LIVED EXPERIENCES OF NURSES ON A BURN UNIT RELATED TO SECONDARY TRAUMATIC STRESS

by

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ABSTRACT

LINDSAY MCDERMOTT SHEARER. Lived experiences of nurses on a burn unit related to secondary traumatic stress.
(Under the direction of DR. JOHN CULBRETH)

Nursing is a large and growing profession. Nurses provide a critical service to patients and families, often in highly stressful work environments (McGibbon, Peter, & Gallop, 2010; Theme Filha, Costa, & Guilam, 2013). The stressful nature of nursing work, and particularly the intense suffering that nurses witness, puts nurses at risk for secondary traumatic stress (Beck & Gable, 2012; Morrison & Joy, 2016). Secondary traumatic stress is defined as the "natural consequent behaviors and emotions resulting from knowing about a traumatizing event" or "the stress resulting from helping or wanting to help a traumatized or suffering person" (Figley, 1995, p. 7). Nurses working on burn intensive care units face particularly traumatic content (Hilliard & O'Neill, 2010; Kellogg, Barker, & McCune, 2014; Martins et al., 2014), though they have not been the specific focus of a study on secondary traumatic stress. Furthermore, the counseling literature has not addressed the needs of nurses despite counselors being increasingly well positioned to advocate for and serve nurses with a rise in more comprehensively integrated care models (Crowley & Kirschner, 2015). This is a phenomenological qualitative study that used in-depth interviews with four nurses working at an accredited burn center in the Southeastern United States. Interviews were transcribed and then analyzed loosely based on Moustakas' (1994) method. Five over-arching themes were found, including Suffering as Context, Adaptation to Suffering, Suffering the Reality of Limitations, Distinction through Suffering, and Sharing Suffering. The theme of

Adaptation to Suffering had numerous subthemes, including Meaning Making, Empowerment through Knowledge, Compartmentalization, Enjoying Wound Care, and Preparedness to Restlessness. The theme of Distinction through Suffering had two subthemes, including Burn Insiders versus Burn Outsiders and Nursing as Territorial.

DEDICATION

For my two children, Fiona and Damian – the two most important teachers in my life. For my rock, my champion, my husband, Evan. And for the burn nurses, the unsung heroes who show up day after day and walk their patients through the depths of human pain and despair.

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CHAPTER 1: INTRODUCTION

Introduction

Nursing is a large and growing profession. According to a U.S. Department of Health and Human Resources (HRSA) (2013) report titled, The U.S. Nursing Workforce: Trends in Supply and Education, between 2008 and 2010, there were 2.8 million registered nurses (RNs) and 690,000 Licensed Professional Nurses (LPNs) working or seeking employment in the field of nursing. Growth in the nursing workforce outpaced that of the population in the decade prior to the 2013 HRSA report, with the RN population growing by almost a quarter and the LPN population growing by 15.5%.

Despite data showing a healthy interest in the nursing profession with a consistent influx of new nurses, the need for more nurses is ever present. There are a variety of factors supporting this need. One is that the overall nursing population is aging. According to the HRSA (2013) report, in the next ten to fifteen years a third of the nursing workforce will reach retirement age. Additionally, the overall population is aging with the baby boomer generation entering older adulthood. Patients are presenting with increasingly complex health needs, especially with a rise in obesity (Ogden, Carroll, Kit, & Flegal, 2014), and there are many new patients seeking care under the Affordable Healthcare Act. With all of these factors to consider, well-trained nurses will continue to be in high demand, and nursing will remain an ever-critical profession.

Like many of the helping professions, nursing jobs are overwhelmingly held by white women, though these demographics may be shifting (HRSA, 2013). People identifying as white made up 80.4% of the nursing workforce in 2000 (HRSA, 2013). This number declined to 75.4% in data collected between 2008 and 2010, with the other 9.9% identifying as Black or African American, 8.2% as Asian, 4.8% as Hispanic or

Latino, 0.4% as American Indian or Alaska Native, 0.1% as Hawaii Native or Pacific Islander, and 1.3% as Multiple or Other (HRSA, 2013). According to the U.S. Department of Labor Women's Bureau, in 2007, 91.7% of registered nurses were women. Men in the profession increased from 7.7% in 2000 to 9.1% in the 2008 to 2010 data collection period (HRSA, 2013).

The literature supports the commonly accepted fact that nurses experience a significant amount of stress (Adriaenssens, De Gucht, & Maes, 2015; Oyama & Fukahori, 2015; Rushton, Batcheller, Schroeder, & Donohue, 2015; Terakado & Matsushima, 2015; Wolfgang, 1988). One study of job stress in various health professionals done by Wolfgang found that nurses reported the highest stress level of any health professionals. In a survey done by the American Nurses Association (ANA) in 2011, which had 4,614 respondents, 74% of respondents listed "effects of stress and overwork" as a top three concern. To put this in perspective, the American Psychological Association (2011) reported the results of a survey on stress in the workplace noting that 41% of employed adults, across occupations, feel stressed out during their workday. This is a significantly smaller number of reports than in the comparable nursing study cited.

The physical burden of nursing alone is considerable. Nursing can require a lot of lifting and holding of awkward positions. The lifting that nurses do is increasingly taxing, with a third of the United States adult population classified as obese (Ogden, Carroll, Kit, & Flegal, 2014). The American Nurses Association survey conducted in 2011 found 56% of 4,614 respondents had experienced musculoskeletal pain caused or made worse by their job in the 12 months prior to the survey. The physical toll of

nursing can be significant and often coincides with and contributes to a host of other problems.

Another factor that makes nursing a particularly stressful occupation is the nature of shift work (Geiger-Brown & Trinkoff, 2010). With shift work, nurses can be on the clock for 12 hours at a time, sometimes through the night into the morning. Depending on staffing and individual financial circumstances, nurses may feel pressure to work additional shifts or over-time. Shift work has implications for nurses' social lives and sleeping patterns – disruptions that bring a host of secondary physical and psychological health issues (Geiger-Brown & Trinkoff, 2010).

Nurses are front-line staff. In fact, this is something that tends to draw people to the nursing profession – the desire for a great deal of hands-on contact with patients. Nurses are positioned such that they manage the vast majority of family members' or patients' complaints about discomfort or dissatisfaction. One quantitative study examining compassion fatigue in 13 healthcare workers assisting patients and families after a bombing found that containing the anger of bereaved loved ones was one of the more negative aspects of the nursing role and a contributing factor for compassion fatigue (Collins & Long, 2003). The anger that nurses are tasked with containing can be overwhelming, given the level of powerlessness and helplessness that loved ones can feel.

The cumulative effect of the stressors that nurses experience in their workday, often occurring in an already over-stimulating environment with a variety of unsettling sights, sounds, and smells, can take a significant toll. Sheen, Slade, and Spiby (2014) completed a literature review focused on indirect trauma exposure in health professionals

and found that work-related stress is associated with traumatic stress responses. The multitude of factors that generate stress in the nursing role essentially prime nurses for more disturbing reactions to the traumatic material they regularly witness.

There are a variety of concepts that have been introduced in the literature that capture the profound psychological impact of nursing work on the personhood of the nurse. Such terms include *burnout*, *moral distress*, *caregiver stress*, *compassion fatigue*, *vicarious traumatization*, and *secondary traumatic stress*. Many of these terms are closely related, however, they also capture different nuanced aspects of the emotional impact of nursing.

Secondary traumatic stress is defined as "natural consequent behaviors and emotions resulting from knowing about a traumatizing event" or "the stress resulting from helping or wanting to help a traumatized or suffering person" (Figley, 1995, p. 7). It is a term often used to describe the reactions of individuals in helping professions such as nursing (Figley, 1995). According to Figley, compassion fatigue is synonymous with secondary traumatic stress. Figley emphasized the use of the word "natural" in this definition of secondary traumatic stress. That is to say, there is nothing abnormal about caregivers reacting in this manner to the traumatic content they encounter; to some extent, it is expected. Figley explained that the negative effects of secondary exposure are identical to those resulting from primary exposure and include intrusive imagery, avoidance of reminders and cues, hyperarousal, distressing emotions, and functional impairment. This set of symptoms would be referred to as PTSD in the instance where criteria were met for the disorder as defined in the Diagnostic and Statistical Manual, 5th

edition (APA, 2013). Because the symptoms of secondary traumatic stress and PTSD are identical, both terms will be used throughout the introduction and review of the literature.

By being closely involved with sick, critically injured, or dying patients – and their family members – nurses are almost certain to have exposure to traumatic stories and traumatic experiences. According to the Substance Abuse and Mental Health Services Administration's Trauma and Justice Strategic Initiative (2012),

> Trauma results from an event, or series of events, or set of circumstances that is experienced by an individual as physically or emotionally harmful or threatening and that has lasting adverse effects on the individual's functioning and physical, social, emotional or spiritual well-being (p. 2).

According to the fifth edition of the Diagnostic and Statistical Manual of Mental Disorders (American Psychiatric Association, 2013, p. 271), the first criterion, out of eight, for a diagnosis of PTSD is that a person has been exposed to "death, threatened death, actual or threatened injury, or actual or threatened sexual violence". The diagnostic and statistical manual specifies that the person may have been directly exposed to these phenomena, or else that they may have witnessed such an event in person, learned that it occurred to a close family member of friend, or "experienced first-hand repeated or extreme exposure to aversive details of the traumatic event" (APA, 2013, p. 271). Many nurses would easily qualify for this first criterion for a diagnosis of PTSD and, in many cases, somewhat dependent on the setting, regularly encounter what would be classified as traumatic material.

Though first responders, police officers, and medical professionals are sometimes overlooked as trauma survivors, upon objectively reviewing the criteria for PTSD, it seems very appropriate to view them as such. In fact, when you consider the level of exposure a nurse will have had to traumatic material throughout a typical career, it seems

critical that these professions be considered at high risk for secondary traumatic stress. Davidson and Jackson (1985) began describing nurses as trauma survivors in an article that addressed lasting effects of trauma exposure in nurses, many of whom resorted to maladaptive coping skills. Referring to nurses as trauma survivors represents an important shift in our collective understanding of who qualifies as a "survivor" – one that takes us closer to understanding that providers for traumatized individuals are also survivors.

When it comes to nurses' exposure to traumatic material and consequences of that exposure, the literature has tended to focus on Sexual Assault Nurse Examiners or SANE nurses (Townsend & Campbell, 2009; Wies & Coy, 2013), nurses caring for survivors of intimate partner violence (Gates & Gillespie, 2008; van der Wath, van Wyk, & van Rensburg, 2013), nurses working in the emergency department (Duffy, Avalos, & Dowling, 2015), labor and delivery nurses or midwives (Beck & Gable, 2012; Faucher, 2013; Rice & Warland, 2013), and intensive or critical care nurses (Sheen et al., 2014). Beck and Gable (2012) found 35% of a random sample of 464 labor and delivery nurses experienced at least moderate secondary traumatic stress. Morrison and Joy (2016) found 75% of their sample of emergency room nurses reported at least one symptom of secondary traumatic stress in the previous week. Other studies targeting these populations have equally concerning findings.

Studies focused on intensive care unit nurses, which would include specialties such as burn care, raise concerns. One study looking at 30 intensive care nurses in South Africa found that 40% had a high level of compassion fatigue (Elkonin & van der Vyver, 2011). Another study of 332 intensive care nurses (Mealer, Burnham, Goode, Rothbaum,

& Moss, 2009) found that 18% met criteria for a diagnosis of Post Traumatic Stress Disorder (PTSD). In 2012, Mealer et al. conducted another study of 744 nurses, finding 21% had symptoms that indicated PTSD might be present. These results are staggering when consequences are considered and indicate that intensive care nurses are at high risk.

There is limited research on the prevalence and particulars of secondary traumatic stress and related phenomena in the specialty of nursing work on a burn intensive care unit. Research that has been conducted on burn nurses has focused on emotional impact, in general, rather than secondary traumatic stress or post traumatic stress symptoms specifically (Cronin, 2001; Hilliard & O'Neill, 2010; Martins et al., 2014). Just as burns are unique injuries that require a unique approach with patients, working with burn injuries is a unique experience for nurses and should be considered separately from the other groups of specialty nursing.

According to the American Academy of Dermatology (2015), the skin is the largest organ of the human body. It serves a variety of essential functions, including regulating body temperature, containing internal body parts, protecting vulnerable organs from germs, and allowing for sensation of surroundings through nerves. Skin plays a significant role in appearance, whether by color, quality, or anomalies, and can strongly impact how individuals are perceived. When the skin is compromised, as with burn injuries, the consequences can be devastating, if not deadly.

Burn injuries occur in a variety of ways and can happen to anyone, a fact well known to burn nurses. It is estimated that around 486,000 burn injuries were treated in 2016 across the United States based on federal surveys collecting data from hospital admissions and visits to hospital emergency departments (Centers for Disease Control

and Prevention, 2011). There were estimated to be 3,275 deaths from fire or smoke inhalation (National Fire Protection Association, 2014). Of admissions to burn centers between 2005 and 2014, 43% were from fires, 34% from scalding, 9% from contact with a hot object, 4% from electricity, 3% from chemicals, and 7% by other means (ABA, 2016). Burn injuries are classified based on total body surface area (TBSA) covered and depth of the wound, whether superficial, partial-thickness, or full-thickness. In all instances of burn injury, the damage tends to occur rapidly and unexpectedly. Patients almost always emerge with a traumatic story.

If individuals live through the initial incident, medical advances have made survival, even of the most severe burns, significantly more likely (Brusselaers et al., 2005). Fifty years ago, individuals in the 15-44 age range had a 50% chance of survival if they had sustained a 43% TBSA or larger burn (Bull & Squire, 1949). The mortality rate has nearly halved since then, with the National Burn Repository indicating only 26.9% of individuals with burns from 40 to 49.9% died between 2004 and 2013 (ABA, 2016). The overall survival rate between 2004 and 2013 is reported at 96.8% (ABA, 2016). This improvement in the burn survival rate can be attributed to a variety of factors, including the designation and accreditation of burn centers with specialized practitioners and advances in wound care (White & Renz, 2008).

Burns are typically thought of as some of the worst injuries one can sustain, involving severe pain, and often disability and disfigurement. Burn patients who live are often referred to as survivors for the remainder of their lives, nodding to the trauma they have endured. In fact, studies have found the prevalence of PTSD among burn survivors to be around 25-30% (Davydow, Katon, & Zatzick, 2009; Fukunishi, 1999; McKibben,

Bresnick, Wiechman Askay, & Fauerbach, 2008; Palmu, Suominen, Vuola, & Isometsä, 2011).

Patients, however, are not the only survivors on burn units – the nurses can be thought of as survivors as well. In a qualitative study by van der Wath et al (2013) in which data was collected from eleven nurses working in an emergency department in South Africa, one of the more salient stories that came forth was of a burn patient. The participant stated, "Everybody was talking about it… you could see their faces… it was so painful. I didn't even go to the ward to see the patient…she was burnt over the face…the whole day it was that girl…we kept on asking…how is she doing…?" (van der Wath et al., 2013, p. 2246). In reading this quote, it seems evident that seeing a burn injury was particularly disturbing to the group of nurses involved.

Burns are a fraction of the types of injuries that emergency nurses encounter on a daily basis and seemingly memorable when they present. Burns are, however, the injury constantly encountered by burn nurses. Burn patients rely heavily on the competence and care of nurses to survive these injuries. The increase in the survival rate means burn nurses are responsible for caring for and witnessing the suffering of more severely injured individuals for an extended period of time. The average length of a hospital stay for a burn injury is between eight and ten days (ABA, 2016), however, hospitalization can last for months in the case of more severe burns. More extensive wounds mean more wound care and wound care that takes longer per patient, which is especially relevant when considering that wound care is often the most traumatic aspect of nursing work on a burn unit (Cronin, 2001; Hilliard & O'Neill, 2010). It goes without saying that burn nurses are at significant risk for secondary traumatic stress, perhaps now more than ever.

There are no studies specifically targeting secondary traumatic stress in burn nurses. There are a number of qualitative studies in which the researchers explore the overall emotional impact of working on a burn unit, and some which focus on how nurses cope with the death of a burn patient or with inflicting pain when treating burn patients (Cronin, 2001; Hilliard & O'Neill, 2010; Kellogg, Barker, & McCune, 2014; Martins et al., 2014; Nagy, 1999). These studies indicate that nurses are often highly disturbed by what they witness and are asked to perform in their role as a nurse on a burn unit.

Researchers contemplating emotional impact on burn nurses found that burn nurses find little to no time throughout their day to process their experiences (Cronin, 2001; Kellogg et al., 2014). Reactions to work with patients that burn nurses have been able to identify tend to be feelings of powerlessness and helplessness (Hilliard & O'Neill, 2010; Kellogg et al., 2014; Martins et al., 2014). Burn nurses are acutely aware that they can do their best to comfort people, but they cannot eliminate their suffering or the significant and often permanent consequences of their injuries (Hilliard & O'Neill, 2010; Kellogg et al., 2014; Martins et al., 2014).

Burn nurses are not only close to patients who are suffering intensely, they are required to inflict additional pain as part of treatment via dressing changes or by assisting during other wound care procedures. Treatment for burn injuries includes procedures such as wound excision, debridement, and grafting (Jeschke, Kamolz, & Shahrokhi, 2013). Excision is the surgical removal of necrotic tissue that will not heal on it's own (Jeschke et al., 2013). Debridement is a procedure whereby all potentially damaged skin around the wound is removed to promote healing and to prepare the areas for grafting (Jeschke et al., 2013). Grafting procedures aim to cover or close the wounded skin, often

with the goal that the graft will take permanently (Jeschke, Kamolz, & Shahrokhi, 2013). For surgical procedures, anesthesia is used. In the case of dressing changes, however, patients are typically conscious. With any of these procedures, nurses are fully conscious and witnessing these intensive manipulations of the human body.

Such wound care procedures, during which patients can experience intense pain, often despite exhaustive pain management efforts, were particularly salient for burn nurses (Cronin, 2001; Hilliard & O'Neill, 2010; Nagy, 1999). Even in instances where patients are not actively experiencing pain, nurses are exposed to the manipulation of the human body that occurs during treatments. One nurse, who had not provided care to burn patients in four years, reported that she could still readily conjure up the smell of burn wounds and found this sensory memory intrusive (Hilliard & O'Neill, 2010).

Nurses experiencing secondary traumatic stress may find their working environment so triggering that they decide to leave their job or the profession entirely (Adriaenssens et al., 2015; Mealer et al., 2009). Mealer et al. conducted research with 332 nurses, finding that those who met criteria for PTSD (18%) and Burnout Syndrome (86%) worked 11.6 fewer years, on average, in the nursing field than those nurses who did not have PTSD or Burnout Syndrome. One longitudinal study by Adriaenssens et al. (2015) showed 20% of participants involved in their study – all emergency department nurses – had left their jobs 18 months later. This comes at a financial cost and is detrimental, as well, to patient care.

O'Brien-Pallas et al. (2006) explained that turnover in the nursing profession is considered dysfunctional when it "involves the unavoidable separation of nursing staff that the organization prefers to retain and when it occurs at high rates, contributing to

reduced continuity of care, reduced productivity, and increased risk" (p. 170). These authors completed a pilot study to determine the financial costs of turnover, finding it does come at great cost to institutions, with the average cost of turnover per nurse being $21,514 (O'Brien-Pallas et al., 2006). Patient care and the financial health of medical institutions suffer when they cannot retain nurses.

When nurses who are struggling with secondary traumatic stress decide to continue in the triggering work environment without seeking support, there is risk that they will cope in maladaptive ways, which could negatively impact patient care. People experiencing a trauma response to a triggering stimulus are operating from a more primitive part of the brain, the limbic system (van der Kolk, 2014). Bessel van der Kolk (2014) describes this part of the brain as the "smoke detector." Van der Kolk explained that, "While the smoke detector is usually pretty good at picking up danger clues, trauma increases the risk of misinterpreting whether a particular situation is dangerous or safe" (p. 61). When nurses have an over reactive "smoke detector," it is especially problematic, because their job involves accurately reading critical medical situations and responding appropriately.

Van der Kolk (2014) further explains that when the "smoke detector" is activated, the prefrontal cortex, or the "watchtower", as he refers to it, goes offline. The "watchtower" allows for objectivity; it allows time to react in a measured way, and to inhibit our automatic or fight, flight or freeze responses (van der Kolk, 2014, p. 62). In order to function well, humans need to have a balance between the "smoke detector" and "watchtower". The smoke detector keeps us safe and readies us for quick reactions, which can be critical in the nursing profession. However, if nurses' "smoke detectors"

are activated inappropriately and too frequently, this may impair their ability to accurately read presenting clinical information.

Individuals suffering from posttraumatic stress may seek to avoid the things or situations that trigger the trauma response that van der Kolk (2014) describes – in fact, it is part of the criteria for a diagnosis of PTSD (American Psychiatric Association, 2013). For nurses, that trigger is often the patient or things related to patient care. It follows from there that nurses may begin to avoid patients when suffering from traumatic stress. Because nurses can only engage in this avoidance to such an extent and still maintain their employment, those experiencing secondary traumatic stress will likely employ other mechanisms to defend against this trauma response such as depersonalization or dissociation. Figley (1995) noted that secondary traumatic stress could, theoretically, impact a provider's ability to empathize with his or her patients and understanding the brain helps one to see why.

