RESEARCH UNIVERSITY

Pre-Test – Question 1

1. What is the definition of compassion fatigue?
   a) A negative phenomenon with rapid onset affecting those in caregiving professions, especially nurses who have repeated, continuous, intense exposure to the stress created by caring for very ill patients near end of life, patients who have died, and the traumatic events patients have experienced
   b) The positive feeling a person experiences when doing caring work in a helping profession and is characterized by a feeling of pleasure from being able to do his or her work well.
   c) A state of accumulated, prolonged environmental stress which occurs gradually and is characterized by an inability to cope with one's environment, especially the work environment.
   d) Emotional distress a person experiences when he or she hears about the traumatic experiences of others. Although the person has not personally experienced the trauma, he or she feels the emotional pain as if he or she had.

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Compassion Fatigue Educational Module

Keshia Kotula BSN, RN
M.S. Nurse Educator Student
North Dakota State University

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Pre-Test- Question 2

2. Which of the following does NOT represent a way to prevent compassion fatigue?
   a) Nurses' self care
   b) Debriefing sessions
   c) Education on compassion fatigue
   d) Encouraging staff to not discuss traumatic patient events while at work

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Compassion Fatigue in Critical Care Nursing and the Development of an Educational Module

Dear 2E or 3E RN:

My name is Keshia Kotula. I am a graduate student in department of nursing at North Dakota State University, and I have developed an educational module on the topic of compassion fatigue in critical care nursing. It is our hope, that with this project, you will gain enhanced knowledge on this topic. It is our hope that we will be able to evaluate the effectiveness of the module by receiving your feedback.

Because you are an RN working on 2E or 3E, you are invited to take part in the online educational module. Your participation is entirely your choice, and you may change your mind or quit participating at any time, with no penalty to you.

It is not possible to identify all potential risks in research procedures, but we have taken reasonable safeguards to minimize any known risks. There is a small chance you will experience mild psychological distress by thinking about or reliving unpleasant experiences related to end of life care of patients and their families. Significant distress or discomfort is unlikely.

By taking part in this research, you may benefit by increasing your level of knowledge on the topic of compassion fatigue in critical care nursing. However, you may not get any benefit from being in this study. Benefits to others are likely to include information regarding the effectiveness of the educational module.

It should take about 10-15 minutes to complete the educational module.

Please complete the module by October 1st.

Your participation in the module is anonymous. That means that no one, not even members of the research team, will know that the information you give comes from you.

If you have any questions about this project, please contact me at (218)966-0163 or Keshia.Kotula@ndsu.edu, or contact my advisor at Dr. Norma Kiser-Larson, (701)231-7775, Norma.Kiser-Larson@ndsu.edu

You have rights as a research participant. If you have questions about your rights or complaints about this research, you may talk to the researcher or contact the NDSU Human Research Protection Program at 701-231-8908, toll-free at 1-855-800-6717, by email at ndsu.irb@ndsu.edu, or by mail at NDSU IRPP Office, NDSU Dept. 4000, P.O. Box 6050, Fargo, ND 58108-6050.

Thank you for your taking part in this research.

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Pre-Test – Question 3

3. Which statement best represents the difference between burnout and compassion fatigue?
   a) Compassion fatigue can occur in any profession, but burnout is specific to those in caregiving professions
   b) Compassion fatigue is related to our connection with others and bearing witness to their suffering, whereas burnout is more generalized dissatisfaction with one's work
   c) Burnout arises and subsides abruptly, and compassion fatigue arises and subsides gradually
   d) Compassion fatigue is a response to the work environment, and burnout is the consequence of caring for suffering people

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Pre-Test – Question 4

4. Which of the following is NOT a risk factor for compassion fatigue?

a) High level of empathy

b) Becoming overly involved in patient cases

c) Repeated care of suffering persons

d) Desire to work with end-of-life patients and their families

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What is compassion fatigue?