Nurses may turn to substances to cope with their trauma responses, which are highly accessible in the nursing environment. Sheppard (2015) pointed out that over-stressed nurses may be likely to self-medicate or abuse substances to numb emotional pain. In another study, most of the 16 nurses interviewed who had participated in an alternative diversion program to get help for their own substance use disorders, cited stressful work environments as a contributing factor in their addiction. These studies were centered on stress in general rather than secondary traumatic stress or PTSD. More research is needed to investigate the relationship between secondary traumatic stress and addiction.

The National Council of State Boards of Nursing (NCSBN) released a report

called “Substance Use Disorders in Nursing: A Resource Manual and Guidelines for Alternative and Disciplinary Monitoring Programs” in 2011. According to that report, some estimates indicate that 6 to 8% of nurses are considered impaired professionals because of their use of alcohol or drugs (NCSBN, 2011). Other estimates place the rate at 10 to 15%, which is on par with the general population (Baldisseri, 2007; Kunyk, 2015). The report aptly puts this in perspective, explaining that this means one in ten nurses you encounter is likely to have a substance use disorder.

Prevalence estimates are likely conservative because stigma and fear of punishment make reporting of use unlikely. Even if the reported prevalence rates are taken at face value, they are alarming when considering the responsibility of nurses to the public, and the consequences of impaired practice. Dunn (2005) pointed out that nurses with substance use disorders may have impaired judgment, slower reaction time, and may be diverting needed drugs away from their patients for their own use. This is to say nothing of the impact of addiction on the nurse’s well being and those close to them and the overall impact on the reputation of the nursing profession.

Compounding the traumatic material that nurses are exposed to on a burn unit is the reality of stigma around expressing reactions to what has been witnessed and barriers to seeking help. Burn nurses describe working hard to mask or suppress their emotions while working with patients so as not to further upset them (Cronin, 2001; Hilliard & O’Neill, 2010; Kellogg et al., 2014). Even after leaving patient rooms, many nurses describe holding back emotion for fear of being judged by colleagues and because of a sense of needing to appear unflappable (Cronin, 2001; Hilliard & O’Neill, 2010).

Hilliard and O'Neill (2010) did find, however, that fears of appearing vulnerable with colleagues tended to subside after some time spent on the unit, after which nurses tended to rely very heavily on each other for consolation. More to this point, many burn nurses are clear that anyone they would seek out for support related to their professional work would have to have experienced something similar (Cronin, 2001; Hilliard & O'Neill, 2010). Cronin (2001) pointed out that mental health services that have been made available to nurses on burn units have tended to be phased out when nurses did not take advantage of the offering. Still, Kellogg et al. (2014) found that nurses lament the lack of formal nursing education on the emotional impact of their work and the lack of institutional support for their emotional health.

It is of concern that burn nurses have not taken advantage of mental health services or else do not feel confident that mental health counselors could be helpful to them, because the consequences of leaving secondary traumatic stress unaddressed are significant for patients, medical institutions, and nurses alike. Mental health counselors need to attend to this concern. Counselors need to better understand the experiences of nurses and the particulars of different specialties such as burns. Furthermore, counselors need to appreciate the context of nursing, just as we work to consider any client's context or to educate ourselves about any population in need.

Looking up the subject term "nurs" with the source listed as *Journal of Counseling and Development*, the official publication of the American Counseling Association, renders 17 total results. This is when searching the "Academic Search Complete" database. Of the 17 results, few were relevant or actually from the *Journal of Counseling and Development*. One of the few relevant references seemed more focused

on making nurses more aware of their patients' needs, as counselors see it, rather than focusing on the counselor's responsibility to understand and provide care for nurses.

It is striking that the counseling profession has given little to no attention to the nursing profession despite its large size, the far-reaching implications of nursing work, and the clearly identified health needs of nurses. There are over 3 million registered nurses and licensed professional nurses in the United States (United States Department of Health and Human Resources, 2013). Over the course of a career, each of these nurses may serve countless members of the public - people likely to be suffering physically, emotionally, and/or spiritually. The competence of the care patients receive from nurses goes on to impact health outcomes. Knowing the large size of the nursing population and the extent of their impact on the public, as well as the challenges that nurses face with secondary traumatic stress, addiction, and turnover, it is critical that counselors understand how to serve this population.

It may previously have been easier for counselors to remain ignorant of the plight or needs of the nursing population. However, health care is increasingly moving toward an integrated model, whereby counselors and other mental health practitioners work in close collaboration with medical providers, sometimes within the same organization or practice (Liberati, Gorli, & Scaratti, 2016). The goal is to provide care that is holistic, acknowledging all parts of the patient, and facilitated by multidisciplinary teams. As we move more toward this model, counselors will have both more awareness of the needs of nurses and also more access than ever to the nursing population. Counselors will effectively be better positioned to gain understanding of nurses and to serve them.

Research suggests nurses currently do not feel mental health counselors can help

them since they do not believe counselors would understand their experiences (Cronin, 2001; Hilliard & O'Neill, 2010). As the counseling literature begins to address this unmet need, in-depth understanding of nurses' experiences is an appropriate starting point. If counselors are to begin to serve the nursing population, some levels of bearing witness to their stories while withholding preconceived notions is critical.

According to Lazarus and Folkman's Transactional Theory of Stress (1984), stress can be conceptualized as being generated by factors related both to the person and the environment. This theory acknowledges that stress is not simply a set of circumstances particular to an environment, but also involves characteristics and coping skills of the person perceiving and experiencing that environment. Applying this model to the environment of the burn unit, in order to improve the stress level of nurses working on a burn unit, counselors must both understand the characteristics of nurses who have had more difficulty coping and also work to advocate for a more supportive environment.

Purpose of the Study

The purpose of this study was to illuminate the lived experiences of burn nurses related to secondary traumatic stress and, ultimately, to better understand factors impacting help seeking as well as ways counselors can prepare to serve this population.

Phenomenological Questions

The primary question upon which this qualitative research study is focused is "What are the lived experiences of nurses on a burn unit related to secondary traumatic stress?" Additional questions that guide this study are:

1. What factors impact help seeking by nurses who are suffering from secondary traumatic stress?

2. What does the counseling field need to do to better prepare to serve nurses suffering from secondary traumatic stress?

Definitions

The following definitions are provided to ensure clarity for the reader:

Referral Criteria for Treatment at an Accredited Burn Center: See Appendix A

Total Body Surface Area (TBSA): Burn severity takes into account the depth of the burns (first or second degree, both considered partial thickness, or third degree, considered full thickness) and also the extent to which the burns cover the body (ACS, 2006). Total Body Surface Area is the term used to describe the percentage of the body area that the burn covers. It is determined through bedside evaluation by a physician. The body is broken down into parts. In the event that the burn injury impacts one of those parts, a certain percentage is assigned for that part. These percentages are then totaled up.

Integrated care: The coordination of mental health, substance abuse, and primary care services (SAMHSA, 2012). There are a variety of levels at which care can be integrated from separate systems and facilities with very little communication to shared systems and facilities, with conscious influence sharing and in-depth understanding across professions (Doherty, 1995).

Delimitations

Eligibility for participation in this study is based on the following criteria:

1. Participant is over 18 years of age.
2. Participant holds a full-time nursing position at burn center from which sample is being taken.

3. Participant has been working full-time at a burn center for at least a year.
4. Participant self-identifies with at least one symptom of secondary traumatic stress.
5. Participant speaks English fluently.
6. Participant agrees to be interviewed and recorded.

Limitations

1. Data will be collected from a small number of nurses at one hospital and at one accredited burn center in the Southeastern United States. Though this smaller number of participants and focused population is intentional to facilitate the qualitative nature of the research, it does significantly limit the generalizability of the results.
2. Participants need to self-identify with at least one symptom of secondary traumatic stress in order to participate, which may be difficult given the stigma that exists around help seeking for medical professionals.
3. Social desirability may impact responses to interview prompts, especially considering participants are being asked to talk about their professional work. That is to say, participants may respond in such a way as to cast his or herself in the best light possible.

Organization of the Study

This study is presented in five chapters. This introduction included a brief overview of the problem and reason for the study, as well as the phenomenological questions being addressed, significance of the study, key definitions, delimitations, and limitations. The second chapter – the literature review – will include a synthesis of all relevant literature broken down into the following subheadings: overview of the nursing profession, nurses and stress, secondary traumatic stress, nurses and secondary traumatic

stress, burn unit work environment, secondary traumatic stress, consequences for nurses, nurses and help seeking, and integrated care.

The literature review will be followed by the methodology section, which will explain the details of the qualitative research design, including participants, procedures, and data analysis methods. The last two chapters are the results and discussion sections. The results section provides summarized information about the data collected, while the discussion section elaborates on implications of the findings and recommendations for counselors moving forward.

CHAPTER 2: REVIEW OF THE LITERATURE

Introduction

Chapter two provides an synthesis of existing literature on topics related to the lived experiences of burn nurses with secondary traumatic stress, starting with an overview of the nursing profession and stress in nursing, and narrowing to concerns specific to burn nurses. Databases searched included PsychINFO, CINAHL Plus, Health Source: Nursing/Academic Edition, and MEDLINE. Other articles were obtained through reference lists within highly relevant articles.

Literature Review

Nursing Overview

The United States Department of Labor's Bureau of Labor Statistics (USBLS) publishes an "Occupational Outlook Handbook", summarizing national statistics on defined occupations and providing basic descriptions for each occupation. In the 2016-2017 iteration, under the occupation, "Registered Nurses", there is a short description of the role. It states, "Registered nurses provide and coordinate patient care, educate patients and the public about various health conditions, and provide advice and emotional support to patients and their family members" (USBLS, 2016, p. 1). The description is comprehensive and accurate, though it does not capture some of the nuances that make nursing such challenging work.

In an institutional ethnography by McGibbon et al. (2010), one of the themes that emerged was related to the spatial proximity of nurses to the people for whom they are caring. This may seem like a mere factual statement about nursing work, that nurses' bodies are close to the bodies of those they serve almost constantly during their shifts.

The realities, however, of being in close spatial proximity to bodies in unbearable pain, bodies that are wounded and vulnerable, bodies that are dying, are often unthinkable. Figuratively speaking, nurses go where many people do not dare.

Nurses are the lifeblood of medical institutions. They carry out many of the procedures ordered by physicians, ensure pain is properly managed, attend to both the basic and complex needs of patients, and offer comfort to those who are suffering. The demand for competent and well-trained nurses is ever-present and growing. The USBLS (2016) projects that employment for registered nurses will grow by 16% between 2014 and 2024. They cite a number of reasons for this rapid growth, which is much higher than the average across occupations (USBLS, 2016). Some of the reasons include a shift to focusing on preventative care, the increase in incidence of chronic conditions, and an aging population (USBLS, 2016). Nurses are critical to the healthy functioning of any medical institution and are a rapidly expanding population.

Nurses are currently, and have historically been, overwhelmingly female (U.S. Department of Health and Human Resources, 2013). In 2007, 91.7% of registered nurses were female (U.S. Department of Labor, 2007), though male interest in the profession has been rising with an increase in registered male nurses from 7.7% to 9.1% between 2000 and 2008 (HRSA, 2013). People identifying as white made up 80.4% of the nursing workforce in 2000 (HRSA, 2013). This number declined to 75.4% in data collected between 2008 and 2010, with the other 9.9% identifying as Black or African American, 8.2% as Asian, 4.8% as Hispanic or Latino, 0.4% as American Indian or Alaska Native, 0.1% as Hawaii Native or Pacific Islander, and 1.3% as Multiple or other (HRSA, 2013). These numbers are on par with data on race in the overall United States population,

which, according the U.S. Census Bureau's 2010 report, is 63.7% white, 16.3% Hispanic or Latino, 12.2% Black or African America, 4.7% Asian, .7% American Indian or Alaska Native, .15% Native Hawaiian and other Pacific Islander, 1.9% two or more races, and .2% some other race.

Nurses have a range of possible credentials and educational levels. Practicing nurses may have an educational level between a high school diploma up through a doctorate (USBLS, 2016). Typically, hospital positions will require a bachelor's degree (USBLS, 2016). Regardless of the setting or level of education, in the United States all practicing nurses must be licensed (USBLS, 2016). Requirements for becoming licensed include having graduated from an approved nursing program and passing the National Council Licensure Examination (USBLS, 2016). Nurse anesthetists, nurse midwives and nurse practitioners are considered Advanced Practice Nurses, and they are able to provide primary or specialty care and prescribe medications in many states (USBLS, 2016).

Nurses practice in a wide variety of settings, including hospitals, outpatient medical practices, and nursing homes (USBLS, 2016). Nurses can provide in-home care and sometimes work in schools, correctional facilities, or for the military (USBLS, 2016). Within hospital settings, nurses can focus on adult or pediatric care; they may work in the emergency department or in a critical care setting. There are almost as many settings in which nurses can practice, as there are types of medical facilities. These various settings share many environmental factors in common and yet also differ in many ways.

Nurses and Stress

It is clearly demonstrated in the literature that nursing is a highly stressful occupation (McGibbon et al., 2010; Theme Filha, Costa, & Guilam, 2013). The number

of articles on stress in the nursing profession alone is indicative of this reality. In the nursing literature, the general term for the stress experienced by nurses is *occupational stress*. Searching nursing and medical databases, including CINAHL, Health Source: Nursing/Academic Edition, and Medline, for articles that have both "nurses" and "occupational stress" in the title yields 192 results, 122 of which are from the past ten years. Though some of the articles are duplicates, all of the 192 articles are relevant. The results include articles establishing occupational stress in nurses (Adriaenssens et al., 2015; Oyama & Fukahori, 2015), articles addressing how nurses cope with occupational stress (Happell et al., 2013; Lu et al., 2015), and articles reviewing possible interventions to address occupational stress in nurses (Orly, Rivka, Rivka, & Dorit, 2012; Rickard et al., 2012). Overall, the articles indicate that nursing stress is a global phenomenon, and one that permeates all nursing settings (Hamaideh, 2012; Wu, Sun, & Wang, 2012).

There are a variety of reasons why nursing is a stressful occupation. Some of the reasons cited in the literature are the realities of shift-work, inadequate pay, lack of respect or control, physical exhaustion and injury, time pressure, acute cases, witnessing suffering, and complex technology (Boniface, Ghosh, & Robinson, 2016; McGibbon et al., 2010; Sharma et al., 2014; Stolt, Suhonen, Virolainen, & Leino-Kilpi, 2016; Theme Filha et al., 2013). Demands on nurses can be overwhelming and seem to be ever increasing.

The stressors that exist in the nursing context combine with the personhood of the nurse, making some nurses more susceptible to the effects of the stress. Understanding the relationship between the person and the environment is called the transactional theory

of stress (Lazarus & Folkman, 1987). Lazarus and Folkman (1987) explain this relationship:

> Threat…is not solely a property of the person or of the environment; it requires the conjunction of an environment having certain attributes with a particular kind of person who will react with threat when exposed to those environmental attributes (p. 142).

In other words, individual nurses may have very different reactions to what they experience in their work environment.

Some of the personal factors that can contribute to the resilience or vulnerability of a nurse include personality style, presence or lack of coping skills, and personal history (Mark & Smith, 2012). As an example, in a survey by Mark and Smith (2012) with 870 participants, over-commitment to work was found to the most significant predictor of higher levels of anxiety and depression. Thus, in order to fully understand the impact of occupational stress on nurses, researchers need to consider characteristics unique to the particular nurse.

Stress and Nursing Specialty

Some studies suggest that certain types of nursing are inherently more stressful than others (Sharma et al., 2014; Yu, Mansfield, Packard, Vicary, & McCool, 1989). For example, one study in which 952 respondents completed surveys on occupational stress found 75% of nurses working in an intensive care setting endorsed seven out of eight stressors for one category on the survey, while 75% of nurses working in an outpatient setting only endorsed two stressors for that same category (Yu, Mansfield, Packard, Vicary, & McCool, 1989). In another, more recent study by Sharma et al. (2014), results indicated that emergency and intensive care unit nurses were significantly more stressed

when compared to nurses working in internal medicine, pediatrics, surgery, or obstetrics and gynecology.

Shift Work

Specialty can sometimes dictate whether or not the nurse does shift work. Nurses who work in hospitals or nursing care facilities tend to work in shifts, given the around the clock care that patients require. This means working 12 hours at a time, sometimes until the middle of the night or into the morning, and sometimes on an on-call basis (USBLS, 2016). Oftentimes, nurses report that the demands during such 12 hour shifts are so great they are unable to find the time to eat, rest, or use the bathroom, let alone process any of what they have witnessed (Cronin, 2001; Kellogg et al., 2014; McGibbon et al., 2010). Shift work can also lead to disruptions in circadian rhythm, which can bring on a host of additional health related problems (Geiger-Brown & Trinkoff, 2010).

There is a constancy to the contact that nurses have with their patients, as is described in an institutional ethnography done by McGibbon et al. (2010) – nurses have to constantly reassure patients and their families, check vital signs, etc. While attending doctors may convey to patients and their families that death is imminent, nurses are the ones who sit with families and patients as death approaches and in the aftermath (McGibbon et al., 2010). Nursing, especially for those who do shift work, means being intensively immersed in and entangled with the condition of the patient.

Nursing and Occupational Hazards

The constant contact that nurses often have with their patients has a physical component. Nursing is a highly physical and sometimes physically threatening job. Unbeknownst to many, it is considered to be one of the most dangerous occupations of

those accounted for by the USBLS (USBLS, 2016). The USBLS released a report in 2011, which found hospitals to be more dangerous places to work than construction or manufacturing sites when considering days away from work. This, of course, does not account for nurses who work despite their pain, meaning the scope of the problem is likely much larger. Occupational hazards of nursing work include, but are not limited to, exposure to disease, needle-sticks, overexertion and injuries from lifting and transferring patients, violence, and poor psychological health (USBLS, 2016).

Nurses have the highest incidence of musculoskeletal injuries of any health professionals (USBLS, 2015). In a qualitative study examining musculoskeletal pain in nurses, one interviewee spoke of her pain stating, "Pain – we all have it. There is a lot worse out there and I feel that I will be letting the team down if I didn't turn up because I've got a bit of back pain", demonstrating a theme of stoicism among nurses that the researchers found (Boniface et al., 2016, p. 352). Yet, physical pain in nurses is problematic and does need to be treated. The injuries that nurses can endure while working or that are made worse by working can be a contributing factor in nurses becoming addicted to illicit substances, further impacting their personal lives and patient care (Trinkoff, Le, Geiger-Brown, Lipscomb, & Lang, 2006).

Hierarchy Amongst Medical Professionals

There is a hierarchy that exists in the medical world. Nurses often do not feel valued or respected to nearly the same degree as the attending doctors to whom they report. This dynamic can create a lot of additional stress for nurses. In a qualitative study, one nurse talked about picking up everyone's slack and feeling underappreciated "It is a lot of responsibility, but it is not valued. It's like a mother. No one knows what

she does until the husband has to stay home for two days (McGibbon et al., 2010, p. 1364)." It also came out through McGibbon et al.'s (2010) ethnographic study that nurses tend to be seen as important, but not needing to be thinkers. In fact, a number of participants in the study described being referred to as "just nurses" (McGibbon et al., 2010, p. 1365). The combination of the enormity of responsibility that nurses take on, and this sense of being under-appreciated and disrespected, is troubling.

The medical hierarchy has been shown to have a direct impact on nurses' emotional health. One study attempting to define the relationship between occupational stress and self-rated health in nurses found that nurses with less control in their working environment were less motivated and more dissatisfied (Theme et al., 2013). The authors suggested that encouraging nurse participation in decision-making or else reducing the strength of the hierarchy would promote their well-being (Theme Filha et al., 2013). This conclusion is supported by another study where nurses in positions with more control – nurse practitioners, for example – experienced less burnout than those with less control, such as emergency room nurses (Browning, Ryan, Thomas, Greenberg, & Rolniak, 2007). Having a sense of power, control, and respect is critical to the well-being of nurses, and often hard to achieve.

Facing Suffering

Not least of the stressors that nurses face is coming into contact with human suffering on a daily basis. In McGibbon's (2010) ethnographic study, nurses sometimes became tearful about things that had happened years earlier. In these nurses' responses, the word suffering was used repeatedly (McGibbon et al., 2010). Nurses witness profound suffering at every level – physical, emotional, and spiritual.

Despite the strong emotions nurses may experience and the horrific things they may witness, nurses describe having to contain their emotions (McGibbon et al., 2010). This issue may be particularly true in dealing with parents of young patients being treated, who are described as liable to react to the slightest change in a nurse's demeanor (McGibbon et al., 2010). In the interest of not disturbing the patients, and in order continue doing their jobs, nurses must find a way to mask their reactions.

Though containing emotion was described as challenging by nurses, in McGibbon's (2010) study, the nurses reported a different challenge upon returning home at the end of their shift. In the study (McGibbon et al., 2010), nurses reported struggling with going home and having to be still and face what had happened during their day. To some extent, nurses seemed to find comfort in the requirement that they busy themselves and contain any reactions while in their work environment (McGibbon et al., 2010). Ways of coping that may be preferable while on the job are not as much so when globalized to all settings. The desire to avoid, to suppress, the feeling of it all being too much to face, puts nurses at risk for more distinct clinical conditions such as secondary traumatic stress, burnout, or vicarious traumatization.

Secondary Traumatic Stress

There are a variety of terms that have been used to describe phenomena whereby nurses or other helping professionals become unwell from the stress of helping others who are suffering. These terms include *burnout*, *moral distress*, *caregiver stress*, *compassion fatigue*, *vicarious traumatization*, and *secondary traumatic stress*. These conditions share some similarities, but are also considered distinctly different phenomena. As Tabor (2011) points out, it is important in the facilitation of future

research, to be clear in defining and distinguishing these terms. Regardless, the mere existence of the term secondary traumatic stress, and a variety of other terms that describe the impact of helping those who suffer is demonstrative of the scope of the problem.

Secondary traumatic stress is a term that addresses the way in which the emotional impact of helping can mirror that of the traumatized person being helped. Secondary traumatic stress is defined as the "natural consequent behaviors and emotions resulting from knowing about a traumatizing event" or "the stress resulting from helping or wanting to help a traumatized or suffering person" (Figley, 1995, p. 7). The symptoms of secondary traumatic stress are identical to those of PTSD and include intrusive imagery, avoidance of reminders and cues, hyperarousal, distressing emotions, and functional impairment (Figley, 1995). In fact, individuals experiencing traumatic stress from secondary exposure may ultimately meet diagnostic criteria for PTSD (APA, 2013).

Secondary traumatic stress poses a complex problem for helping professionals. Empathy, the very thing that makes helping professionals effective, also leaves people more vulnerable to secondary traumatic stress (Figley, 1995; Jenkins & Baird, 2002). To some extent, empathy is also found to be protective for helping professionals, promoting the meaningfulness of the work (Jenkins & Baird, 2002). Ultimately, however, the profound impact of empathizing with those who suffer may be unavoidable. This may be especially true for individuals with personal trauma histories or those who lack coping skills (Figley, 1995).

According to Figley (1995), secondary traumatic stress is synonymous with compassion fatigue, though there is some literature contradicting this notion. Studies

looking at secondary traumatic stress often involve use of the Professional Quality of Life (ProQOL) scale (Stamm, 2010). It is advertised as the most commonly used tool for exploring both negative and positive aspects of working in a helping role with those who have suffered trauma (Stamm, 2010). The authors of the tool conceptualize secondary traumatic stress and burnout as contributing to compassion fatigue, as opposed to seeing secondary traumatic stress and compassion fatigue as synonymous, with burnout as a separate phenomenon (Stamm, 2010).

Sheppard (2015) conducted a study to try to clarify the accuracy of the concepts underpinning the ProQL. The findings of the study included that nurses' experiences did not always fit with the ProQL model (Sheppard, 2015). While secondary traumatic stress correlated highly with compassion fatigue, consistent with Figley's (1995) conceptualization, the nurses described burnout as a normal, expected part of their work (Sheppard, 2015). This contention points to a larger theme in the literature whereby there is lack of clarity around distinctions between the related constructs that capture the impact of helping traumatized others. For the purposes of this study, Figley's definition of secondary traumatic stress will be used.

Nurses and Secondary Traumatic Stress

It is abundantly clear in reviewing the literature on secondary traumatic stress, that this is a significant problem for nursing professionals, not just in the United States, but across the globe (Duffy et al., 2015; Komachi, Kamibeppu, Nishi, & Matsuoka, 2012; Morrison & Joy, 2016). Studies have been done on secondary traumatic stress in nurses in the United States, Japan, Australia, Scotland, Ireland, South Africa, and England (Berger, Polivka, Smoot, & Owens, 2015; Duffy et al., 2015; Elkonin & van der Vyver,

2011; Komachi et al., 2012; Michael & Jenkins, 2001; van der Wath et al., 2013). Secondary traumatic stress seems to be an inevitable reality of the work that nurses do across many contexts, to the extent that it can be considered an occupational hazard.

Studies that have examined secondary traumatic stress in nurses have tended to use a cross-sectional survey design (Komachi et al., 2012; Robins, Meltzer, & Zelikovsky, 2009) or else a mixed-methods design, using a survey with additional open-ended prompts (Beck & Gable, 2012; Michael & Jenkins, 2001; Morrison & Joy, 2016). Some purely qualitative studies were found as well (Rice & Warland, 2013; van der Wath et al., 2013). Some of the most commonly found survey instruments used were the Professional Quality of Life (ProQL) measure (Berger et al., 2015; Elkonin & van der Vyver, 2011), mentioned previously, and the Secondary Traumatic Stress Scale (Dominguez-Gomez & Rutledge, 2009; Duffy et al., 2015; Quinal, Harford, & Rutledge, 2009).

Across studies examined, prevalence for secondary traumatic stress in nurses varied somewhat. Studies done in the United States, regardless of nursing specialty, showed that the rate of secondary traumatic stress tended to be between 20 and 40% (Beck & Gable, 2012; Quinal et al., 2009; Townsend & Campbell, 2009). Other studies done outside of the United States showed something strikingly different. For example, one study of 105 emergency room nurses in Western Ireland found that 64% of the participants met criteria for secondary traumatic stress based on the Secondary Traumatic Stress Scale (Duffy et al., 2015). Even more concerning was a study done on 176 nurses at a general hospital in Japan in which 90.3% of participants were found to have secondary traumatic stress as determined by the Impact of Events Scale (Komachi et al.,

2012). Given research that has shown organizational stress creates higher risk for secondary traumatic stress (Sheen et al., 2014), these differences may be explained by organizational differences based on geographic location. Whether the rate is as high as 90% or somewhere between 20 and 40%, secondary traumatic stress is a legitimate concern for nurses and the people they serve.

There is reason to believe that incidence of secondary traumatic stress among nurses varies dependent upon age and years of nursing experience. In one study focused on PTSD in nurses, a condition that mirrors secondary traumatic stress, the researchers found that the incidence of PTSD was inversely related to years of experience and age (Mealer et al., 2009). Furthermore, these researchers found that nurses who met criteria for both PTSD and Burnout Syndrome had, on average, 11.6 fewer years of work experience compared to those who did not have either (Mealer et al., 2009). In another study of pediatric nurses, participants between the ages of 18 and 39 had significantly higher secondary traumatic stress when compared with participants 40 and older (Berger et al., 2015). Contrastingly, a literature review done by Gates and Gillespie (2008) found that secondary traumatic stress correlated positively with career length. This is an area where more understanding is needed, as protective factors may be uncovered.

The actual events defined by nurses as traumatic varied. In a cross-sectional survey looking at resilience in intensive care unit nurses, the nurses were asked to classify the traumatic event that triggered symptoms of PTSD (Mealer et al., 2009). In this study, 50% of participants indicated that not being able to save a patient was the identified trauma, 29% listed seeing patients die, 36% listed performing futile care, and 39% listed verbal abuse by the family members of patients. In another study on the

impact of work-related trauma on perioperative nurses, one of the identified traumas that triggered trauma-related symptoms was abuse of the nurses by doctors (Michael & Jenkins, 2001), a theme that emerged elsewhere in the literature (Niiyama E et al., 2009). Though secondary traumatic stress is typically conceptualized as emerging from the helping relationship, the contextual factors that surround that helping relationship such as the dynamic between doctors and nurses has a role to play.

The traumatic events nurses experience and their reactions to them are more richly captured in the qualitative data that exists. Participants were often able to recall incidents in detail years after they had occurred (van der Wath et al., 2013; Walsh & Buchanan, 2011). In Sheppard's (2015) study, themes emerged that almost seemed to be outside of some of the concepts available to researchers to describe nurses' experiences. These themes included "life is unfair" and "endless suffering" (Sheppard, 2015) and suggested the nurses tap into existential truths about humanity and the nature of reality.

The qualitative data indicated a theme of emotional distancing that seemed necessary for many of the nurses and reflects symptoms of secondary traumatic stress. In a qualitative study in which eleven emergency room nurses were interviewed in South Africa, the participants spoke of coping through emotional detachment (van der Wath et al., 2013). One participant of the study stated, "Emotionally we lose touch with the reality of being a human being…it becomes immoral, people feel heartless…I am a bystander…there's nothing I can do…" (van der Wath et al., 2013, p. 2246). In another study, a nurse stated, "After a while there is no way to effectively cope with it except detaching yourself, and when you detach yourself it makes you feel like a bad person" (Walsh & Buchanan, 2011, p. 359). This secondary feeling of shame related to the

emotional distancing was echoed again in a study where it was revealed that participants found the term compassion fatigue stigmatizing, with the idea that a nurse who has lost compassion should be ashamed (Sheppard, 2015). Thus, not only do nurses feel there is no other way to cope with their experiences than to detach, dissociate, or numb, they often subsequently feel ashamed of their inability to stay engaged.

Research on secondary traumatic stress in nurses has tended to focus on certain specialties. The specialties focused on in the literature include emergency room nurses, Sexual Assault Nurse Examiners (SANE) (Townsend & Campbell 2009), intensive care unit nurses (Meadors & Lambson, 2008; Mealer et al., 2009; Walsh & Buchanan, 2011), pediatric nurses (Berger et al., 2015; Maytum, Heiman, & Garwick, 2004; Robins et al., 2009), and labor and delivery nurses or midwives (Beck & Gable, 2012; Beck, LoGiudice, & Gable, 2015; Rice & Warland, 2013). There is also one study each with oncology (Quinal et al, 2009) and hospice nurses (Abendroth & Flannery, 2006). These studies reveal similarities across specialties and also unique challenges.

Burn Unit Work Environment

The experience of secondary traumatic stress can be said to be qualitatively different dependent on work location. Even within intensive care settings, there is variation. One intensive care setting, storied in the medical community and society at large, is the burn unit. At present in the United States, there are 66 burn centers verified by the American Burn Association (2016). In order to be treated at an accredited burn center, patients have to meet certain eligibility criteria as defined in chapter one (ACS 2006). Though the idea of severe burns often conjures images of the outward scars that

these individuals possess, there are invisible scars that exist for the nurses who provide round-the-clock care for patients.

The National Burn Repository publishes an annual report on the mandatory data collected from specialized burn centers. Their 2016 report indicates that between 2006 to 2015, 205,033 individuals sustained burn injuries in the United States (ABA, 2016). This number is based on data collected from 96 hospitals in 36 states (ABA, 2016). Data collected through the National Burn Repository highlights the remarkable increase in chances of survival from even the most significant burn injuries. The overall mortality rate between 2006 and 2015 was 3.3% – remarkably better than fifty years ago (Brusselaers et al., 2005; ABA, 2016).

Burns are categorized by the total body surface area impacted, abbreviated TBSA. According to the National Burn Repository (2016), the majority of cases are between a 1 and 9.9% TBSA burn, with the next most common being between 10 and 19.9%. In addition to noting the TBSA, it is important to understand the etiology of a burn and the circumstances surrounding the injury. Where etiology is concerned, most burns occur from a flame (41%), followed closely by scalds, which account for 33% of the burns reported (NBR, 2016). As for circumstances surrounding the injury, the vast majority of burns are non-work related accidents (73.7%) (NBR, 2016) – meaning they occurred completely unexpectedly and unintentionally.

Burn injuries significant enough to require treatment at a verified burn center are a serious medical event given the skin is the largest organ in the human body and serves a number of key functions in maintaining health and life. The average length of the hospital stay for a burn injury is 7.9 days for females and 8.8 days for males (NBR,

2016); however, hospitalization can last much longer in the case of more severe burns. For example, for 30-39.9% TBSA burns, the average length of hospital stay was 27.3 days (NBR, 2016). Complications can occur in hospitals that prolong treatment, most notably pneumonia, cellulitis, urinary tract infections, and wound infections (NBR, 2016). For some, treatment continues beyond hospitalization, with 6.1% of patients needing home health care upon discharge, 2.9% requiring intensive, inpatient rehabilitation, and 2.3% requiring care at a nursing home or skilled nursing facility (NBR, 2016).

With more patients surviving significant burn injuries, attention has shifted toward quality of life issues for survivors (McKibben et al., 2008). Following a burn injury, psychosocial adjustment is a significant challenge, and psychiatric morbidity is considerable (Palmu et al., 2011; ter Smitten, de Graaf, & Van Loey, 2011; Van Loey, Maas, Faber, & Taal, 2003). Patients often face a lengthy and painful course of treatment that continues long after the hospital stay. Patients cope with the trauma of having faced a life threatening situation, as well as trauma related to loss of control and excruciating pain throughout treatment. Burn incidents often involve loss of possessions or may involve traumatic loss of loved ones or pets. Burns can leave individuals permanently disabled, leading to a change in employment status and subsequent loss of identity (Pallua, Künsebeck, & Noah, 2003). Burns are also often permanently disfiguring, leaving individuals to cope with staring and stigma (Pallua et al., 2003).

It is not surprising to note that studies have found the prevalence of PTSD among burn survivors to be around 25-30% (Davydow et al., 2009; Fukunishi, 1999; McKibben et al., 2008; Palmu et al., 2011). Circumstances surrounding the time of injury typically

qualify individuals under Criterion A for PTSD of the fifth and most recent edition of the Diagnostic and Statistical Manual (American Psychiatric Association, 2013), which specifies that a person was directly exposed to "death, threatened death, actual or threatened injury, or actual or threatened sexual violence".

Burn centers rely on nurses to provide round-the-clock care to these critically injured patients, as well as support to their loved ones. Nurses in burn centers perform tasks typical of any nurse in an intensive care setting – checking and monitoring vital signs, administering medication, changing bedding, communicating with attending doctors about progress, etc. More unique to burn nursing is wound care. Wound care for burns involves remarkably painful procedures such as debridement, hydrotherapy, and dressing changes. It is these procedures that are often most salient for burn nurses in talking about their experiences (Davidson & Noyes, 1973; Sandroff, 1983).

Debridement is the process of removing dead tissue from the area of the skin impacted by the burn to clean the burn and prevent infection (ABA, 2009). Hydrotherapy is a method of treating burn injuries and minimizing the damage to the skin (ABA, 2009). Burn patients have described the pain associated with these procedure as "severe" and "excruciating" (Sandroff, 1983). Deeper burn wounds must be covered to promote healing and prevent infection (ABA, 2009). Without the protection of intact skin, burn patients are extremely susceptible to infection. Dressing changes can take hours for more extensive burns and are typically extremely painful for patients, despite analgesics and narcotics being given well beforehand, relaxation exercises, or encouraging words (Sandroff, 1983). Nurses employ a variety of coping mechanisms to deal with inflicting this kind of pain on patients (Nagy, 1998; Steenkamp & van der Merwe, 1998).

In addition to coping with inflicting pain, nurses face long and sometimes complicated courses of treatment with many patients, engage with patients who have been significantly traumatized, and grapple with the realities of long-term disability and disfigurement with which burn survivors are faced. Furthermore, patients often come in with a variety of pre-existing conditions and psychosocial stressors that present their own unique challenges. In a study by Thombs, Singh, Halonen, Diallo, and Milner (2007) considering the effects of pre-existing medical conditions on mortality, findings included that length of hospital stay was significantly predicted by pre-existing conditions such as psychiatric diagnoses (42%), alcohol abuse (36%), drug abuse (20%), and hypertension (17%). The researchers controlled for demographic and burn injury characteristics. The National Burn Repository (2016) indicates that more than half of all patients included in the report had either government insurance (Medicare or Medicaid) or were uninsured, meaning nurses are often working with patients with limited financial resources. All of these stressors occur in an often over-stimulating environment with a variety of disturbing images, off-putting odors, and loud cries of pain.

Burn Nurses and Emotional Impact

Little research has been conducted in the past ten years on the experiences of burn nurses, particularly as relates to the emotional impact of their work. Upon reviewing the literature, only three such studies were found (Hilliard & O'Neill, 2010; Kellogg et al., 2014; Martins et al., 2014). There are, however, a number of older studies, which address the psychological reactions of burn nurses in general terms (Baeyer & Krause, 1984; Brack, LaClave, & Campbell, 1987; Costa & Rossi, 2003; Cronin, 2001; Davidson & Noyes, 1973; Nagy, 1998, 1999; Sandroff, 1983; Steenkamp & van der Merwe, 1998).

There are currently no studies specifically addressing secondary traumatic stress in burn nurses, though the phenomenon seems evident in the literature that exists.

The most common theme in studies focused on the emotional impact of working with burn patients is the centrality of the experience of inflicting pain. In fact, a few of the studies that have been conducted with burn nurses focus solely on the experience of inflicting pain (Nagy, 1998, 1999; Sandroff, 1983). Referring to performing dressing changes for a 15 year old boy burned over 85% of his body when his sleeping bag caught fire on a camping trip, one nurse states, "When I am changing his dressings, I would rather be anywhere else" (Davidson & Noyes, 1973, p. 1716). The facts of this case alone make it easy to empathize with this nurse's reaction.

This sentiment of wanting to by anywhere else while performing painful procedures poses a constant dilemma for burn nurses. On the one hand, nurses recognize the inevitability of inflicting pain. In a study done by Sandroff (1983, p. 35), a nurse from a New York burn hospital stated, "We can inflict it cruelly, or as gently as possible. But it has to be done." However, common amongst the nurses interviewed in this study was that no one was quite sure how to balance empathy and protective self-withdrawal (Sandroff, 1983). One nurse in this study stated, "It's emotionally draining to do a thorough job of debridement, keep open to the patient's suffering, and deal with my own emotions" (Sandroff, 1983, p. 39). The author of the article raises the question, "Is it possible to make a healthy emotional adjustment to the gruesome job of inflicting unavoidable pain on a patient?" (Sandroff, 1983, p. 35). This is a difficult question to answer.

Many burn nurses describe emotional detachment as a primary mechanism for

coping with the pain they inflict on patients (Cronin, 2001; Kellogg et al., 2014; Nagy, 1999). In a qualitative study by Nagy (1999) in which 32 nurses working in five burn units were interviewed, distancing oneself from the patient's pain was found to be the most prevalent coping mechanism. On the other hand, that same study found that many nurses coped by engaging more fully with their patients, ensuring every possible measure was taken to reduce pain (Nagy, 1999). This strategy of engagement was found to promote the nurses' satisfaction with their work (Nagy, 1999). In another qualitative study by Hilliard and O'Neill (2010), nurses not only denied emotional distancing or "being immune", rather they seemed to find this way of describing their stance toward a patient's pain offensive. They instead described hiding their emotions to support the comfort of their patients (Hilliard & O'Neill, 2010). Though there is nuance in how nurses describe and frame this coping mechanism, the theme of repressing emotion while engaging in painful procedures came through strongly in the literature.

Beyond coping in the moment while performing painful procedures, nurses grapple with bigger ethical and existential questions in their work on burn units (Brack et al., 1987; Davidson & Noyes, 1973; Nagy, 1998). In the same case described above of the 15 year old burned over 85% of his body, nurses struggled with keeping him alive, knowing how significantly his quality of life may be impacted by his extensive burns (Davidson & Noyes, 1973). Another study in which a questionnaire on the attitudes of burn nurses was administered, 22.2% of the participants were uncertain or disagreed that they would choose burn treatment for themselves, even though all participants agreed that burn treatment was a life-saving option (Brack et al., 1987). These studies indicate how deeply and profoundly nurses are impacted by the suffering they witness and reveal the

questions that linger around the purpose behind the work done on a burn unit.

The literature indicates that burn nurses vacillate between feeling empowered and having a sense of powerlessness and helplessness (Hilliard & O'Neill, 2010; Kellogg et al., 2014; Martins et al., 2014; Nagy, 1998). In a study comparing the emotional reactions of burn nurses to that of neonatal intensive care units with regards to patient's in pain, it was found that although burn nurses had much greater anxiety, given the patient's ability to express their pain, the nurses also felt more competent and in control given their skill in advocating for pain management (Nagy, 1998). In other studies, nurses reframed the act of inflicting pain, focusing on the role of painful procedures in promoting healing (Hilliard & O'Neill, 2010; Nagy, 1999). On the other hand, nurses often feel helpless when faced with their patient's suffering, recognizing the limitations of their ability to soothe patients and families (Kellogg et al., 2014; Martins et al., 2014).

Burn nurses serve as a container for the immense grief, anger, shock, and sadness that burn patients and their family's experience, sometimes for prolonged periods of time. In fact, in one study by Martins et al. (2014), the participants described burn patients as the most complex and "difficult" patients they had ever worked with, and especially referred to the sadness and rage present for the patients and their families. Given the nurses' proximity to the patients and their families, the overwhelming emotions that patients and families experience often gets directed at the nurses, coming out as anger and dissatisfaction (Hilliard & O'Neill, 2010), and further compounding the stress that burn nurses experience.

Oftentimes, burn nurses are left without any time or space to process the suffering that they are witnessing, inflicting, or experiencing (Cronin, 2001; Kellogg et al., 2014).

In a phenomenological study by Cronin (2001, p. 344), one nurse explained, “If there was anything that upset you, then you would have to quietly make your exit and not make a scene”. Another nurse participating in a qualitative interview seemed to be taking time to process her feelings about inflicting pain for the first time, stating, “It’s pretty hard when you think about it. I don’t think you realize how guilty you feel until you start talking about it like this. I don’t think we talk about it enough as nurses” (Nagy, 1999, p. 1432).

Beyond expressing emotions while in the room with the patient or in the work setting, burn nurses may feel that it is not appropriate for them to express their emotions about their work in any context (Cronin, 2001; Hilliard & O’Neill, 2010). Some nurses feared the stigma of sharing their emotional reactions with colleagues. In Sandroff’s (1983) study, nurses described the intense negative reactions they received when sharing anything about their work with burn patients to family and friends. It is as if there is both fear for the burn nurses of going within, and also fear on the part of anyone around him or her, fear of catching a glimpse of what she has seen. The content is unbearable, or unspeakable, something common to trauma (van der Kolk, 2014).