- A negative phenomenon with rapid onset affecting those in care giving professions, especially nurses who have repeated, continuous, intense exposure to the stress created by caring for very ill patients near end of life, patients who have died, and the traumatic events patients have experienced

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Pre-Test – Question 5

5. Which of the following is a potential resource for help for you or a coworker who may be experiencing compassion fatigue?

a) Chaplaincy

b) Unit Manager

c) Employee Assistance Program

d) Your peers/coworkers

e) All of the above

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Visualizing Compassion Fatigue

Compassion fatigue can be thought of by visualizing a thermometer. As a person's level of compassion fatigue increases, their ability to empathize with others decreases. The decreasing ability to empathize can be visualized as the temperature on a thermometer dropping. The temperature (ability to empathize) continues to drop lower and lower as compassion fatigue rises eventually leading to a "frozen heart".

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Learning Outcomes

After completing this module, you will be able to:

1. Define compassion fatigue
2. Explain the characteristics of burnout and compassion fatigue and the differences between the two
3. Recognize contributing factors and symptoms of compassion fatigue
4. Identify actions to take if compassion fatigue is suspected in yourself or others
5. Describe resources available for nurses experiencing compassion fatigue
6. Explain various methods of self-care to help prevent compassion fatigue

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How does compassion fatigue differ from burnout?

Burnout	Compassion Fatigue
• Arises and subsides gradually	• Arises and subsides abruptly
• Can occur in any profession	• Specific to helping, caregiving professions
• Related to environmental factors (long hours, inadequate staffing, no breaks, poor pay)	• Related to the repeated exposure to traumatic events (caring for patients and their families near end of life)
• Accumulation of prolonged, multifactorial stressors in life	• Result of caring for suffering people
• Response to stressful work environment	• Response to the repeated witnessing of traumatic events, end of life patients, and grieving family members
• Generalized dissatisfaction with one's work	• Loss of ability to nurture and holistically care for patients

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What contributes to the development of compassion fatigue?

- High levels of empathy (feeling of another's emotions)
- Repeated exposure to the traumatic events of patients and families
- Repeated care of suffering/grieving patients and their families
- Inadequate emotional support in the workplace
- Becoming overly involved in patient cases

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What should I do if I notice these symptoms in myself or a coworker?

- Early recognition and treatment is important!
- Tell someone (charge nurse, coworker, nurse manager
- Take care of yourself physically, mentally, emotionally, and spiritually
- Seek help

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What are the symptoms of compassion fatigue?

- Physical
  - Exhaustion, frequent headaches and stomachaches, sleep disturbances
- Mental, Emotional, Psychological
  - Depression, anger, anxiety, irritability, oversensitivity
- Lack of ability to care
  - Apathy, indifference, avoidance of end-of-life patients, unresponsiveness, callousness

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Case Study

Nurse Jill is caring for A.B., a post-cardiac arrest patient, in the cardiac ICU. Today is her third 12-hour shift caring for him and his family. Jill has developed a strong rapport with the family and thinks about them even after she leaves work.

A.B.'s health begins to rapidly deteriorate at around 1500, and a Code Blue is called. Resuscitation efforts are unsuccessful, and A.B. is pronounced dead at 1530.

Jill provides extensive support to the family and completes post-mortem cares. She is deeply saddened by A.B.'s passing and feels mentally, physically, and emotionally exhausted.

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Why are nurses, especially critical care nurses, at risk?

- High patient acuity
- Frequently faced with ethical and moral issues
- Frequent end of life care
- Repeated exposure to death, traumatic events, and grieving families

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Case Study (cont.)

Immediately upon returning to the unit from the morgue, the charge nurse informs Jill that there is a rapid response patient requiring BiPap and vasopressors who will be arriving in 10 minutes. Jill will be the patient's nurse.

The remainder of Jill's shift is spent attempting to stabilize the rapid response patient whose family is distraught. Her shift ends at 1930, and she leaves at 2100 once her charting is completed.

When Jill gets to her car, she decides she does not want to care for end-of-life patients ever again. She resents the idea of having to return to work.

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Case Study (cont.)

During Jill's next shift, she requests an assignment change when she learns her patient will be switched to comfort cares. Her coworkers notice that Jill is irritable and seems to "not care." They are concerned for her because she is typically very empathetic and caring with her patients.