Perhaps one of the most challenging aspects of going within for burn nurses is the recognition of their common humanity with the patients they serve – patients who have experienced horrific and on-going traumas. Burn nurses realize that this could be them or a family member, and that awareness is disturbing and promotes a sense of personal vulnerability (Nagy, 1998). In fact, the study comparing burn nurses to neonatal nurses found that burn nurses had a significantly higher rate of mutilation anxiety, or fear of bodily mutilation (Nagy, 1998). This finding should not be surprising given the kinds of injuries burn nurses encounter.

Despite extensive exposure to traumatic content and reports from nurses of emotional distancing, frequent feelings of helplessness and powerlessness, and hyperawareness of personal vulnerability, no studies yet exist examining secondary traumatic stress in burn nurses. This is especially troubling given the ways in which secondary traumatic stress can impact nurses as well as the people they serve and the institutions in which they work.

Secondary Traumatic Stress: Consequences for Nurses

Secondary traumatic stress has demonstrated impact on nurses, both personal and professional, and given the role of the nurse, that impact can be far-reaching. Nurses suffering from secondary traumatic stress may be more likely to call in sick or leave a job prematurely, to the detriment of their employers and the patients they serve (Adriaenssens et al., 2015; Jeong Won Han & Byoungsook Lee, 2013; Mealer et al., 2009). These nurses may be compelled to distance themselves from patients, both emotionally and physically, in order to cope (Cartledge, 2001; van der Wath et al., 2013). They may be inclined to over- or under-react to medical events (van der Kolk, 2014). They may develop substance use disorders to cope with symptoms (Darbro, 2005; Sheppard, 2015). All of these scenarios are concerning and are reactions of which mental health counselors need to be aware.

Absenteeism and Turnover

When nurses are overwhelmed by reactions to their work, they may naturally seek ways to avoid engaging in the work. This avoidance could take the form of absenteeism or it could mean leaving a job or the profession entirely (Adriaenssens et al., 2015; Barrett & Yates, 2002; Jeong Won Han & Byoungsook Lee, 2013; Mealer et al., 2009).

In a study on 250 emergency department nurses who had been working for a month or longer at a variety of different hospitals in Korea, post traumatic stress symptoms were found to influence turnover intention directly (Jeong Won Han & Byoungsook Lee, 2013). That is to say, nurses were leaving their jobs in the emergency department, at least in part, because of post traumatic stress symptoms. In a longitudinal study by Adriaenssens et al. (2015) on the consequences of occupational stress for nurses, the speed at which this turnover can happen is highlighted. The researchers found a turnover rate of 19.7% over an 18 month period, with 254 nurses participating at the outset and only 204 still working on site upon follow-up (Adriaenssens et al., 2015). Of course, no insight is provided about the nurses who left since they were no longer participants, which limits conclusions that can be drawn about the precise cause of turnover in this case.

Cartledge (2001) conducted a qualitative study, interviewing nurses who had left an intensive care unit setting, seeking to better understand their reasons for leaving. Though it was hypothesized that stress would not be a primary reason for leaving, as the literature review indicated other factors were more to blame, the results did not bear this out. Stress was a prominent theme in the qualitative data and was divided into two categories – death and tragedy, and the nature and pace of the work (Cartledge, 2001). The author quoted one participant's statement, "You are sort of faced with tragedy continually and having a year out made me look at it and think this isn't…it isn't what I wanted to see anymore" (Cartledge, 2001, p. 351). Another participant is quoted as saying, "… I didn't see the patients as living, I did see them as pieces of meat something; just a body I should say…I never thought that before; that's just how I started to see

them" (Cartledge, 2001, p. 351). These responses suggest secondary traumatic stress in that they identify exposure to traumatic content and demonstrate the exhibition of emotional distancing to cope.

While turnover can happen very quickly for overwhelmed nurses, secondary traumatic stress can also have a more insidious impact on nursing careers. In a study by Mealer et al. (2009), 332 nurses completed questionnaires on PTSD and Burnout Syndrome. Results suggested that those who met criteria for PTSD and Burnout Syndrome worked 11.6 fewer years, on average, in the nursing field than those who had neither. This means less return on investment in nursing education and less seasoned professionals caring for patients.

Turnover in the nursing profession has significant consequences for medical institutions. O'Brien-Pallas et al. (2006) found the average cost of turnover per nurse to be $21,514. From a broader perspective, another study found that turnover accounted for greater than 5% of the annual operating budget at a major medical center (Waldman, Kelly, Arora, & Smith, 2004). This is to say nothing of the human capital lost. One nurse in Cartledge's (2001) qualitative study, when asked about whether or not turnover was a problem said, "When you lost a nurse from intensive care, you lose a lot of skills you won't get easily" (p. 351). Turnover is a problem and secondary traumatic stress seems to be a contributing factor.

For nurses suffering from secondary traumatic stress, the alternative to calling in sick or leaving a job or the profession is finding ways to cope within the nursing context. While nurses may and do find healthy ways to cope with their symptoms, there are also many maladaptive ways that nurses can cope, to the detriment of themselves, their

patients and significant others in their lives. Though there is limited literature directly addressing how secondary traumatic stress impacts patient care, much can be deduced about this impact from the literature that exists on secondary traumatic stress amongst nurses, and from what is known about trauma responses.

Trauma, Brain Changes, Impact on Patient Care

Studies have shown that trauma changes the brain (Gong et al., 2014; Karl et al., 2006). In a series of meta-analyses, Karl et al. (2006) examined differences in brain structure in persons with PTSD compared to control groups with and without trauma exposure. Among the primary findings were that hippocampal volume differed based on PTSD severity, and persons with PTSD have abnormalities in multiple frontal-limbic system structures (Karl et al., 2006). The hippocampus plays a role in learning, memory, and stress regulation, while the limbic system controls basic drives and emotions. It is critical that nurses be able to learn and retain information and that they be able to manage their reactions.

In another study by Gong et al. (2014), the researchers set out to determine if structural magnetic resonance imaging (sMRIs) could be used as a means to accurately diagnose PTSD. Remarkably, the researchers learned that they could discriminate individuals with PTSD against healthy controls with 91% accuracy, just by looking at images of grey and white matter in their brains (Gong et al., 2014). Furthermore, they could accurately discriminate between trauma-exposed individuals without PTSD and healthy controls with 76% accuracy (Gong et al., 2014).

These studies indicate not only that PTSD changes the brain, but also that trauma exposure alone can change the brain, whether or not PTSD symptoms are present. This

finding is especially concerning when considering the volume of trauma to which nurses are exposed. It would suggest a need to be concerned, not only about the nurses reporting symptoms of secondary traumatic stress, but about all nurses exposed to traumatic content. Research that includes images of nurses' brains would provide better insight about the scope of the problem.

The changes that take place in the trauma-exposed brain can pose problems for professional nurses. Bessel van der Kolk (2014) explains these changes in simple terms in his most recent book. He refers to the limbic system as the "smoke detector" (van der Kolk, 2014). He explains that this smoke detector serves the critically important function of readying the body to react when danger is present. For individuals with PTSD, the smoke detector can become over- or under-reactive, misinterpreting cues as dangerous that are not or else failing to react to actual danger. It is not difficult to see how misinterpreting danger could be problematic for nurses, considering nurses face life-or-death situations regularly.

Even more concerning are the secondary effects of an over-reactive smoke detector. When the smoke detector gets activated, van der Kolk (2014) explains, the prefrontal cortex, a higher order part of the human brain that allows for objectivity and rational decision-making, goes offline. While it is important to survival that people have the built in mechanism of the smoke detector to allow instincts to kick in unencumbered by critical thinking, a defective smoke detector is problematic in that it limits critical thinking abilities inappropriately.

The experience of perceiving danger where it is not and regularly having the fight, flight or freeze response triggered is disturbing for people experiencing PTSD (van der

Kolk, 2014). It is therefore unsurprising that people suffering from PTSD will begin to avoid anything that triggers this response (APA, 2013). Nurses suffering from secondary traumatic stress are in a particularly difficult position, as they cannot completely avoid their patients, though patients and the issues that patients face may be highly triggering to them. Nurses may be inclined to minimize contact with patients or else to employ other mechanisms of coping, such as dissociation or depersonalization (Walsh & Buchanan, 2011). This could help explain why nurses in one qualitative study took offense to the idea that they were no longer empathizing with their patients; instead they were finding ways to manage themselves in the moment (Sheppard, 2015).

Addiction in Nursing

Nurses may turn to substances to cope with the traumatic content they encounter at work. The literature has established that substance use disorders are an issue in the nursing profession (American Nurses Association, 1984, Kunyk, 2015). The American Nurses Association (1984) estimates that somewhere between 6 and 8% of nursing professionals have substance use disorders significant enough to cause impairment. Other more recent studies estimate the rate at 10 to 15%, which would be on par with the general population (Baldisseri, 2007; Kunyk, 2015). To put these numbers in perspective, approximately one in ten nurses is likely to have a substance use disorder (NCSBN, 2011). These numbers may be more significant depending on the type of substance. For example, Trinkoff and Storr (1999) found that nurses have elevated rates of prescription drug abuse compared with the general population.

Considering the high prevalence of alcohol use in the population, it is important to consider nurses' use of alcohol, specifically. In particular, risky drinking is more

prevalent than alcohol use disorders and has a host of personal and public health consequences (SAHMSA, 2015). According to a National Survey on Drug Use and Health (2015) done by SAHMSA, 70.1% of the population reports drinking in the past year, with 26.9% of participants 18 and older reporting binge drinking in the last month. Despite the scope of the problem of risky drinking in the general population and the emerging knowledge around addiction amongst nurses, little to no literature exists on risky drinking in nurses. Searching abstracts in the PsychINFO, CINHAL, and Health Source databases with key terms "risky drinking" and nurs*, only yielded nine total results, two of which actually addressed nurses using alcohol. The other seven were focused on nurses assessing and intervening around risky drinking in patients.

It may be that the reported prevalence rates that have been established understate the reality of substance use disorders in the nursing profession in general. Evidence exists in the literature of significant stigma and a historically punitive approach to addicted nurses (Darbro, 2005; Dunn, 2005; Monroe & Kenaga, 2011). As it is, the reported prevalence rates are cause for concern. Patients and other medical professionals rely on nurses being alert and clear-minded. When nurses suffer from substance abuse disorders the risks can include impaired judgment, slower reaction time, or possibly diverting much needed pain medication from patients for personal use (Dunn, 2005). The consequences for the nurses themselves and their personal lives are equally concerning.

There does not appear to be research specifically examining the relationship between secondary traumatic stress and substance abuse in nurses, though some have addressed this peripherally. Sheppard (2015) pointed out that over-stressed nurses may be likely to self-medicate or abuse substances to numb pain. In another study, most of

the 16 nurses interviewed, who had participated in an alternative diversion program to get help for their own substance use disorders, cited stressful work environments as a contributing factor in their addiction (Darbro, 2005). Finally, Duffy et al. (2015) found that, of the 64% of their participants who met criteria for secondary traumatic stress, there was a statistically significant correlation with using alcohol to alleviate that stress when compared with participants not reporting secondary traumatic stress. More research is needed to confirm the relationship between secondary traumatic stress and substance abuse.

There is plenty of research confirming a correlation between PTSD and substance abuse in a variety of populations (Sullivan et al., 2016). Interest in the relationship between PTSD and substance abuse peaked after the Vietnam War, when the US Department of Veterans Affairs was frequently treating co-occurring PTSD and substance abuse (Cross & Ashley, 2007). Since that time, it has been well established that individuals who suffer from PTSD are more likely to abuse substances (Brady, Back, & Coffey, 2004; Brown, Stout, & Mueller, 1999), and furthermore, that individuals with co-occurring PTSD and substance abuse have poorer treatment outcomes compared to those treated for one or the other of these diagnoses (Brown, Recupero, & Stout, 1995; Peirce, Brooner, King, & Kidorf, 2016).

Easy access to controlled substance for those working in medical settings adds another layer of risk. Trinkoff et al. (1999) found that the more easily nurses were able to access prescription pain-medications at their work site, the more likely they were to use. Given the ready access nurses have to prescription medications and the prevalence of secondary traumatic stress amongst nurses – a condition that mimics PTSD – it would

seem to follow that part of the reason for the prevalence of substance abuse amongst nurses is secondary traumatic stress.

Nurses and Help Seeking

There is a paucity of literature addressing the help-seeking behaviors of nurses. What literature does exist suggests that nurses experience significant barriers to seeking help (Cares, Pace, Denious, & Crane, 2015; Cronin, 2001; Galbraith, Brown, & Clifton, 2014; Hilliard & O'Neill, 2010). Some of the barriers that present include lack of time, work culture, and stigma (Berger et al., 2015; Cares et al., 2015; Galbraith et al., 2014; Sandroff, 1983). Given the consequences of secondary traumatic stress for nurses, their patients, and the institutions for which they work, it is concerning both that so little literature exists attempting to understand the help-seeking behaviors of nurses and that nurses likely struggle with help-seeking.

Some studies indicate that help-seeking is simply not part of nurses' training or culture, and not something for which they are able to find time (Berger et al., 2015; Sandroff, 1983). In Sandroff's (1983) study, one nurse stated, "As nurses, we're trained to look outside ourselves, observe the patient, and respond to quick emergencies. Rarely are we encouraged to know ourselves and observe our personal reactions to our work" (p. 37). Providing further insight about what is required of nurses, a participant in another qualitative study stated,

> You try to bury it or tell yourself that it's just fate. It's hard to deal with it sometimes because in the ED things happen so fast that you can't deal with it all the time and later you do not have the energy to. So it stays buried until it comes out at a later date, usually with tears, and you grieve, and then you just move on (Berger et al., 2015, p. 13).

It's clear from a review of the literature that many nurses neither have time to process

what they have seen, nor do they feel they have been given the tools or freedom to do so.

Galbraith et al. (2014) completed a study focused on attitudes of nursing students toward help-seeking. They administered a questionnaire to 219 nursing students at universities in the United Kingdom. Findings concluded that confidentiality was a major consideration in treatment choice. It was also found that nurses' preference was to seek support from friends or family as opposed to seeking help from professionals (Galbraith et al., 2014). These results strongly suggest stigma around help seeking.

Qualitative data obtained from studies specifically looking at secondary traumatic stress further confirm the presence of stigma (Cronin, 2001; Hilliard & O'Neill, 2010; Sheppard, 2015). In Sheppard's (2015) study, some of the participants perceived the term compassion fatigue to be stigmatizing and even feared losing their jobs if they were to admit symptoms. Other studies found that nurses held back emotion, not just for the sake of patients, but also amongst colleagues, fearing judgment or being labeled (Cronin, 2001; Hilliard & O'Neill, 2010).

In contrast, the study by Hilliard and O'Neill (2010) found that nurses who initially held back from expressing their emotions to colleagues, eventually relied very heavily on those same colleagues. It seemed to be a matter of getting comfortable with each other. Moreover, studies on burn nurses indicated that many feel strongly that they would only seek support from another nurse who had been through something very similar (Cronin, 2001; Hilliard & O'Neill, 2010). Because what nurses, and particularly burn nurses, see is so out of the ordinary and so shocking, nurses may be deterred from seeking professional help, believing that outsiders could not possibly understand.

Many nurses report wanting mental health support and programming through their

institutions (Kellogg et al., 2014; Walsh & Buchanan, 2011), though one study showed that when these services were made available, nurses tended not to partake (Cronin, 2001). It seems nurses are able to identify that their work can bring on quite a bit of suffering, and sometimes mental illness and substance abuse, but also tend to isolate based on a belief that what they know and have seen is too horrific to take outside the walls of the hospital. This phenomenon is one to which mental health counselors need to pay close attention.

There is no current literature in the premier counseling journal and official publication of the American Counseling Association, the *Journal of Counseling and Development*, addressing the needs of nurses. This is the case despite the size of the nursing population, the depth of the problems they face, and the scope of the impact nurses have on their communities. This is a significant gap in the literature that needs to be addressed, and counselors are increasingly well positioned to address it.

Integrated Care

Integrated care is increasingly becoming the norm in the provision of health services (Crowley & Kirschner, 2015). While integrated care can exist on a variety of levels, in ideal circumstances providers share the same space, working in close collaboration (Doherty, 1995). It is critical that there is understanding and appreciation for different perspectives and roles amongst providers working in an integrated way (Doherty, 1995). As an example, this means that counselors need to understand what nurses experience.

Furthermore, as counselors work in close collaboration with nurses, counselors will become increasingly aware of the traumatic nature of the work that nurses do, and

the different ways in which nurses are traumatized based on their specialization. In fact, the direct contact that counselors will increasingly have with the service that nurses provide to patients is likely to increase nurses' trust in counselors as individuals capable of understanding their circumstances. Being better positioned to earn this trust, counselors will be called upon to advocate for nurses.

Summary

Nurses represent a large and growing occupation with an extremely important and also extremely difficult job to do. Nurses are faced with a wide variety of occupational hazards, including secondary traumatic stress. Though the phenomenon of secondary traumatic stress has been studied as it occurs in a number of nursing specialties, it has not been studied for nurses that care for burn patients. Studies exploring the emotional impact of working with burn patients strongly suggest the presence of secondary traumatic stress. These studies also highlight the uniqueness of the burn environment and the challenges faced by burn nurses.

The consequences of secondary traumatic stress are far-reaching for nurses, their patients, and the institutions that employ them. Despite this, professional counselors have devoted little to no attention to the needs of nurses, let alone the particular needs of nurses in various specialties. Literature on the help-seeking behaviors of nurses clearly indicates that without in-depth understanding of the challenges nurses faces, the probability of nurses seeking out mental health counselors for support is minimal. As professional counselors interface with nurses in integrated care settings, they are increasingly well positioned to better understand the plight of nurses and to earn their trust as helpers.

CHAPTER 3: METHODOLOGY

The purpose of this study was to qualitatively illuminate the lived experiences of burn nurses related to secondary traumatic stress and, ultimately, to better understand factors impacting help seeking and ways counselors can prepare to serve this population. The study used a phenomenological approach. In-depth interviews were completed and supplemented with a brief survey.

Phenomenological Research

Qualitative methods allow the researcher to explore phenomena in their naturally occurring setting and then describe phenomena observed with richness and depth (Hill, Thompson, & Williams, 1997). Using qualitative methods, the hypothesis can evolve with data collection, making these methods especially appropriate with topics that have not been well researched (Hill et al., 1997). Given the lack of attention to the specialty of burn intensive care nursing in the research on secondary traumatic stress, a qualitative method of inquiry is appropriate to begin illuminating burn nurses' reactions to traumatic content, perhaps thereby effectively guiding larger scale, controlled quantitative research.

Phenomenology is a distinct method of qualitative research. Phenomenology has a strong philosophical underpinning (Creswell, Hanson, Clark Plano, & Morales, 2007) and one faction of phenomenology draws heavily from the ideas of a German mathematician, Edmund Husserl (Spiegelberg & Schuhmann, 1982), hence Husserlian phenomenology. Though there is some debate about what phenomenology is, all agree that the assumptions are based on studying lived experience as it is (Van Manen, 1990).

Phenomenological approaches to qualitative research attempt to describe common experiences amongst participants in relation to a particular phenomenon such as

traumatic content on a burn unit (Creswell et al., 2007). The ultimate purpose in phenomenology is to capture the universal essence of the phenomenon being described, or, as van Manen (1990, p. 177) put it, to "grasp of the very nature of the thing." The essence of the phenomenon is sought rather than an explanation or analysis (Creswell et al., 2007). Discovering the universal essence of a phenomenon is usually approached in a phenomenological study using interviews (Creswell et al., 2007). This study utilized the interview method typical of phenomenological research.

Participants

This study used a purposive sample, with participants selected intentionally based on their exposure to traumatic content while caring for burn patients, and identification with some symptoms of secondary traumatic stress. The original goal was to recruit six full-time nurses who had been working on a burn unit for at least one year, though ultimately, despite submission of an amendment intended to promote participation, only four interviews were completed.

After obtaining IRB approval from the hospital review board (Appendix B), with a letter of agreement signed by UNC Charlotte's review board (see Appendix C), recruitment was initiated with a recruitment email (See Appendix D) sent to all full-time nurses working at the identified burn center. The list of full-time employees was obtained from the nurse manager. The email listed symptoms of secondary traumatic stress and invited nurses who had experience with one or more of these symptoms to participate. Two nurses expressed interest based on this email, and though both were eligible, only one was ultimately enrolled.

When response to the initial email was insufficient, potential participants were sent an email specifically addressing them and reminding them of the research opportunity. The language that was used in this email is provided in the targeted recruitment email (See Appendix E). Secondary traumatic stress was not included in the subject line of these targeted emails. In this targeted email, the researcher was cautious to avoid any coercive language. This was especially important since participants known to the researcher may have felt obligated to participate. More information is provided about the researcher's relationship to participants in the researcher's reflexivity statement below and in participant profiles in chapter four. Two more participants reached out in response to this email and both were enrolled in the study. Another nurse expressed interest, but then did not respond to the researcher's emails following up. Additional participants were recruited through snowball sampling – with those who had already agreed to participate being asked to pass on word of the study. One participant was secured this way.

Recruiting participants proved difficult. Nurses enrolled in the study were able to provide some insight into this. Some of the participants explained there was a tendency of nurses to be inattentive to emails – the primary recruitment method. Another nurse talked about the challenge of doing advanced planning with nurses working in a more reactive setting such as the burn center. She explained that nurses learn to function in a context where they never know what is about to come at them in the proceeding minutes or hours. Learning to orient toward time in this way makes scheduling a week into the future difficult. Another challenge to recruitment was the length of employment required

for eligibility. This criterion significantly limited the number of nurses eligible to participate.