*What do you think is going on with Jill?

*As her coworker, what could you do to help?

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Where can I go for help?

- Unit Manager
- Clinical Care Supervisors
- Hospital Chaplaincy
- Employee Assistance Program
- Seek support from trusted peers/coworkers

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Case Study (cont.)

Which of the following symptoms is Jill presenting with which lead you to believe she is experiencing compassion fatigue?

- ❑ Exhaustion
- ❑ Apathy
- ❑ Irritability
- ❑ Avoidance of end-of-life patients

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What can I do to prevent compassion fatigue?

- Early symptom recognition
  - Arm yourself with the knowledge of how to recognize compassion fatigue
- Be AWARE of your feelings and sense of self
- Take time for yourself
  - Self-care is critically important for nurses.
- Take breaks while at work, get off the unit
- Participate in a debriefing session after traumatic events

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Case Study (cont.)

Which of the following symptoms is Jill presenting with which lead you to believe she is experiencing compassion fatigue?

- ✓ Exhaustion
- ✓ Apathy
- ✓ Irritability
- ✓ Avoidance of end-of-life patients

All of the above symptoms point to compassion fatigue.

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Care for Yourself!

- Nurses often use their own self as a therapeutic tool when caring for patients and their families.
- You must take care of yourself physically, emotionally, mentally, and spiritually in order to provide the best care possible to your patients.

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Self-Care

- Take regular breaks at work
- Exercise
- Find activities you enjoy and make time for them after work
- Journal about your experiences
- Practice relaxation techniques

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Survey

Please indicate your level of agreement with the following statements:

I feel this module was beneficial
1 Strongly Disagree 2 Disagree 3 Neutral/Not Sure 4 Agree 5 Strongly Agree

I will use the knowledge obtained from this module in my current nursing practice
1 Strongly Disagree 2 Disagree 3 Neutral/Not Sure 4 Agree 5 Strongly Agree

I feel I understand the resources available if I or a coworker are or might be experiencing compassion fatigue
1 Strongly Disagree 2 Disagree 3 Neutral/Not Sure 4 Agree 5 Strongly Agree

I have an understanding of the risk factors for compassion fatigue
1 Strongly Disagree 2 Disagree 3 Neutral/Not Sure 4 Agree 5 Strongly Agree

I have an understanding of interventions to prevent compassion fatigue
1 Strongly Disagree 2 Disagree 3 Neutral/Not Sure 4 Agree 5 Strongly Agree

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The Privilege of Practicing Nursing

- We are privileged to be present at:
  - The beginning and end of life
  - Patients' happiest and saddest times
- We are trusted
- We have a unique opportunity to TRULY make a difference
  - Compassion, kindness, and advocacy go a long ways
- This can be a heavy burden!!
  - Take care of yourself. The work you do is important.

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Survey

What did you find beneficial about this module?

What newly acquired knowledge do you plan to incorporate into your current practice?

Was the design of this module conducive to learning?

Did you find the content in the module to be interesting or relevant to your life? How so?

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Post-Test

- Questions 1-5
- Same questions as Pre-Test
- Order of questions and responses rearranged

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Thank you!

Your time and participation is greatly appreciated.

If you have any questions please feel free to contact:

Keshia Kotula BSN, RN
Keshia.kotula@ndsu.edu

Please click "Submit" to finish the module

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APPENDIX G. NORTH DAKOTA STATE UNIVERSITY IRB APPROVAL LETTER

NDSU NORTH DAKOTA STATE UNIVERSITY

May 14, 2014

FederalWide Assurance FWA00002439

Dr. Norma Kiser-Larson
Nursing
Sudro Hall

Re: IRB Certification of Exempt Human Subjects Research:
Protocol **#PH14273 , "Compassion Fatigue in Critical Care Nursing and the Development of an Educational Module"**

Co-investigator(s) and research team: **Keshia Kotula**

Certification Date: 5/14/14 Expiration Date: 5/13/17
Study site(s): **Sanford Health**
Funding: **n/a**

The above referenced human subjects research project has been certified as exempt (category # 2) in accordance with federal regulations (Code of Federal Regulations, Title 45, Part 46, *Protection of Human Subjects*). This determination is based on the original protocol with revised consent and recruitment emails (received 5/13/14).

Please also note the following:

- If you wish to continue the research after the expiration, submit a request for recertification several weeks prior to the expiration.
- Conduct the study as described in the approved protocol. If you wish to make changes, obtain approval from the IRB prior to initiating, unless the changes are necessary to eliminate an immediate hazard to subjects.
- Notify the IRB promptly of any adverse events, complaints, or unanticipated problems involving risks to subjects or others related to this project.
- Report any significant new findings that may affect the risks and benefits to the participants and the IRB.
- Research records may be subject to a random or directed audit at any time to verify compliance with IRB standard operating procedures.

Thank you for your cooperation with NDSU IRB procedures. Best wishes for a successful study.
Sincerely,
Kristy Shirley

Kristy Shirley, CIP, Research Compliance Administrator

INSTITUTIONAL REVIEW BOARD
NDSU Dept 4000 | PO Box 6050 | Fargo ND 58108-6050 | 701.231.8995 | Fax 701.231.8098 | ndsu.edu/irb
Shipping address: Research 1, 1735 NDSU Research Park Drive, Fargo ND 58102

APPENDIX H. SANFORD HEALTH IRB APPROVAL LETTER

SANFORD HEALTH

May 21, 2014

PI: Norma Kiser-Larson, PhD
Project: 03-14-051 Compassion Fatigue in Critical Care Nursing and the Development of an Educational Module
Project Review Level: Exempt category 2
Project Risk: No more than minimal
Approved through exempt review: 05/20/2014
Items Approved with this Review: Consents (hardcopy, web-based), oral scripts, emails, flyer, ProQOL questionnaire/survey, demographic profile

The study submission and informed consent for the proposal referenced above has been reviewed and approved via the procedures of the Sanford Health Institutional Review Board (IRB).

Attached is your original consent document that has been stamped with the IRB approval date. You must keep this original on file. Please use this original consent document to make copies for subject enrollment/re-consent. No other consent form should be used. It must be signed by each subject prior to initiation of any protocol procedures. In addition, each subject must be given a copy of the consent form.

Prior to initiation, promptly report to the IRB, any proposed project updates / amendments (e.g., protocol amendments/revised informed consents) in previously approved human subject research activities.

The forms to assist you in filing your: project closure, continuation, adverse/unanticipated event, project updates /amendments, etc. can be accessed online at SanfordConnect.

You have approval for this project starting from the approval date. Exempt projects do not expire; however, please update the IRB of your study status annually. Exempt projects can be closed when data collection is completed. When this study is completed please notify the Human Research Protection office.

Sincerely,

Deb Langstraat, CIP
Director-Sanford IRB

Sanford Health Human Research Protection Program, Route #5033 • 1305 W. 18th Street • Sioux Falls SD 57117-5039 • P 605-312-6430

APPENDIX I . PROQOL 5 SCORE INTERPRETATION

YOUR SCORES ON THE PROQOL: PROFESSIONAL QUALITY OF LIFE SCREENING

Based on your responses, place your personal scores below. If you have any concerns, you should discuss them with a physical or mental health care professional.

Compassion Satisfaction _____

Compassion satisfaction is about the pleasure you derive from being able to do your work well. For example, you may feel like it is a pleasure to help others through your work. You may feel positively about your colleagues or your ability to contribute to the work setting or even the greater good of society. Higher scores on this scale represent a greater satisfaction related to your ability to be an effective caregiver in your job.

The average score is 50 (SD 10; alpha scale reliability .88). About 25% of people score higher than 57 and about 25% of people score below 43. If you are in the higher range, you probably derive a good deal of professional satisfaction from your position. If your scores are below 40, you may either find problems with your job, or there may be some other reason—for example, you might derive your satisfaction from activities other than your job.