Given these challenges, the researcher submitted an amendment to the hospital IRB to enhance recruitment methods, make participation easier, and widen the pool of eligible participants. This amendment, which was approved by the IRB (see Appendix F), allowed the researcher to post flyers advertising the research opportunity in shared nursing spaces (See Appendix G to review the Recruitment Flyer), to attend shared nursing meetings, and to include participants who had worked with burns for at least six months. The amendment also allowed the researcher to conduct interviews over the phone if necessary. The amendment specified that phone interviews would be recorded using the iPhone application, "voice memos". The files generated from the application would then be downloaded to the department laptop used for the purposes of this research. No additional participants were secured despite these efforts.

Data Collection

All individuals who expressed interest in participating in the study were screened for eligibility over the phone, using the original eligibility criteria and eventually the amended eligibility criteria, per the amendment (See Appendix H and I). Information obtained from here forward was recorded on Participant Forms (See Appendix J), made to aid in tracking and organizing data collected. Any participant screened was given a code name, asked for a preferred email address and phone number, and then asked if the researcher could self-identify in a voicemail. See Appendix K for the outlined plan for generating code names and a sample of the linkage file. The linkage file for the codes is stored in a separate and secure location from the transcripts that were generated.

If participants were deemed appropriate, the researcher provided an overview of the methodology and briefly reviewed the informed consent (See Appendix L for the original informed consent document and Appendix M for the amended one, which was never used). The informed consent document was then emailed to each participant at their preferred email address to look over in advance. Official informed consent was not sought during the phone conversation, but rather at the onset of the face-to-face interview. If participants maintained interest based on the phone screening, face-to-face interviews were scheduled for 90 minutes in the principal investigator's office, in a separate wing of the hospital from the burn unit and a confidential space. As a former member of a team of mental health counselors providing screening and brief intervention and basic mental health care to patients on various units throughout the hospital, the researcher had maintained badge access and credentials through the hospital system.

Informed consent was reviewed in detail at the onset of the face-to-face interview. Informed consent included, amongst other standard verbiage, a clear explanation of the particular risks posed by reflecting on and talking about traumatic memories and details about what help would be offered if participants became distraught or desired additional support. Each participant signed a paper copy of the informed consent, which the researcher then signed as well. The researcher provided each participant with a paper copy of the signed informed consent. The original copies of informed consent documents were stored in a locked file box in the Principal Investigator's office at Wake Forest Baptist Medical Center, where they will remain for the required three years (for Institutional Review Board purposes). The researcher and the principal investigator each have a key to this box.

After completing the informed consent process, demographic data was collected using a demographic questionnaire (See Appendix N). The Secondary Traumatic Stress Scale (See Appendix O) was then administered as a means to confirm the presence of secondary traumatic stress and further educate nurses about the symptoms. The Secondary Traumatic Stress Scale (STSS) is a validated instrument with 17 Likert-type items measuring intrusion, avoidance, and arousal symptoms that comprise STS (Bride, Harrington, Jacobson, Sanders, & Ting, 2004). Bride et al. (2004) validated the STSS with a sample of 287 licensed social workers. They tested reliability using Chronbach's alpha, with coefficients reported for the intrusion, avoidance, and arousal subscales as α = .80, α = .87, and α = .83, respectively. The Chronbach's alpha coefficient for the overall instrument was reported at α = .93. Authors found support for convergent and divergent validity of the STSS and subscales with significant correlations between the STSS and the convergent variables, but not between the STSS and divergent variables. Confirmatory factor analysis confirmed a three factor model with values obtained for the fit indices reported as follows: Goodness of Fit Index = .90, Comparative Fit Index = .94, Incremental Fit Index = .94, and root mean square error of approximation = .069.

After the STSS was administered, the researcher commenced collecting qualitative data using a semi-structured interview protocol (See Appendix P for the Interview Protocol). Though the interviews were scheduled for 90 minutes, the individual sessions lasted various lengths of time dependent upon the participant having fully conveyed their thoughts. Throughout the interviews, the researcher engaged in what Moustakas (1994) labeled, epoché. Epoché is a Greek word that means to refrain from judgment. In so doing, the intention was to see the phenomenon being studied with

openness and as if for the first time. Refraining from judgment also aided in rapport building, creating a space that allowed for more in-depth disclosure. In addition to engaging in an epoché process, the researcher utilized rapport building and interviewing skills acquired through training as a mental health counselor, including warmth, reflective listening, and open-ended questioning.

Interviews were voice-recorded using two methods, including a small hand-held recording device and a department computer supplied by the burn center. The researcher conducted sound tests at the beginning of each interview to ensure data was not lost. The researcher encouraged participants not to use any patient names or their own name while responding. When not in use, the hand-held recording device was locked in a pouch requiring a key, which was inside a locked filing cabinet in the work office of the Principal Investigator. It will be kept like this until it no longer holds any data or no longer than three years from the time data collection is complete.

Within a week after the interviews took place, and often much sooner, the researcher contacted the participants to provide results from the Secondary Traumatic Stress Scale. Interpreting scores on the STSS was done according to recommendations from the developers of the instrument, with a score of less than 28 indicating little or no secondary traumatic stress, a score of 28 to 37 indicating mild STS, 38-43 moderate, 44 to 48 high, and 49 and above severe (Bride, 2007). Participants were encouraged to ask any questions. They were then provided with an educational pamphlet produced by the National Child Traumatic Stress Network that discussed secondary traumatic stress and how to manage it:

(http://www.nctsn.org/sites/default/files/assets/pdfs/secondary_traumatic_tress.pdf).

They were offered referral for additional support as appropriate or requested. In cases where scores indicate high or severe secondary traumatic stress, counseling or further evaluation was recommended.

The initial plan was for the researcher to transcribe the audio files, however, due to delays in the IRB process and circumstances in the researcher's personal life, an amendment was submitted to allow for use of an online transcription service, rev.com (See Appendix F). The transcription service provider agreed to sign their non-disclosure agreement (See Appendix Q) and a confidentiality agreement generated by the researcher (See Appendix R). The audio files collected on the department laptop proved of sufficient quality for transcription and were sent to this service. They were returned within a week to the researcher's hospital email address and of high quality. The researcher removed all identifiers – replacing the participants name with the code names that had been generated in the recruitment process – and compared the transcripts against the audio files, making corrections as needed and adding in non-verbal responses from memory. These electronic copies of the transcripts were twice locked – with both the document itself and the computer password protected.

The de-identified transcripts were sent via encrypted email to the participant's preferred email addresses for member checks (Lincoln & Guba, 1985). Participants were asked to read the transcripts and confirm whether or not they accurately conveyed what they were attempting to communicate during the interview. Participants were permitted to request any changes to the transcript to make it most consistent with their lived experience and were invited to do so in writing through email. Participants were advised that if changes were extensive or if there were issues needing clarification, a phone

conversation with the researcher was an option. These emails specified that if the participants did not respond within a week, the researcher would assume the transcripts were sufficient. Only one participant responded and no changes were requested.

All information obtained from participants through this study was kept confidential as per the American Counseling Association Code of Ethics (2014, G.2.d) standard regarding the rights of research participants. Limits to confidentiality were conceived of as consistent with the ACA Code of Ethics (2014) as well and would have included instances where the researcher believed the participant intended to harm him or herself or someone else (B.2.a) or instances where the researcher believed a child or elder person had been or would be abused or neglected. All data collected and informed consent documents will be securely stored for three years after the research has been completed at which time computer files will be deleted and paper files shredded in a Wake Forest Baptist Medical Center secure shredder.

Data Analysis

The data analysis process was guided by methods recommended by Moustakas (1994). Initially, the focus was on immersion in the data. This immersion happened by listening back to the tapes while ensuring the transcripts were correct, as well as reading and re-reading the transcripts. The data was then reduced to significant statements or quotes, referred to as horizontalization (Creswell et al., 2007). The researcher conceived of significance broadly, remaining open to the idea that the significance of certain statements may better reveal themselves through the process of generating themes. Statements were then combined into themes (Creswell et al., 2007).

From here, the researcher diverged from Moustakas's method, focusing on capturing and communicating the essence of the phenomenon being studied (Creswell et al., 2007), rather than providing thematic analysis on a participant-by-participant basis. Results of the Secondary Traumatic Stress Scale were included in the participant profiles with brief, analytic comments made. During the data analysis, the study came up for continuing review through the hospital and UNC Charlotte IRBs and was approved (See Appendix S).

Risks, Benefits, and Ethical Considerations

The focus of this qualitative research was secondary traumatic stress. Given the researcher asked participants to reflect on traumatic content witnessed as burn nurses and the impact on them, awareness of how they were managing this additional exposure to the material was essential. Participants were advised that they may experience symptoms from mild discomfort to dissociation; unpleasant sensory experiences; fight, flight, or freeze responses; or flashbacks where they feel as if they are they are re-living the moment being described. It may have been the case that participants were inclined to avoid certain traumatic memories because it was too disturbing for them.

From the outset, participants were encouraged to speak up if they needed a break or if a topic was too triggering. The researcher was also attentive to non-verbal cues that participants needed a break or needed some help regulating their bodies or emotions. The researcher was prepared to utilize basic counseling skills, as necessary, to help to settle anyone who seemed distraught, such as reflection of feeling, active listening, validation, and use of grounding or de-escalation techniques. None of the participants requested such a break or indicated that they were becoming triggered to an extent they were

uncomfortable with. At no point did the researcher become concerned that any of the participants were a danger to themselves or anyone else, nor did the researcher observe any signs of dissociation. Participants became appropriately tearful at various points and seemed able to regulate well. All participants, regardless of their reactions during the interview, were informed of resources available to them for additional support, including the Employee Assistance Program through the hospital.

Some participants expressed deriving benefit from sharing about their traumatic experiences in a safe and confidential space. Some of the participants described a normalizing effect of learning about secondary traumatic stress. Obtaining results from the Secondary Traumatic Stress Scale was affirming for some and a surprise for others. In two cases it seemed to motivate nurses to further explore the impact of their professional work on their well-being and to seek out additional opportunities for self care.

Strategies for Quality

Qualitative methods are often criticized because of the potential for the researcher's subjectivity to impact the results (Madill, Jordan, & Shirley, 2000). The intrusion of researcher subjectivity runs counter to the positivist epistemological paradigm, which focuses on seeking knowledge through research methods that, theoretically, are reliably objective (Madill et al., 2000). Despite philosophical shifts which have generated acceptance of the reality of subjectivity, a great deal of importance continues to be placed on eliminating bias in research (Madill et al., 2000). Given this, the researcher has taken extra steps to contribute to the reliability of the results, including providing a reflexivity statement and using bracketing.

Researcher Reflexivity Statement

I am a 33-year-old Caucasian, heterosexual, able-bodied female from Annapolis, Maryland. I am married with a 3-year-old daughter and infant son. My family, on both sides, is of European decent – Irish, Scottish, French, and German – and my parents, who are now divorced, both identified as Roman Catholic throughout my childhood. I received a private school-education, kindergarten through high school, in the Annapolis area and attended a private university for college – Boston College – where I obtained a Bachelor of Arts in Psychology with a minor in African and African Diaspora Studies. I completed a Masters of Science in Mental Health Counseling from the University of Vermont, where I spent five years working for a mobile crisis center for children and adolescents in a variety of roles, including as a clinician and supervisor.

In July of 2013, I moved to Charlotte, North Carolina to pursue a doctorate in Counselor Education and Supervision from the University of North Carolina at Charlotte. I am in my fifth year in the program. During the spring semester of my first year in the doctoral program, I began doing clinical work on a burn unit. My professional interest in working with trauma survivors and the fact that the American Burn Association (ABA) was changing their accreditation standards to include a requirement that all patients be screened for PTSD made this an appropriate fit. I was engaged in this clinical work for two and a half years.

During my time working with burn patients and their families, I became acutely aware of the trauma content witnessed, and also became very close with many of the nurses working for the burn center. I was informed of and witnessed an alarming rate of turnover amongst the burn nurses and started to connect this, in part, to the possible

presence of secondary traumatic stress and similar phenomena amongst the nurses. During a particularly challenging "burn season" – in the winter time when the number of admissions tends to escalate significantly – I spent a significant amount of my working hours debriefing with and supporting nurses.

I felt honored to be granted some level of admission to what I observed to be a tight-knit community of nurses. I was often stunned by what I witnessed nurses doing, as far as patient care. I believe strongly that these nurses are trauma survivors based on my experiences working on a burn unit, and during my time there, saw myself in an advocacy role, pushing for more institutional support for the nurses' emotional health, including education about secondary traumatic stress and more opportunities to process trauma content in a healthy way.

Working in the environment of a burn unit and engaging with burn patients and nurses on the unit around their traumatic experiences required skill on my part in managing reactions and regulating emotion. This is a skill that I have honed in my experiences as a crisis clinician and a skill that was further strengthened by my experiences on the burn unit. This skill allowed me to remain present and regulated with the nurses as they shared their stories throughout the interview process.

Throughout all of my clinical experiences, I have successfully managed to uphold the ethical and legal obligation of confidentiality. As well, I have extensive experience determining what constitutes grounds for breaking confidentiality. I brought my experiences maintaining confidentiality as a counselor into my role as a researcher, as remains my ethical obligation.

Bracketing as a Tool of Reflexivity

Consistent with Moustakas' (1994) epoché stance, which was utilized throughout the data collection process, the researcher used bracketing, a term first described by Husserl, and emphasized by Moustakas, during data analysis. Bracketing is a state attempted by researchers where they are able to read the text without any preconceptions or biases (Moustakas, 1994). The process of effectively "bracketing" ones preconceptions or biases allows the researcher to more nearly capture or reveal the essence of the phenomenon being investigated (Moustakas, 1994).

Independent Reviewer

One of my doctoral peers, Leigh Dongre, served as an independent reviewer of my data analysis process. She was given information about my approach to analyzing the data and then tasked with reviewing, and generating themes in similar fashion, for the first participant's transcript. The goal of having Leigh as an independent reviewer was to ensure the appropriateness of the method used and to confirm that my analysis made sense based on the content of the transcripts (Bernard, 2013).

After Leigh reviewed the transcript and generated themes, we discussed her findings over the phone, then comparing them against mine. Leigh and I concurred that there was strong consistency in our themes with nuanced variation in how we labeled and conceptualized those themes. Where discrepancies were found, we were able to find ways to incorporate Leigh's impressions or to adjust mine to mutual satisfaction. We were fully in agreement in our understanding of the essence of what was shared by the nurses.

Summary

This study sought to qualitatively illuminate the lived experiences of nurses on a burn unit as related to their encounters with traumatic content and to better understand how counselors might support nurses suffering from secondary traumatic stress. The researcher conducted semi-structured interviews with a purposive sample of four burn nurses. Interviews were transcribed and then analyzed with Moustakas' methods as a guide. The researcher used an epoche stance and bracketing to promote trustworthiness, and also conducted member checks. The researcher's reflexivity statement is provided.

CHAPTER 4: RESULTS

Overview

This is a phenomenological study using qualitative interviews and a survey. The purpose of this study was to illuminate the lived experiences of burn nurses related to secondary traumatic stress and, ultimately, to better understand factors impacting help seeking as well as ways counselors can prepare to serve this population. The primary and focal question of this qualitative research was, "What are the lived experiences of nurses on a burn unit related to secondary traumatic stress?" Additional questions that guided this study are:

1. What factors impact help seeking by nurses who are suffering from secondary traumatic stress?
2. What does the counseling field need to do to better prepare to serve nurses suffering from secondary traumatic stress?

Interviews were completed with four nurses yielding prominent themes. There were overarching themes and other subthemes identified. The most prominent overarching theme was that of suffering. Suffering was woven into every response in each of the interviews. There were five main themes that revolved around suffering including Suffering as Context, Adaptation to Suffering, Suffering the Reality of Limitations, Distinction in Suffering, and Sharing Suffering. Some of these themes had subthemes or components, which will be elaborated on.

Demographic Information

Table 1 lists the demographic information obtained from each of the four participants with the code names that were used to track them throughout the data

collection process, and the pseudonyms that will be used for them in the analysis of the data. Table 2 providers additional participant characteristics obtained. There is some diversity in age and years of nursing experience, with two of the participants fairly new to burns, one more settled into the position after a year and a half, and one "lifer", having cared for burn patients going on ten years. There is no diversity in gender or race/ethnicity with all participants identifying as female and white. Where gender is concerned, the fact that the participants were all female is reflective of nursing being an overwhelmingly female dominated profession.

Table 1: Demographic Information

Pseudonym (Code)	Age	Gender	Race/Ethnicity	Have children?
Marie (P2E)	53	F	White	Yes
Joni (P3E)	26	F	White	No
Alice (P4E)	34	F	White	Yes
Rachel (P5E)	25	F	White	No

Table 2: Additional Participant Characteristics

Pseudonym (Code)	Nursing Credentials	Years Nursing	Years in Burns	Caseload % (pediatric/adult)
Marie (P2E)	RN, BSN, CCRN	20	10	30/70
Joni (P3E)	ADN	1.5	1.5	30/70
Alice (P4E)	RN	8mo	8mo	10/90
Rachel (P5E)	RN, BSN	8mo	8mo	30/70

The estimated percentages provided of the breakdown between pediatric and adult cases attended to is remarkably identical for three of the participants, with 30% pediatric and 70% adult patients reported. Alice, however, reported attending to significantly less pediatric burns, which I later learned was a direct result of her avoidance of pediatric cases. Having previously worked on a pediatric ICU and as a mother herself, she was significantly more reactive to pediatric cases and reported feeling less capable of coping.

Results on Secondary Traumatic Stress Scale

The Secondary Traumatic Stress Scale (STSS) is a validated instrument with 17 Likert-type items measuring intrusion, avoidance, and arousal symptoms that comprise Secondary Traumatic Stress (Bride et al., 2004). Interpreting scores on the STSS was done according to recommendations from the developers of the instrument, with a score of less than 28 indicating little or no secondary traumatic stress, a score of 28 to 37 indicating mild STS, 38-43 moderate, 44 to 48 high, and 49 and above severe (Bride, 2007).

Table 3 summarizes the STSS results for each of the four participants, providing scores on the three subscales and total scores. Results were mixed with two participants scoring in the "high" range at 44 and 44.5, respectively, and two scoring in the "little to no secondary traumatic stress" range at 26 and 28 respectively.

Table 3: Results of Secondary Traumatic Stress Scale

Pseudonym (Code)	Intrusion Subscale	Avoidance Subscale	Arousal Subscale	Total Score
Marie (P2E)	11	21.5	12	44.5
Joni (P3E)	11	17	16	44
Alice (P4E)	8	9	9	26
Rachel (P5E)	10	9	9	28

The overall outcome of the administration of the Secondary Traumatic Stress Scale generates more questions for me than answers. I wondered about differences between those who scored high and those who scored low. I noted that the two who scored high were those with whom I had a prior relationship. This generated questions for me about if my relationship with them, or lack thereof, impacted the result, with those more comfortable with me disclosing their symptoms more accurately. I also noted that the two who scored high were the more experienced of the four, as far as time spent on the unit and level of integration with the team. This contradicted some of what I learned from the interviews – that earlier experiences on the unit, ones that occurred before there was a great deal of knowledge or competence, tended to be more disturbing.

I was surprised both by how high the higher scores were and by how low the lower scores were. It surprised me to see my assumption that burn nurses are highly traumatized so emphatically confirmed, but it also puzzled me to see nurses so seemingly unaffected. Though I acknowledge that I cannot draw any conclusions from these results without a higher sample size, the results may suggest that more research is needed to determine why some nurses suffer from secondary traumatic stress while others fare

better. More detailed discussion on individual results is provided within each of the participant profiles.

Participant Profiles

When asked to speak generally about themselves, revealingly, some of the interviewees launched immediately into talking about their work as nurses, while others shared elements of identity unrelated to nursing. Responses to this prompt and other bits about the participant's life stories and identities gleaned throughout the interviews will be shared in the forthcoming participant profiles. The object is to orient the reader to the rich characters present in the room with me and also to give a sense of my relationship with the participant and subjective experience of them. In these participant profiles, certain details may be withheld at my discretion to protect anonymity.

Marie

Marie is a 53-year-old white female with adult children and grandchildren. She is a Registered Nurse with a special certification as a critical care nurse (CCRN). She holds a Bachelor's of Science in Nursing. She has been employed on the burn unit for 10 years and is, by far and wide, the most experienced nurse of the interviewees, with a combined 20 total years of nursing experience. Marie stepped away from nursing to raise her children, but returned after they left home. Her worked has focused primarily in the burn intensive care unit as opposed to the "floor" where less acute burn patients are treated.

She had the highest score on the Secondary Traumatic Stress Scale of the participants interviewed, with a total of 44.5, putting her in the "high" range (Bride, 2007). When I contacted her by phone to provide these results she seemed surprised. She had realized some level of suffering, but to see her level assessed as "high" caught

her attention. Consistent with her approach to the entire process as a participant, she was receptive to the information and to any recommendations.

I greatly admired Marie's work during my time on the burn unit. I saw her as the quintessential nurse – sage like, maternal, grounded. Her many years of experience seemed only to deepen her empathic capacity rather than dull it. At the same time, she often presented as unshakeable and steadfast – having seen it all, there was a confidence there – anticipation that she would be able to handle what came her way. I worked to divest these preconceived notions of Marie as I began our interview, as I aimed to do with each of the participants.