Burnout_____

Most people have an intuitive idea of what burnout is. From the research perspective, burnout is one of the elements of Compassion Fatigue (CF). It is associated with feelings of hopelessness and difficulties in dealing with work or in doing your job effectively. These negative feelings usually have a gradual onset. They can reflect the feeling that your efforts make no difference, or they can be associated with a very high workload or a non-supportive work environment. Higher scores on this scale mean that you are at higher risk for burnout.

The average score on the burnout scale is 50 (SD 10; alpha scale reliability .75). About 25% of people score above 57 and about 25% of people score below 43. If your score is below 43, this probably reflects positive feelings about your ability to be effective in your work. If you score above 57 you may wish to think about what at work makes you feel like you are not effective in your position. Your score may reflect your mood; perhaps you were having a "bad day" or are in need of some time off. If the high score persists or if it is reflective of other worries, it may be a cause for concern.

Secondary Traumatic Stress_____

The second component of Compassion Fatigue (CF) is secondary traumatic stress (STS). It is about your work related, secondary exposure to extremely or traumatically stressful events. Developing problems due to exposure to other's trauma is somewhat rare but does happen to many people who care for those who have experienced extremely or traumatically stressful events. For example, you may repeatedly hear stories about the traumatic things that happen to other people, commonly called Vicarious Traumatization. If your work puts you directly in the path of danger, for example, field work in a war or area of civil violence, this is not secondary exposure; your exposure is primary. However, if you are exposed to others' traumatic events as a result of your work, for example, as a therapist or an emergency worker, this is secondary exposure. The symptoms of STS are usually rapid in onset and associated with a particular event. They may include being afraid, having difficulty sleeping, having images of the upsetting event pop into your mind, or avoiding things that remind you of the event.

The average score on this scale is 50 (SD 10; alpha scale reliability .81). About 25% of people score below 43 and about 25% of people score above 57. If your score is above 57, you may want to take some time to think about what at work may be frightening to you or if there is some other reason for the elevated score. While higher scores do not mean that you do have a problem, they are an indication that you may want to examine how you feel about your work and your work environment. You may wish to discuss this with your supervisor, a colleague, or a health care professional.

APPENDIX J. PROQOL 5 SELF-SCORING TOOL

WHAT IS MY SCORE AND WHAT DOES IT MEAN?

In this section, you will score your test so you understand the interpretation for you. To find your score on **each section**, total the questions listed on the left and then find your score in the table on the right of the section.

Compassion Satisfaction Scale

Copy your rating on each of these questions on to this table and add them up. When you have added then up you can find your score on the table to the right.

3. _____
6. _____
12. _____
16. _____
18. _____
20. _____
22. _____
24. _____
27. _____
30. _____

Total: _____

The sum of my Compassion Satisfaction questions is	So My Score Equals	And my Compassion Satisfaction level is
22 or less	43 or less	Low
Between 23 and 41	Around 50	Average
42 or more	57 or more	High

Burnout Scale

On the burnout scale you will need to take an extra step. Starred items are "reverse scored." If you scored the item 1, write a 5 beside it. The reason we ask you to reverse the scores is because scientifically the measure works better when these questions are asked in a positive way though they can tell us more about their negative form. For example, question 1. "I am happy" tells us more about the effects of helping when you are *not* happy so you reverse the score

You Wrote	Change to
	5
2	4
3	3
4	2
5	1

*1. _____ = _____
*4. _____ = _____
8. _____
10. _____
*15. _____ = _____
*17. _____ = _____
19. _____
21. _____
26. _____
*29. _____ = _____

Total: _____

The sum of my Burnout Questions is	So my score equals	And my Burnout level is
22 or less	43 or less	Low
Between 23 and 41	Around 50	Average
42 or more	57 or more	High

Secondary Traumatic Stress Scale

Just like you did on Compassion Satisfaction, copy your rating on each of these questions on to this table and add them up. When you have added then up you can find your score on the table to the right.

2. _____
5. _____
7. _____
9. _____
11. _____
13. _____
14. _____
23. _____
25. _____
28. _____

Total: _____

The sum of my Secondary Trauma questions is	So My Score Equals	And my Secondary Traumatic Stress level is
22 or less	43 or less	Low
Between 23 and 41	Around 50	Average
42 or more	57 or more	High