Joni

Joni is a 26-year-old white female. She is a Registered Nurse with an associate's degree in nursing. She does not have children of her own, but often acts as a caregiver for her niece. She comes from a family of all girls and was inspired by her older sister to try nursing. She started nursing school after an injury precluded her from participating on a sports team that had been central to her identity. She completed nursing school a year and a half ago and has been working on the burn unit ever since. She now describes identifying as a nurse above anything else.

She received a score of 44 on the Secondary Traumatic Stress Scale, putting her in the "high" range, like Marie (Bride, 2007). At least outwardly, she denied having a strong reaction to this result. To her, it was where she expected it would be. She was openly aware that she had been strongly impacted by her work on the unit.

I had a previous relationship with Joni from my time working on the burn unit. She tends to be more verbose and certainly eager to talk about her work. I also believe

our connection aided in her openness during the interview. Joni is petite and wiry, but fiercely dedicated and commanding of respect at the same time. My perception is that her trust is hard to earn, but unwavering once established. Her strong sense of identifying with the burn unit and being a nurse contributes to an "insider/outsider" mentality that could be experienced as intimidating to someone just meeting her. I, however, find this aspect of her personality endearing. She has grit.

Alice

Alice is a 34-year-old white female with children. She is a registered nurse and has also been working for the burn unit since completing nursing school. She has now been on the unit for eight months. She sought out nursing school after staying at home with her children. She explains, "Then, when I was getting close to 30 I was like, okay I know I'm not having anymore children. They're gonna be gone and I'm gonna have nothing." She views motherhood as her primary and most important role, though she always envisioned herself being a helper.

She had the lowest score of the participants on the secondary traumatic stress scale. She scored a 26, indicating "little or no secondary traumatic stress" (Bride, 2007). One of the dimensions of the scale is that of avoidance. Interestingly, though Alice described actively avoiding pediatric burn cases to the extent that her percentage break down for pediatric and adult burns seemed markedly skewed compared to the caseloads described by the other participants, this was not reflected in her avoidance score on the secondary traumatic stress scale.

I had never met Alice in my previous role on the burn unit. I encountered her while posting flyers for my study and she later reached out by email. Alice was slow to

warm up during the interview, often providing one-word answers. She engaged more fully as we got further along in the interview, but never seemed fully at ease. I wondered if this had more to do with our lack of prior relationship or discomfort with the subject-matter.

Rachel

Rachel is a 25-year-old white female with no children. She is a registered nurse with a Bachelor's of Science in Nursing who has been working on the burn unit for eight months, ever since completing nursing school. She is the first person in her family to obtain a college education. She was inspired by a friend's mother to become a nurse. She explains,

> And I saw her go through nursing school, and get a job, and like, do things, and be different than anyone else in her family college-wise, and things like that. So I just always wanted to be a nurse.

Rachel had a lot to learn about the college process as a first generation college student, but she was determined and willing to take a risk.

She scored a 28 on the Secondary Traumatic Stress Scale, putting her in the range of mild secondary traumatic stress (Bride, 2007). She appeared very confident in her responses to the questions on the measure and was satisfied that the result reflected the truth for her.

I did not know Rachel in my previous role on the burn unit. Similarly to the other participant that was not previously known to me, we met near the nurse's station in the intensive care unit while I was putting up flyers. She describes herself as hopelessly positive, and I can see this in my interaction with her. It is as if she believes positivity is

what I expect from her. She is sharp, dutiful, a rule-follower. I can sense how much she wants to be helpful to me, and I find myself appreciating her kindness.

Interview Themes

Five primary themes emerged from the interview data, including Suffering as Context, Adaptation to Suffering, Suffering the Reality of Limitations, Distinction Amidst Suffering, and Sharing Suffering. Some of these themes have various components or subthemes. Components of Adaptation to Suffering were Meaning Making, Empowerment through Knowledge, Compartmentalization, Enjoying Wound Care, and Preparedness to Restlessness. Components of Distinction Amidst Suffering included Burn Insiders versus Burn Outsiders and Nursing as Territorial.

Suffering as Context

There is no way to walk onto a burn unit and avoid an encounter with human suffering. Suffering is the stuff of which burn units are made. Burn units are designed to manage and contain suffering, and so that is what they do, day in and day out. They manage and contain not only the suffering of the patient's they serve and the families who fret and grieve, but also the suffering that comes from bearing witness. The data brought forth the idea that suffering not only exists in the context of a burn unit, but rather is the context of a burn unit.

The context of suffering that exists on the burn unit is perhaps best appreciated through the senses – the sights, the smells, the sounds. The participants collectively recreated the sense of being in this context of suffering. Marie captured the overarching feeling of her first experience with a burn patient saying, "It was striking, it was something, I'm like, I don't know if I can do this. I don't know." Here you sense that it

is difficult for her to find the words to fully capture the impact of what she saw, heard, or learned about the patient. It is as if the suffering is something beyond words, it can only be experienced.

Referring to the unique characteristic of nursing on a burn unit in that patients are often conscious during extremely painful procedures, Joni explained,

> Because it's different to turn a patient, and to hurt a patient when they're intubated. Maybe not sedated, but intubated, and you're giving them pain medication and they can't help you. Yeah, you can see their blood pressure going up. Yeah, you can see that spike. Yes, the vent is going to alarm because they're fighting the vent because you're hurting them. Like yes, all of those things happen. But for a patient to actually physically yell, and to scream, and tell you that it hurts. That they're begging you to stop. They don't want to continue in the moment, and then they do want to continue. The reality is a very, very different thing to experience.

Here you can begin to get a picture of the sounds that surround nurses on burn units – those of the equipment in some cases, reminding them of the patients breathing or heart rate, but more profoundly, the desperate, helpless pleas and the screaming.

While it likely would not surprise anyone to discover that there is screaming on a burn unit, the nurses' stories of patient's screaming in pain brought this reality to life. Alice spoke about working with children:

> I try to avoid taking the children (takes a deep breath). I do. They hate seeing nurses. If you're in blue, they scream and cry because they've been poked and they've been ... I mean, they've just had this traumatic event and you have to hurt them. You have to poke them. You have to clean them. You have to do all that and they're hurting and they're just so innocent. I just want to squeeze them and hold them and just tell them it's okay. They're screaming.

Here one can empathize with the screaming child and also the hesitating nurse – on the one hand understanding the necessity of the procedure, and on the other hand fighting every instinct telling her to hold and comfort the child. One begins to understand that it

isn't only the suffering that exists beyond control on the burn unit, it is the suffering that must be inflicted by nurses and endured by patients for any hope of healing.

The visual input on a burn unit is an important part of the context. Over and over again, I heard the nurses refer to what they were "looking at" – trying to understand what they were looking at, reacting to what they were looking at, or fearing it. Rachel says, "I have a hard time sometimes controlling my face when I'm looking at things, so I've had to really work on that." Here you sense the grotesqueness of the forthcoming images and also the aspect of having to manage reactions.

Marie referred numerous times to the smells that exist on a burn unit. She said, "Whenever you tell somebody you're a burn nurse, they're like, ooh, who could do that? The smell. I'm like, I don't smell the smell. I get rid of the smell." Here Marie acknowledges and also seems to express resentment for the outsider perspective on burn units and begins to illuminate another theme of adaptation to suffering, which will be addressed in the next section.

Just as the felt sense and/or sensory experiences as described by the burn nurses created a picture of suffering as context, the stories that the nurses shared conveyed the depths of suffering that surround these nurses. The stories that were shared about experiences on the burn unit invariably were stories of profound suffering.

The first patient story that Marie ever heard is one that most people will never hear from the mouth of someone who survived it in an entire lifetime:

> When I first went into an anesthesia procedure… she was a patient that had been… Someone had broken into the house, killed a person that was in the house with her, and then I guess he thought he had killed her. Piled them on top of each other, and burned them. She survived, and she was… She was probably an 80% burn.

This story is so shockingly horrible it almost seems as if it could not be real, yet it was just the first of countless stories Marie has come into contact with in her ten years caring for burn patients.

Joni has only been caring for burn patients for a year and a half and, in her interview she marveled at the volume of severely traumatized patients she had seen. She found it ridiculous to think of having someone debrief with burn nurses after a traumatic event, saying,

> They talk about doing a debriefing after a traumatic event, well then we should do a debriefing every day. There is no such thing… If you had a good day, you wait for the other shoe to drop. I'm like, "This isn't gonna last."

Here it becomes obvious that it is not about trauma being something that burn nurses may encounter occasionally – they are swimming in it. Seeing people who have suffered unthinkable trauma, that is the context.

Adaptation to Suffering

One begins to get a sense, as the theme of Suffering as Context is explored, of the idea that a context of suffering does not suggest adaptation, it demands it. In other words, the environment of the burn unit makes adaptation an absolute necessity. In order to survive, nurses on burn units must adapt. Thusly, the largest theme that emerged from the data, and one that encompassed many different components, was that of Adaptation to Suffering.

Components of the theme of Adaption to Suffering included meaning making, empowerment through knowledge, compartmentalization, enjoying wound care, and preparedness to restlessness. Some of the methods of adapting seemed inherently

healthier than others, though each of them represented what could be considered a normative human response to a context of suffering.

Meaning Making

Initially, for each of the participants, their placement on the burn unit was based more on practical considerations or happenstance; there was an opening, the hospital was conveniently located, they just wanted a job – that kind of thing. Marie recalled how the need for a job overrode an hesitancy she felt, "I didn't know what this was, maybe I don't know if I want to do this, but then again, I was motivated by a job so I'm like I'll try it."

Oftentimes intensive care experience held appeal insofar as it would present well on a resume. Joni described her bravery and how she stood out amongst her peers as she moved toward burns, drawn to the resume-building potential, "I was the only one that said I would do the burn unit. I really saw it as it's a level one job facility. It's ICU experience. It's on the resume." Alice was similarly motivated by critical care experience, perhaps with more humble ambitions: "I went in knowing that I wanted critical care, but I was like well, I guess I'll see if I can do burns because we just don't get that."

The nurses were focused on something that fit an idea or a specific image of what they wanted for their professional lives. Rachel even noted that she liked that there wasn't carpeting when she toured the burn unit and that this factored into her decision. The nurses' considerations seemed to be ones of the head, not of the heart, though the tiniest touch of ambivalence or even trepidation could be detected.

At the same time as their individual choices to accept positions on the burn unit pointed to practicality, their decisions also revealed naiveté. The nurses did not yet

understand the personal sacrifices that they would make or the impact their encounters on the burn unit would have on their psyche. This is evident in the details of their responses; things like, “I didn’t know”, “It was kind of luck”, and “I guess I’ll see”. These snippets indicate an ignorance of the reality of the work.

Eventually, something seemed to click for each of the nurses once they got a taste of working on the unit; they were somehow changed by what they saw and their role became more than just a job. They were emphatic in their revelations about this, tending to use the word “love”. Alice nodded and smiled as she said, “I did. I fell in love with burns.” Joni recalls contacting her boyfriend after her first full day to say, “I absolutely love it. I love it.” Marie seemed to have surprised herself with her affinity for burns, saying, “For some reason, I fell in love with it.”

Upon further investigation, it became clear that this idea of falling in love with the burn unit had everything to do with the meaning the nurses derived from their work. Marie followed up her statement about falling in love with burns saying, “It was more of a… I guess like a ministry.” While Marie’s ten years of experience on the burn unit have likely led her to have this level of coherence about her purpose as a burn nurse, data indicated that the starting point in the meaning making process was the perspective that was gained in the work. Each day, these nurses were forced to reflect on their own gratefulness. Rachel talked about the clear focus that this perspective generated for her,

> I mean, I’ve always cared a lot about my family and friends, but I mean, when you see people who go through a traumatic experience and don’t have anyone, you refocus on what’s truly important, and you look over the small things that you may get annoyed about. They don’t really matter, so I think I try to stay positive more, because my life’s not that bad.

Rachel was able to better appreciate the presence of support in her life and to maintain a more productive attitude after witnessing the suffering of burn patients. Marie also touched on her ability to better appreciate her intact, able body – one that does not invite staring, "I can thank my lucky stars every day that I'm not there. I can walk out of here. I have all my skin, you know. I don't look mutilated, so I think that was very therapeutic for me." Speaking about her gratefulness here actually brought her to tears. Alice shared about going home to her children,

> I'd go home and snuggle with my children, just thankful that they're there, you know. I get to go home to children that have parents that love them. Which is the good part because it makes me realize what I have at home. It just makes it all the more special when I get home to mine.

These nurses were constantly reminded how trivial their daily disturbances were when compared to the greater tragedies and injuries one can sustain, and one thing that came from this comparison was gratefulness.

In addition to finding meaning through perspective and gratefulness, the horrors that the nurses witnessed on the burn unit imbued in them a sense of purpose in their work as caregivers. One sensed that there was something exceptional about their work – that it was meaningful. Joni captured this well saying,

> The day that I stop caring is the day that I need to walk away… Just because if you don't care, then you're not in the right line of business. Especially with burns, being a nurse… Clocking in and clocking out, that idea that you can clock out and leave your work, that has never happened for me. That was never even an expectation for me when I started.

More simply and quietly, Alice shared, "I just really enjoy knowing that I'm making a difference and taking care of people in their hard times."

While obtaining employment as a nurse on the burn unit may have started as a way of addressing a practical need, it seemed to then take on a much greater meaning,

leaving each of the participants profoundly touched by their work. In some form, their minds steered them toward creating a narrative that made sense of the suffering they witnessed – that they must be more deeply grateful for what they had and that they had a greater purpose in serving their patients.

Ultimately, making meaning out of their experiences on the burn unit is a way for the nurses to adapt to the suffering they encounter. If they are not able to make meaning out of it or see their greater purpose in being there, then how can they endure; how can they persist? This may parallel the tendency for individuals to more vigorously seek evidence of a higher power in trying times. In a world of pain and suffering, the nurses find meaning to in order to endure.

Empowerment through Knowledge

In describing their early experiences on the burn unit, the participants in this study conveyed that much of their fear came from the unknown – what they did not know about burns and what they did not know in terms of performing as nurses. As Alice put it, "Oh, it was scary. I was so scared. I never felt prepared. I still have moments of what if I do something wrong or there's something I don't know or what if I miss a sign?" Rachel recalled

> I just remember the first patient interaction that I had was a man who was burned, and he was in sulfa soaks, and my preceptor was like, "Put this in this, and put it down those tubes." I was like, "Okay." Like I had no idea what a sulfa soak was…. but she didn't have time to explain it to me in the moment.

For the nurses, not knowing generated fear; their newness and ignorance made them feel vulnerable.

In order to adapt to their roles and to their fears about being responsible for people in such dire need, the nurses sought knowledge. Knowledge gave them a sense of

power and control over an otherwise highly chaotic and potentially traumatic environment. They all expressed some craving for knowledge, and satisfaction in mastery. When asked to talk about her first experiences as a nurse, Alice responded,

> You have so many emotions and just with my personality, I want to know what I'm doing. I want to know that my patient is safe. I want to know that whatever the next step is, I'm gonna know what that is. I want to know that I'm not just there. I'm gonna know when something happens. I'm gonna know when something's not right. It's been a battle not knowing things. They can't prepare you for everything in school.

In this quote, it is apparent that knowledge helps Alice in a variety of ways. It allows her to determine that her patients are safe or makes her feel more secure that she can keep her patients safe. It also allows her to better anticipate the order in which things will occur. Again, the idea of knowledge giving a sense of control is evident.

For Marie, knowledge and the pursuit of knowledge seems to have sustained her over her ten years treating burn patients. Her responses throughout the interview captured her journey in mastering her role as a nurse on a burn unit,

> I recall, yeah absolutely. When I first started working, I was afraid to touch any of the dressings. I didn't want to mess anything up…. Yeah. I know exactly what's under that dressing. I know exactly what I can touch, I know exactly what I can't touch. It was like, you have to be confident in that when you're doing dressings because it's like, that's cadaver skin, that's his skin. That's the difference in that, that's integra, that's primatrix. This is a soaked dressing, I can't touch that.

As she was speaking here, I sensed strongly how much pride she derived from her knowledge of burn wounds and her ability to treat them. As she rattled off different grafting techniques, she sat up a little straighter.

Partly gaining knowledge gave the participants a sense of control over their environment, but it also seemed to be adaptive in that participants felt pride and earned respect as they became more knowledgeable. The nurses concern themselves with the

well being of their patients and, concurrently, the well being of their patients may reflect on their skill. In that way, knowledge both makes them more capable of competently caring for their patients and has the additional benefits of promoting their self-esteem and earning them respect. This respect was especially important to Joni. She explains,

> I don't think that I could go to another unit and have a smooth transition because I think that I was given too much autonomy very early. I think I still have too much autonomy. Even now. They're not shy of telling me that in terms of, mainly the PAs say, "We know we ruined you. We know that we gave you the silver platter of… We knew we could trust you with this, and we wouldn't have given this to you if you weren't trustworthy. And if you weren't seeing what we were seeing, or if we didn't think that you were going to do what we wanted, then we wouldn't have given you this.

It was obvious that Joni felt validated by the trust attending doctors placed in her. It may even have been a primary driving force for her. Marie expressed something very similar in a section of our dialogue:

> Marie: … then you have the residents looking at you, well what's your opinion on this? I'm like, that is 100% take. That looks really good. Then they'll, then when you don't have 100% take, well that's melting graft that got some kind of, that got an infection.
> Me: There's pride in that.
> Marie: There is pride in that, and then they come to you. What should I put on this? I'll show you a picture. Why does this need to go in? There's a lot of pride in it.

Marie relished the opportunity to showcase her hard earned knowledge.

The data collected in the interviews made the value of knowledge for nurses working on burn units abundantly clear. The primary and secondary benefits of being knowledgeable were easy to discern. Thus, obtaining knowledge was a very effective means of adapting the suffering present on the unit.

Compartmentalization

The nurses adapted to the context of suffering through compartmentalization. The closer the encounter with suffering, the greater the nurses' tendency to compartmentalize. By compartmentalize, I mean that the nurses would tend to focus on one aspect of their experience at the exclusion of another. The function of this behavior was to lessen their discomfort with their role. Adaptively, the nurses would tend toward focusing on the task at hand while bringing less awareness to the pain experienced by the patient. To the outside observer, this may seem dehumanizing, though the data in these interviews captures the necessity of this process.

Because burn nurses are required to inflict pain in order to promote healing in their patients, they face a lot of cognitive dissonance. Theoretically, they know that they are doing what their job requires and helping the patient in the long run, but physiologically and emotionally they struggle with causing pain. As Joni puts it, "It's a very frenzied experience. Because you have to be the one telling them that, 'You have to do this. It's to get better.' There's no such thing as no pain with burns. Healing is painful." Alice also spoke on this, saying, "I think my first guy was sitting up on the table while we were scrubbing him and stuff. It was just like I can't even believe you can deal with this. This has got to be painful." What this requires of an empathic human being, to continue despite someone screaming out in pain, is hard to imagine. None of the nurses I interviewed were silent on the issue of patient pain and suffering, or about the act of inflicting pain on a patient. At the most basic level, the nurses compartmentalized by reminding themselves, this is my job and I need to get this task done. In a portion of our dialogue, Joni captured this orientation to a "get it done" mentality. Referring to another nurse who was training her, she said,

> First thing she ever said to me was, "can you watch, or can you do?" She didn't know me from anybody. And to this day, that is the first thing I remember from her… I said, "I can do." She said, "Good, pick up a staple remover. "Okay." And I think that… Just the expectation of you're here to do and go home. I don't know if that was part of it that made me fall in love with it.

This put your head down and get the job done mentality that Joni describes here is echoed by Marie, who says, "You've just got to go on autopilot. It's like, you've got to just do it. It's like, okay. It's done. You did a good job." Alice shared a similar mentality, "I guess it's just knowing even though they're alert, you just have to do it." These quotes capture a mentality of doing without processing or thinking too much.

The adaptation doesn't stop, however, at just being determined to focus and press forward. The act of pressing forward and getting the job done requires some kind of mechanism to kick in that allows the nurses to endure in these circumstances. Alice was not aware, until I pointed it out, that she referred to "the burn" as separate from " the person", as if these were two entirely different things. The next couple quotes are illustrative of the mechanism she employs to survive in her role.

> I try not to think about the person when I'm doing wound care. That sounds bad. I try not to think about how hurt they are. I try to think about what we have to do to make them better. You know what I mean?

> Don't forget that they're there because that's easy to forget. You know what I mean, when you're focusing on taking care of that burn, it's easy to forget that they're watching you.

Alice actually described forgetting that she was working on a human being while doing wound care. Not only did she describe this phenomenon, but she also was not aware that she made this separation while engaged in her work – it was such an automatic response for her. For Rachel, there was a process of coming in and out of awareness of the patient's suffering. She consciously attempted to focus her attention on the treatment

goals, though often slipped into empathizing with the pain her patient's were experiencing. You can see that back and forth process in this quote where she talks about doing wound care:

> "What might that be like? I can't even comprehend," but then it's back to... "I'm doing this for a reason. This is dead skin cells. This is part of the healing." And I think that that's like the big piece that makes it all okay, is we're doing everything that we're doing for a reason.
>
> Upon admission into the hydrotherapy room, you're basically scrubbing this person's skin off, but it's okay, because it's dead skin, and we have to remove the dead skin, so that new skin can grow. Then it's, "Oh, my God, this sucks. I cannot imagine having 50% of my skin gone."

These quotes really capture Rachel's efforts to suppress the reality of the work – the fact that she is inflicting excruciating pain. Rachel goes on to share that her colleagues have told her that her motto on the unit is "it's fine". She embraces this characterization and sees herself as someone who tries to maintain positivity, even in the grimmest circumstances. Still, things are anything but fine on a burn unit.

Enjoying Wound Care

The data analysis revealed that as nurses become more skilled in compartmentalization, they are not only more capable of effectively carrying out their role, they sometimes even come to enjoy the more gruesome aspects of the work. This particular adaptation to the context of suffering on the unit challenged my assumptions. In my attempt at an epoche stance, I learned that I carried an assumption that wound care was always approached as a necessary evil, something to be endured. What I learned astounded me. The participants were able to derive great satisfaction in this aspect of their work. For some of them, speaking about it brought a grin to their face.

Marie, the most senior of the nurses interviewed, talked about her ability to enjoy wound care more than any of the other participants. She did not really open up about this aspect of her experience on the burn unit until the end of the interview, almost as if she was not sure if either I could handle the information or perhaps if she should be ashamed of it. Certainly, her statements about enjoying wound care may seem strange to the outside observer. She said things like, "I love it. The bigger, the nastier, the better" and referred to scraping wounds as "good anger management". She also talked about fighting with other nurses over the "good parts" when scraping a burn wound, acknowledging the outsider perspective on this by saying, "it's really weird." Her entire face lit up while speaking about this – there was some delight.

Alice described a similar experience – finding that wound care could be exhilarating. She said, "I like doing the wound care. I like it all. It's some gnarly stuff, but I got to see, my first time, seeing escharotomy, where they cut open the arms of whatever. It's just like, I don't know. It's exciting." Alice had the same gleam in her eye when this came up. I could not quite discern if it had more to do with their awareness that they were talking about something so far out of the range of my understanding or if they were just that excited about it.

As the nurses elaborated on this aspect of their experience, I learned that there was some element of it that was about a compulsion to tidy things up or gain control. Marie explained, "It's almost like an artist. You have a canvas, and you can just work on it. Make it look pretty, make it look better." Alice had a similar focus on taking something gruesome and improving upon it. As she put it,

> It's fascinating how the body can take being burned like that; whether it be a meth lab explosion or a house fire, I mean whatever and then you come to us and we

> put whatever dressing we're gonna put on you. We scrub you down and we take care of that and try to get you to heal.

They are referring to some human compulsion here to reign in chaos, to gain control over chaos.

Part of the enjoyment was a compulsion to tidy up what looked out of control, while another part was a more primitive, visceral satisfaction from the act of scraping and cleaning. In any regard, this phenomenon of enjoying wound care seemed like the ultimate example of the ways in which humans are able to adapt. With repeated exposure to these kinds of wounds, the nurses could come to actually enjoy caring for the wounds.

Preparedness to Restlessness

It seemed each of the participants learned very quickly that to survive on a burn unit, nurses must always be prepared. Per Merriam-Webster (2018), the word preparedness is typically used in reference to readiness to go into battle. This is the perfect analogy. Burn nurses have to be ready as if they are about to go into battle. The nurses do not have control over their workflow and certainly do not know when the next big burn is coming. It goes from there that they are constantly anticipating what's next, a way of being that is adaptive in the context of a burn unit.

Marie was especially aware of the pressure to be prepared as a more senior nurse. She had learned, over time, that the unit could easily be overwhelmed with only a moment's notice,

> I got to get things, and when you're here at work, it's like, I got to get all this done because I never know what's coming in the door…. When am I going to get that call that there are three patients downstairs waiting to come up? I have seven dressing changes that I need to finish up doing before they get up here.

Joni worked in the same harried fashion,

> And knowing that, it's going to happen on a day when you don't have staff, when you're not prepared, everything else is happening… Yep, welcome 50 percenter. You feel like you're constantly rushing to get it done on the off chance that it will happen.

This adaptation seems to start as a very practical way of dealing with an environment in which the workflow is completely unpredictable and the patient's are invariably critically injured.

The desire to be prepared then turned into a preference for busyness over stillness in the work environment. The participants alluded to some kind of vague discomfort in instances where there was not something to be actively doing. Rachel stated, "I don't like sitting, and kind of waiting. I like for there to be things to be done, even if it's like just small, like lab work, consults." Alice describe something similar:

> I like to be busy. I don't like to… I mean, I get tired, trust me, and I want to sit down, but just to sit down and chart, I can't stand it. I want to be up. I want to be moving. I'm gonna ask everybody if they need anything. I like the fast pace.

This constant movement, constant busyness – at some point, it had hints of avoidance. In a context of suffering, the nurses learned to adapt, coping with their emotions and fears by constantly staying busy. The nurses were rendered unable to sit still.

Tellingly, Marie, who had been doing the work the longest, experienced this effect most profoundly,

> You eat really fast. I eat really fast. I eat really fast, it's because like, okay, we have two minutes to eat. Let's eat really fast, and you eat really fast, and it carries over into your home life, too. My husband will say, "You get out of the car like Marines rolling up on the beach. You're out of the car and in the store before I get out." I'm like, well you're just really slow. He's like, I don't think so.

For Marie, staying busy became a way of life – a way of being in the world. Other quotes of hers powerfully confirmed this. She said things like, "I don't know how to do nothing" and "If everything's done, then I can relax". When I followed up on this second

quote by saying, “Does that happen?”, she replied, “not much”. It was not just about staying prepared or being comforted by busyness at work – she felt the urge to stay busy at all times.

In the short term, this adaptation of staying busy may serve to protect the nurses from fully absorbing the impact of what they witness in their work. However, there is reason to believe that this attempt at avoidance may catch up to the nurses. Joni demonstrated some insight about this latent impact. She describes her early months on the unit as a blur – being in a constantly frenzied state. She then talks about the fallout from this: “…and then you realize after. It hits you months later. I was finally able to take a giant step back and look at everything.” She goes on to describe a kind of reckoning, a painful awareness of all the trauma she had witnessed and how this was not “normal”.

When human being are put in a context of suffering, it makes sense both that they may strive to gain control by being better prepared and also that they may find ways to distract their mind from the endless suffering with which they are faced. These are ways of adapting. And yet, the difficulty with being still may rob these nurses of the ability to connect more deeply with themselves and those around them. The solution escapes me, as burn units simply contain more suffering than is humanly possible to be still with.

Suffering the Reality of Limitations

The struggle to be still may be most profound in times when it is all that is left to do, when a patient dies. While the theme, Adaptation to Suffering, was all about ways that the nurses managed the vulnerability that the ever-present suffering created, the circumstance of death made this significantly harder to accomplish. The way that the

nurses dealt with circumstances in which no more striving or adapting is needed varied. What connected their experiences with patients dying was the difficulty they had with coming face to face with the limitations of things that were beyond their control. There were poignant moments in the interviews when nurses found themselves Suffering the Reality of Limitations.

My first participant, Marie, captured very simply, gracefully and maybe unintentionally, the challenge of encountering death when your job description is to keep people alive. Ironically, she was talking about gardening, a hobby that helps her unwind. She started to cry as she explained:

> Marie: I don't like my flowers to die.
> Me: Yeah
> Marie: I was like, you are not going to die.
> Me: The last straw.
> Marie: You are not, and if I do everything right you're going to live.
> Me: How does that work out?
> Marie: Not so good sometimes. Sometimes it gets to you. Sometimes the squirrels uproot them. Or the muskrats will eat them, like little muskrats and they come take a nice big snack. The deer love… Daily, they love to just, it looks like they have taken a pair of scissors and cut them really even. They just chomped off the whole thing. I'm like, who's been cutting my flowers? It's the deer.
> Me: Oh gosh. What can you do?
> Marie: You can't.

The parallel with patient care here is unmistakable. These nurses make a tremendous impact on their patient's lives, but their power to control the outcome has a limit. When injuries are too profound, bodies too weak, or care initiated too late, no level of skill in nursing matters. For Marie, by far the most seasoned of the nurses interviewed, there was more surrender to this reality; a greater sense of peace with her limitations. Marie readily acknowledged the fact that some of her patients would ultimately die and seemed to understand that often times this would have little to do with her competence. She states:

"You know, I mean, I know. Add the numbers together. Their age, their percentage of burn. I can walk down the hall and tell you who's going to make it, who's not going to make it. Sometimes I'm surprised." In this statement, you can sense her level of experience with death, that she has an instinct for it. Also notable is that she's considering factors that are present at the outset, before a nurse even lays a hand on the patient, such as their age and the total body surface area covered by the burn. Marie accepts that death will happen on the unit in spite of her.

For the less seasoned nurses, however, death evoked a higher level of personalization. It created greater fear. Joni talked about how this contributed to a hyper vigilance:

> And this isn't giving meds and you can leave at the end of the day, or, "Hey, you missed that dressing but it's ok." Or "Hey, I had to go to this procedure, and, "Hey, their sugar got a little out of control," and we can fix all these things… If you don't do face care, you just ruined their face for the rest of their life. You have their life, and their body image, and the way they will move, and do, and see, and be… You have all of that in your hands. That's their life.

You can sense how intensely Joni experiences the fragility of patients and the weight of her responsibility toward them. The more Joni talked, the more one got the feeling that it was as if the outcome for any patient was entirely up to her. In a way, this could be seen as a denial of her limitations.

Rachel's struggle with the looming threat of death on the unit permeated her interview in subtle ways. She referred to death as a "bad outcome", almost as if referring directly to the death of a patient was too hard for her. Later, when responding to prompts about how counselors could help, she acknowledged her need for reassurance that she had done everything in her power when a patient died. She also acknowledged her

profound fear of an instance where she may be found responsible. She worried that her professional limitations may cause someone to die.

> Me: So what would make you seek help from a counselor? What kind of point would you need to be at, or?
> Rachel: I think maybe if something was directly related to something I did.
> Me: Okay
> Rachel: Maybe like an incident where there was a bad outcome, and it was my fault, maybe. Yeah, and it's hard for that to happen in a hospital setting. They've made things very shared. There's some people that say it's impossible to kill somebody in a hospital, because there's so many safety nets that we have, but it's definitely possible, because you're the one with your hand on that syringe.

Rachel cared deeply about her interactions with patients – she wanted to do right by them, maybe even dare to evoke gratefulness from them. That some of them would die seemed like an affront to her dedication. At the very end of her interview, as we were wrapping up, she chose to share a story about an older woman who came in with unsurvivable injuries. It feels important to provide the entirety of the story she shared here:

> I mean, there was a patient that came up, and in the instance where ... I forget what the scale is called, but it's their age, TBSA, and then there's a score, and if your score is over 130, there's like a 98% chance that you're not gonna make it. ...I think it was called something else, but I don't know. But this lady was out burning leaves, and fell into her fire, older lady, which immediately screams, "Oh, my gosh, this is my grandma," to me. I'm like, "Gosh." And it's my patient, and they're not even gonna go to the tank room, because we're just gonna keep her alive until her family gets here, and then we're gonna withdraw care. And we have those quilts up there on the unit, the adult quilts, and the kid quilts that we give. ...We had cleaned this lady up, and I just remember her hands. Her hands weren't burnt, and I kept thinking how reassuring that would be as a family member to be able to hold her hand, and not have it be bandaged up, and her face wasn't burned. Her hands weren't burned. So on the other side, it's like, "She's okay. Why are they doing this? She's not ... " You know, compared to someone that we can't even let them touch the family member, because every piece of them is burnt, so ... ...Yeah, and then we went ... I didn't even know the quilts existed, and we walked over to the cabinet, and when we opened the cabinet, it was just like instant grandma, instant grandma smell. And you're just like, "Gosh, this sucks. This sucks so bad." And I went home and cried myself to sleep, and that's okay, because you understand like that empathy.

I found it notable, but not surprising that this story came at the very end of Rachel's interview. For one thing, in the end, we are all human. On some level, these nurses know that they are just as vulnerable as the patients they serve, whether or not that stays in their conscious awareness. This reality is the most painful part of the whole encounter that occurs between nurses and the patient's they serve – that they breathe, feel, fear just the same, and that they are mortal. In working toward acknowledging their limitations, or the fact that death could occur even despite the most competent care, the nurses were faced with the limitations of their own bodies, their own existence.

Distinction Amidst Suffering

Nurses who have taken on the challenge of working on the burn unit and stuck with it are often exceptional human beings. The physical, emotional, and sometimes spiritual demands of their work are tremendous. Just as burn units are often storied – spoken of in a hushed tone, so to speak – the data indicate that burn nurses are also given a special status. The fact that burn nurses can rise to the challenge of the burn unit gives them a certain distinction. Marie gave insight into the common response burn nurses get when they reveal what line of work they are in: "Whenever you tell somebody you're a burn nurse, they're like, ooh. Who could do that?"

The question posed to Marie, "who could do that," is a rhetorical one since, of course, Marie does "that". The status that this affords was not lost on Marie or the other nurses interviewed. They were aware of the "special case" of the burn unit and of the special status their willingness to engage with this context of suffering afforded them; they had achieved some Distinction Amidst Suffering. This theme of Distinction Amidst

Suffering is broken down into two components, Burn Insider versus Burn Outsiders and Nursing as Territorial.

Burn Insiders versus Burn Outsiders

There was a sense of cultural identity amongst burn providers that emerged from the data. It stemmed from an awareness of being a distinguished group of professionals and it had impact on a variety of levels. It distinguished new nurses from those with more experience, it distinguished burn nurses from other intensive care nurses, and it distinguished burn providers from the outside population – people who have never set foot on a burn unit, sometimes best represented by the participant's family members.

Alice seemed to understand how exceptional the circumstances were on the burn unit and that the work required a special kind of nurse:

> I mean, it's the worst thing ever. I would never, ever, ever wish on the most horrible person to get burned. They're so critical and they're in so much pain and it's very rewarding to know that I can be there and I'm a sensitive person. I like to think that I make them feel comfortable.

You can see from her use of the words "worst thing ever" and the almost superfluity of the choice to say "never, ever, ever" and "most horrible person" that burns are not just any injury. Joni had numerous quotes about the exceptionalism of burns, which add further emphasis to this idea. She says, "It's a world unlike any other. It's trauma unlike any other." and "I mean, people joke, they're like, traveling in the emergency room, they joke, they're like, "You haven't seen anything until you get to burns.""

Burns are unique injuries and thereby, the burn unit is a unique place. Joni was explicit in discussing the unique culture of a burn unit saying, "It's such it's own culture." She described her keen ability to identify an outsider: "Probably can tell when people who have never been up there… You can tell the minute the walk in, "you've

never been here." You can tell. Its bad, but you can." She kind of chuckled as she said this, revealing the sometimes harsh, tribal mentality of 'either you can hang or you can't.'

Marie talked about the insider/outsider mentality in terms of the initiation process for new nurses. She talked a lot about the timidity of new nurses in engaging with wound care:

> Someone has to do it, it has to be done, but when you've never seen it done it's like, people are scared to touch a burn. They're scared it's going to hurt. People are scared to pop a blister, it's going to hurt. I mean, people are so scared to touch it, but they don't want to touch any of it. It's like, they get medication for it, this has to be done for their… it just has to be done to the wound, otherwise it's going to get infected and they're not going to have as good of an outcome. You have to do those things.

Here you can sense her impatience with new nurses and you can see the crossroads for the nurses in training. Either they will be a Joni, willing to dive into the deep waters with their fellow nurses, or they will succumb to the horror of it.

This insider versus outsider mentality separated burn nurses from other kinds of intensive care nurses. Joni talked about her difficulty connecting with trauma nurses about her work:

> Every form of trauma is a different form of trauma. So I think it's hard to talk to… You know, I can talk to a trauma nurse about it. Two of my friends are trauma nurses. But they don't see what I see, and she's been a nurse for 14 or 15 years. She tells me… She goes, "I could never deal. What you see." She goes, "I sedate my patients." It's kind of an ongoing joke of I don't hear it. And that's part of it is they don't hear it. And I think that is something…"

When Joni talks about not "hearing it" in this quote, she is referring to patient's screaming. One starts to understand why it is so important to understand the details of what different nursing professionals do on a daily basis.

The participants often struggled to share about their work outsider of the unit, especially with close friends and family members, even though work was often on their minds. Joni experienced this tension most powerfully,

> I think the biggest thing I've realized is that it's hard to not talk about work. But I know that it's something that you can't talk about at the same time… because they don't understand… they don't' want to hear it… it's too heartbreaking to hear, or they tell you, "I can't listen." But I think that the need to say it is there more days than not. And I think that is probably the biggest thing that I've noticed is it's hard to put in a box when I'm not at work. And especially probably around loved ones just because it's such a part of my life that I want to share the triumphs of it. But it's hard to share because it's hard for them to hear it.

Burn nurses appear to have a keen sense that their experiences at work are best kept within the confines of the burn unit's walls. I felt this tension in the theoretical space between me and the nurses during the interviews. Marie did not talk about wound care in detail until toward the end of the interview. Any time the nurses did talk about wound care, I noticed they kept one eye on me – gauging my reaction.

Indeed, burn nurses are a distinguished group. This distinction comes at a cost, but is also a source of great pride. The nurses seemed to say in the interview, "this is not just what we do, this is who we are." They are changed by the trauma they witness and that change sets them apart in the world. Only others who have seen what they have seen can understand what they understand.

Nursing as Territorial

The participants saw distinctions between themselves and nurses in other disciplines, family members and friends, and the population at large. Interestingly, another theme that came through strongly was the ways in which they sought to distinguish themselves from their peers on the unit. Thus, I observed an insider versus

outsider mentality that brought cohesion to burn nurses as well as a territorialism within the unit that bred tension amongst them.

Territorialism amongst the nurses on the burn unit came out in the interviews to varying degrees and with slightly different motivating factors. Rachel endorsed this territorialism loud and clear,

> I mean, every patient that I have is my patient. Don't touch my patient without telling me what you're doing. Don't go in there and mess with my patient. Don't do it. Don't, unless I know what you're doing. So it's just kind of like I take it on…. Yeah, because I think that's a reflection of me as a nurse.

For Rachel, this was about having a strong sense of ownership for her work and wanting to manage her reputation with patients. At least outwardly, she didn't talk as much about having difficulty trusting her fellow nurses, though this was implied to an extent. In Joni's case, trust with colleagues challenged her, at times.

Joni reports being given a great deal of autonomy early in her experience on the unit because of her high level of competence. She explains that the respect she earned from superiors came between her and her fellow nurses:

> Then it became a precarious fine line of being the nurse, but being the go-to for physicians. You're living a double world. You're towing a very fine line that no one tells you about in nursing of don't piss off your counterparts. Don't piss off the people standing at the bedside next to you. Don't put yourself out there, but then what do you do when you are the only number that they call.

While Joni struggled to attain balance between being highly regarded by superiors and also having cooperative relationships with her counterparts, she also tended to have an approach of taking everything upon herself. She shared about her difficulty trusting other nurses to adequately care for patients and how this sometimes contributed to her inability to leave work at work.

Later on in the interview, when being asked about how counselors could help, Marie shared about the tensions that can arise between nurses.

> We have each other. You always have your tight little group of people who you can tell anything to. It's safe to tell, you can tell them that I hate that other nurse over there. She's just not any good. She just doesn't help at all. She's just useless, you know?

The same way that burn nurses may view themselves collectively as an in-group, with everyone else who has not experienced life on a burn unit as out-group, there also appears to be in and out groups with the unit itself.

The competition between colleagues for respect, both from patients and superiors, had a life all it's own. Burn nurses want to distinguish themselves, one from the other. Thus, while one might assume that the challenging aspects of the work come primarily from the direct care, my interviews suggest that relationships between employees may be just as capable of generating stress, if not more so.

Sharing Suffering

Even despite the tensions that grew out of the high stakes environment, there was something the burn nurses could provide for each other that no one else could, even nurses in other disciplines. At the end of the day, the nurses on the unit took comfort in knowing that a fellow burn nurse understood the things that outsiders could not. As I began to explore how counselors might be able to help burn nurses or what obstacles might exist in seeking help from a counselor, it became very clear that the participants needed someone who had been immersed in a context of suffering. This final theme of Sharing Suffering is about the importance of helpers standing beside burn nurses and sharing in their reality, getting their own felt sense of being present in that space.

The idea of Sharing Suffering by having counselors be present in the context of the burn unit had some very simple, practical justifications for the participants. Alice expressed her desire for counselors to come directly to the unit, stating, "It wouldn't be something where [nurses] would have to come and seek help." And Marie suggested, "If this was woven, somehow, into the time that [nurses are on the unit], even if it's for 15 minutes." There were lots of reasons given for why it would be most practical for burn nurses to have counselors supporting them on the job, including accessibility and convenience, and also the fact that burn nurses are depleted on their days off and do not want to have another appointment.

Most prominently, it became clear that burn nurses would only trust a burn "insider" to understand their world. This was obvious earlier on in the interviews as the participants talked about the strong and insular culture of burns. Then, when asked to speak directly to how counselors might be able to help, the particiapnts stated more explicitly that counselors would, ideally, have a personal appreciation of the context. Per Rachel:

> I would think to myself, if there were someone who were in this role, who talked to these patients, and goes in these rooms, and sees these white allograft on a black man's face, they'd have a greater understanding than someone in employee assistance…. I mean, I can explain it to you… But then you seeing it, we would get to skip that step. Then you would have a greater understanding because you would have seen these wounds, and these things. Because I had never seen anyone who was burned, and then you try to explain it to people, and they're like, "What? Shark skin? What? Dead people's skin? What are you doing?"

Part of the challenge, for Rachel, seems to be the highly technical nature of her work and how foreign some of the terms and experiences are to outsiders. She seems to see having a counselor who has experience on a burn unit as an added benefit, while for Joni, this

had more critical importance. Referring to one of the counselors in the team I was part of at the hospital, Joni says,

> I know that I could go to her any time because the last week, she has been coming to one of our pediatric dressing changes and doing mindfulness. This is the first time, though, that she has seen a dressing change to the extent that we're doing. But knowing that she's seen it, kind of makes her a little bit more of an avenue, oh hey, I can talk to her about it, because she's seen it. … At some point, have the nursing staff be aware that counselors, not only are present for the patients, but have them come in on a dressing change. Have them be there for something. And I realize that I'm asking all of you to live trauma with us, but, again, it's hard to talk about it with somebody who's never seen it.

It's obvious how validating it is to Joni for someone to witness her work, and how much more trusting she feels with someone who has "been a witness". She talks about how it would be easier to confide in someone who has seen what she has seen, but I get the sense, that there is something therapeutic even just in the fact of someone intentionally watching, seeing, witnessing what she endures. To heal from suffering, people must Share in Suffering.

Summary

The purpose of this study was to illuminate the lived experiences of burn nurses related to secondary traumatic stress and, ultimately, to better understand factors impacting help seeking as well as ways counselors can prepare to serve this population. First and foremost, what was gleaned about the participant's phenomenological experiences was that they were ones that occurred in a context of suffering and represented human reactions to that context. Ultimately, the intensity and specificity of the participant's phenomenological experiences made it such helping seeking only felt appropriate if the helper had experienced life on the unit first hand. The findings from

this research are a starting point in better understanding nurses working on burn units and ways that they may be best served by counselors.

CHAPTER 5: DISCUSSION

Summary of the Study

Chapter one of this dissertation introduces the reader to the topic of nurses and secondary traumatic stress, supported by a sampling of literature. The purpose of the study is explained and the phenomenological questions laid forth. Key definitions are provided. Delimitations and limitations of the study are reviewed. Finally, the introduction conveys how the study will be organized.

Chapter two is a comprehensive literature review on this dissertation topic, starting broadly with nurses in general and narrowing to focus on research done specifically on secondary traumatic stress in burn nurses. Related topics of focus include stress in the nursing profession, secondary traumatic stress in nurses, and the environment of the burn unit. Consequences of secondary traumatic stress for nurses are also reviewed to provide insight about the critical importance of this research.

Chapter three details the methodological approach to investigating the stated topic. First, the philosophy behind phenomenological research is explained. The chapter then provides enough detail such that one could replicate the study. Potential risks and benefits of the research, as well as ethical considerations are reviewed. Strategies used to promote the quality of the research are listed and explained, including a researcher reflexivity statement, bracketing, and an independent reviewer..

In the fifth chapter, results are compared to the existing literature on the topic. Implications for counselors are discussed. Limitations of the study are shared such that the reader can put the results in their proper perspective. The researcher suggests what future research may be needed given what this study revealed. Finally, the researcher

offers a concluding statement.

Findings Compared to Review of the Literature

The results of this study will now be compared against my review of the literature, as per recommendation by Moustakas (1994). Relating my results back to the literature review will give perspective on what has been reiterated or emphasized by this study, what has been called into question, and what new insights have emerged. This will provide context for moving into the implications for counselors and ideas for future research.

Secondary Traumatic Stress Scale

Though no conclusions can be drawn based on the results from the Secondary Traumatic Stress Scale as administered in this study, it raises a number of interesting questions when compared to some of the existing literature on the incidence of traumatic stress in nurses. Research indicates that secondary traumatic stress may vary based on age and years of experience, though the direction of this relationship is unclear (Berger et al., 2015; Gates & Gillespie, 2008; Mealer et al., 2009). In one study, PTSD was inversely related to years of experience and age (Mealer et al., 2009), while another study by Gates and Gillespie (2008) found that secondary traumatic stress was positively correlated with career length. Again, though the Secondary Traumatic Stress Scale was only used in this study to supplement and support the qualitative data, the variable of age and experience has not been isolated, and the results obtained are not generalizable, it is notable that the nurses with the most experience had the highest scores on the scale. Furthermore, the subtheme, Empowerment through Knowledge, under the overarching theme of Adaptation to Suffering, implies that earlier experiences on the unit, when the

participants had less knowledge, tended to be more traumatizing. These observations would further support that the direction of the relationship between age or years of experience and secondary traumatic stress is unclear.

Suffering

The common thread of suffering in the themes that emerged from the data is one that relates back to seminal works that focus on the centrality of suffering in the human experience. Victor Frankl (1984), a Holocaust survivor, shed light on the ways that human beings can survive unimaginable suffering such as was present in concentration camps in his book, Man's Search for Meaning. He emphasized the critical importance of finding meaning and purpose in experiences, much like the nurses in this study did. Indeed, exploration of the human encounter with profound suffering is not new.

Suffering as Context

The literature captures well and comprehensively that nurses work under highly stressful conditions (Boniface et al., 2016; Theme Filha et al., 2013). There are a large number of studies that capture the various factors that make nursing work so stressful, including the realities of shift work, low pay, the medical hierarchy, musculoskeletal pain from lifting, and sick or dying patients and their struggling loved ones (Boniface et al., 2016; Sharma et al., 2014; Stolt et al., 2016; Theme Filha et al., 2013). The existing research gives consumers a sense of the particular challenges that exist for nurses, challenges that were acknowledged by the participants in this study.

The qualitative research that has been done starts to bring forth a more essential understanding of what all of these contextual factors actually feel like to experience (McGibbon et al., 2010; Sheppard, 2015). In a qualitative study done by Sheppard

(2015), themes emerged from interviews that touch on the sweeping depravity that can exist in nursing environments, themes such as “life is unfair” and “endless suffering”. In the results of McGibbon et al.’s (2010) study, it’s noted that the word “suffering” is used repeatedly. Thus, the idea of suffering being a factor in nursing work is not new.

While these studies begin to touch on the strong presence of suffering, they do not capture the centrality of it in many nursing contexts. It is described as an element, but not as *the* element. This research brings together the factual knowledge about stress and trauma in nursing environments with the awareness of the prevalence of suffering that exists. It also takes the next step to acknowledge that suffering can often be the context in which nurses operate, particularly for nurses who work on burn units.

Adaptation to Suffering

There are counterparts to the overarching theme of Adaptation to Suffering and the components that make up this theme, (Meaning Making, Empowerment through Knowledge, Compartmentalization, Enjoying Wound Care, and Preparedness to Restlessness) in the existing literature. The research that has been done on nurses and secondary traumatic stress, and particularly the qualitative research, does deal with the various ways that nurses cope with, react to, or make sense of their environment, whether or not these processes are referred to as adaptive (Jenkins & Baird, 2002; McGibbon et al., 2010; van der Wath et al., 2013; Walsh & Buchanan, 2011). The results described under this theme are not necessarily new phenomena, but they are reframed in a different way.

Jenkins and Baird (2002) discussed how empathizing with patients can promote the meaningfulness of the work, similar to the findings described in the subtheme of

Meaning Making. Van der Wath et al.'s (2013) study included findings about emotional distancing, which could also be considered compartmentalization. The study done by McGibbon et al. (2010) captured ways that busyness can be protective in the moment in that it prevents nurses from having to process what they are witnessing. This study adds further support for the existence of these types of mechanisms.

One thing that the existing research starts to attend to without fully naming is the potential inappropriateness of pathologizing nurses' responses to their context. Walsh and Buchanan (2011) noted that nurses experienced shame secondary to describing their tendency to distance themselves emotionally from their patients. Sheppard (2015) discovered that nurses found the term compassion fatigue stigmatizing, as if they should or are expected to be able to access compassion in their work at all times. Naming the related theme in this study, Adaptation to Suffering, was done with thoughtfulness and intention. Using the word adaptation is intended to be consistent with our evolving collective awareness of trauma and the notion that conditions such as Post Traumatic Stress Disorder or the related Secondary Traumatic Stress are normal reactions to abnormal circumstances (SAHMSA, 2014). The emphasis is placed on the abnormality of the circumstances rather than the person. This research focused on the adaptive nature of trauma responses, whatever form they take, more than has previously been done in the literature.

Unsurprisingly, in the previous research that has been done dealing specifically with burns nurses, the focus has been on the salience of wound care and the act of inflicting pain on patients (Davidson & Noyes, 1973; Hilliard & O'Neill, 2010; Nagy, 1998; Sandroff, 1983). Though this study was similar in that responses spoke to the

salience of wound care and inflicting pain for burses nurses, and though many of the same findings emerged around the tendency to compartmentalize, there were new revelations about the ability of nurses to enjoy wound care. This finding may expose something about the way that questions have been asked in previous studies, what assumptions may have come into play on the part of the researcher, or the permission burn nurses sense that they do or do not have to speak to this experience.

Another finding from this study that I did not find an apt comparison for in the literature was the subtheme of Empowerment through Knowledge. Though there were studies that looked at whether or not age or years of experience made any difference in outcome for symptoms of secondary traumatic stress or related phenomena (Gates & Gillespie, 2008; Mealer et al., 2009), I was not able to find studies that talked about knowledge as a protective factor or as an adaptive mechanism. Though one may presume that years of experience would be synonymous with increased knowledge, there may be other variables related to years of experience such as desensitization or symptoms of burnout. It is important that the role of knowledge is parsed out in the literature.

Suffering the Reality of Limitations

Similar to the idea of it being difficult to come face-to-face with the limits of one's ability to help a suffering person, there were studies in the literature that found nurses tend to vacillate between feeling empowered and feeling helpless (Hilliard & O'Neill, 2010; Kellogg et al., 2014; Martins et al., 2014; Nagy, 1998). In this study it was certainly true that circumstances where nurses were capable of impacting change and could be useful gave them more opportunities to exercise their adaptive mechanisms. Conversely, the more limited they were in their ability to change an outcome or save a

patient, the more directly they experienced the pain and vulnerability of the suffering around them.

In theory, the objective for nursing is to keep patients alive and to move them toward healing, and this can make death much harder for nurses. One study by Mealer et al. (2009) sought to clarify which of the events intensive care unit nurses experienced as the most traumatizing. They found that the participants tended to identify experiences involving patient death. In particular, 50% were most traumatized by not being able to save a patient, 29% by seeing a patient die, and 36% by performing futile care (Mealer et al., 2009). This study adds more insight into the particular ways that nurses deal with patient death and the various ways it triggers an awareness of their limitations.

Distinction Amidst Suffering

What connects the theme of Distinction Amidst Suffering most to the existing literature is the fact that research has been done focusing on specific nursing specialties. Because research focuses on different nursing specialties, we can assume issues in each may be distinct. The research comparing various nursing specialties indicates that the location where a nurse works can make a difference in the level of stress (Sharma et al., 2014; Yu et al., 1989). The results from this study support that argument, as the participant's expressed how burn units are often exceptionally stressful and traumatizing places to work. This research then takes this a step further, bringing forth the idea that a sense of distinction can be derived from working in places that are commonly considered extremely stressful. Nurses on burn units truly are a kind of war hero, though we may not have thought of them this way before.

The subthemes under Distinction Amidst Suffering, including Burn Insiders

versus Burn Outsiders and Nursing as Territorial, were concepts that I could not find clear comparisons to in the literature. This may have been in part due to the lack of available research specifically focused on burn nurses. Certainly there is understanding of similar phenomena demonstrated in the literature on group dynamics, phenomena related to an in-group, out-group mentality or about tension in intraprofessional relationships. Still, this study brings new understandings about the culture that exists on burn units and the kind of fierce territorialism that burn nurses may have toward their patients.

Sharing Suffering

It is clear in reviewing the literature that these nurses are uncertain who they can share their experiences with and to what extent (Cronin, 2001; Hilliard & O'Neill, 2010; Sandroff, 1983). For burn nurses in particular, one of the biggest barriers to sharing about struggling with their work is the tendency to get intense negative reactions from family members or friends due to the sometimes graphic and disturbing nature of the work (Sandroff, 1983). Other studies indicate that stigma and lack of time are significant barriers (Berger et al., 2015; Cares et al., 2015; Galbraith et al., 2014). The participants in this study spoke to these very same barriers.

The results from this study further aligned with the existing research in that nurses were hesitant to seek support from someone who had not been in similar circumstances (Cronin, 2001; Hilliard & O'Neill, 2010) and wanted more mental health support through their institution (Kellogg et al., 2014; Walsh & Buchanan, 2011). The theme of Sharing in Suffering had everything to do with participants desiring help from someone who had witnessed their work and operated within their domain. Though this may have been

biased by the fact that these were nurses who had experienced an integrated care model in which counselors were actively engaged on the unit, it is notable that having experienced this, the nurses could confirm that it was helpful.

Implications of the Findings for Counselors

Counselors might see this research and the existing literature on secondary traumatic stress amongst nurses and simply recognize the presence of a problem. Despite the large and growing nursing population, the scope of the challenges nurses face, and the fact that they make daily contact with some of the most vulnerable among us, the counseling literature has almost nothing to say about providing care for nurses. It is time for counselors to turn their attention toward the needs of nurses.

In order to effectively treat nurses working on burn units, this research suggests counselors need to have an appreciation for the work that burn nurses do and for the culture that exists. Without this understanding counselors may misjudge or misinterpret phenomena such as enjoying wound care. Counselors who are uninformed regarding what life may be like on a burn unit may tend to pathologize responses that are appropriate and even normal in a context of suffering.

Counselors working with nurses will need to stay vigilant to the fact that nurses may have a tendency to shield them from some of the more disturbing aspects of their work for fear of shocking them. Nurses may take this approach after many experiences of being told by friends and family that the details of their work are too upsetting to be shared. Counselors can work to identify when this may be happening and promote an environment where nurses feel comfortable sharing. Doing so requires counselors to gain tolerance for hearing about the human body at its most vulnerable. While counselors are

skilled at excavating the emotional and psychological landscape of human existence, they are often shielded from the realities of the body.

Though gaining knowledge about and learning to tolerate hearing about work on a burn unit are important steps, they may not be sufficient. As was clearly evident in the data, what nurses crave most is a true witness, someone who can literally be present in the spaces that they occupy. Opportunities for counselors to occupy nursing spaces will become more available as integrated care models take hold (Crowley & Kirschner, 2015). In circumstances where counselors are permitted access to burn units, they should consider attending not only to the patients, but also to the nurses.

This research may challenge counselors to explore difficult questions about their ability to be effective in treating individuals who have experienced something so vastly outside the range of their personal experience. While counselors may dismiss the notion that they can only help individuals regarding challenges they have themselves experienced, we must also consider that there may be utility in having gone to the places of suffering our clients are coming from. In order to help burn nurses, counselors may need to gain more exposure to life on a burn unit.

However, as the participants of this study pointed out, it may not be enough for counselors to work in hospitals or medical facilities that house burn units. It appears as if there is value to counselors observing the work that burn nurses do, smelling what they smell, seeing what they see, hearing what they hear. Doing so gives counselors a deeper understanding of the experiences burn nurses are having and it also gives counselors more legitimacy with the nurses, who may then be more inclined to seek help from them. Burn nurses who know that counselors have been a “true witness” may be less likely to

shield counselors from the realities of their work.

Counselors will need to consider how they can adjust services to meet the needs of burn nurses, and this may mean being flexible and adaptable. Based on the recommendations from nurses in this study, a more "on the go" style of counseling may be the most appropriate and accessible format. Counselors need to be where nurses are and accommodate their work culture. Integrated care models allow for the opportunity.

Counselors who are uninterested or unable to work in the context of integrated care should consider the kinds of issues raised by burn nurses in these interviews. They can stay aware of the level of suffering that burn nurses witness, be cautious not to stigmatize the compartmentalization that burn nurses often use to cope, and focus on how nurses can better transition from the intensity of their workday to the comfort and safety of their homes. Perhaps the single most important way counselor can incorporate the findings from this study into their work is to acknowledge and understand the realities of the environment burn nurses work in, and to normalize the various responses to that environment.

Limitations of the Study

The biggest limitation of this study is the small sample size – small even for a qualitative study. Only four interviews were completed after significant difficulty recruiting and despite amendments submitted to the Institutional Review Board to enhance recruitment and broaden the pool of eligible nurses. Further compounding the issue of small sample size is the fact that the participants interviewed were all white, heterosexual women working at one burn center, in one part of the United States. More participants, greater diversity amongst those participants, and recruiting from different

hospitals would have strengthened this research.

The fact that participants were all recruited from the same hospital meant that they were all referring, not necessarily to the context of burn units in general, but to the context of the burn unit at this particular hospital. Even though the participants were experiencing this context through their own subjective lens, there was likely overlap in the patients and scenarios they were encountering. The themes that emerged from the data may, therefore, be more representative of the particular burn unit than burn units in general.

The researcher's previous role on the burn unit from which the participants were recruited may have limited the research in some ways and strengthened it in others. Two of the participants were well known to the researcher, while the others became known during recruitment. Having a previous relationship with participants may have added to the overall richness of their responses because they may have felt safer to share. Conversely, and dependent upon the individual, a previous relationship may have impeded full disclosure because of an investment in staying in good favor.

Suggestions for Future Research

While this study addresses a gap in the literature around secondary traumatic stress in nurses who work on a burn unit, it is only a starting point. More research is needed to understand how secondary traumatic stress presents in burn nurses and how best to treat it. Quantitative studies are needed looking across burn centers to understand the scope of the issue and more qualitative research is needed to capture nuances of the phenomenon

Nurses in this study confirmed that burn injuries are unique and that being a nurse on a burn unit is a unique experience. Limited studies exist looking specifically at the

emotional impact of providing nursing care on a burn unit, and most of the ones that do exist are outdated. More research is needed parsing out this specialty and understanding the nuances of the burn unit experience.

One of the questions raised in the review of the literature and in reviewing the data from this study was around the relationship between age and experience, and the incidence of secondary traumatic stress. The literature had conflicting results in regards to this relationship. In this study, results from the secondary traumatic stress scale, though the sample was far too small to make anything of these results, suggested more experience correlates with higher levels of secondary traumatic stress. The qualitative data in this study suggested a more nuanced relationship. It seemed early experience on the burn unit was most troubling, though longevity could cause cumulative stress. Perhaps a structural equation model would help to clarify the relationship between age and years of experience and the incidence of secondary traumatic stress, as there may be an intermediary variable.

Data obtained from burn centers clearly indicates that burn injuries are becoming significantly more survivable with increases in knowledge and technology (Brusselaers et al., 2005; Bull & Squire, 1949). Some of the data obtained in this study would suggest that the increase in survivability of burn injuries may mean more complex ethical questions and more traumatizing patient interactions for nurses working on burn units. More research is needed to better understand how these trends impact the emotional health of nurses.

Sandroff (1983) raised the question of whether or not there is such thing as a healthy adjustment to the kind of work that nurses on a burn unit are required to perform.

Though this research has revealed much about the adaptations that burn nurses might make in order to cope, more understanding is needed about which of these mechanisms may be more harmful or which may bode well for overall health. If there are coping mechanisms that may be more beneficial for nurses to employ, counselors could then focus on enhancing these skills in working with burn nurses.

This study did not reveal anything about addiction in burn nurses directly, though there may have been something to this omission. Indirectly, one may have learned that it is not to be talked about. Of course, it may be that none of the participants engaged in use or abuse, or that the participants did not see their use as relevant to the topic or prompts. Still, given the statistics about risky use in particular, it is notable that it did not come up once. Research is needed directly addressing the presence of risky use or addiction amongst burn nurses.

Conclusion

The purpose of this study was to illuminate the lived experiences of burn nurses related to secondary traumatic stress and, ultimately, to better understand factors impacting help seeking as well as ways counselors can prepare to serve this population. Much was learned from the four participants who engaged in interviews. The centrality of suffering for nurses working on a burn unit was the most critical finding. All other observations came from a basic understanding that the nurses worked in a context of suffering. From this context, they learned to adapt, grappled with death, and came to recognize that they were a distinguished group of professionals. They asked for counselors to join them, to share in this context of suffering such that they could more fully trust a counselor's ability to sit with the truth they experienced day after day.

The hope is that this is the beginning of more collaboration and engagement between the professions of nursing and counseling. Nurses are consummate caregivers to an extent that we may forget they need care too. They may even forget they need care. If nurses are not well, it is hard to expect them to provide care for the most vulnerable among us for hours on end, without breaks. Indeed, caring for nurses is caring for the vast number of people served by nurses.

Beyond discovering how counselors can better serve nurses, there is so much that counselors can learn from nurses about caring for others. Counselors may find they are humbled by the work that nurses on a burn unit do and this humbleness can serve as a wonderful teacher. It may teach counselors about a different type and level of vulnerability that can only come from the kind of contact nurses make with human bodies. It may teach counselors about the remarkable resilience of the human spirit, with an endless ability to adapt. It may bring counselors closer to understanding their own existential angst and that of others. These were certainly among the many gifts that I received from my time on a burn unit.

The nurses on the burn unit where this research was conducted are my heroes. I look up to them as inspirations, representing the best of what is quintessentially feminine. I respect them and their remarkable grit immensely. I see them as survivors perhaps because I do not fully understand how they do what they do. This inability to understand moved me toward conducting this research. My hope is that I can offer them something in return for all that they have taught me.

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APPENDIX A: REFERRAL CRITERIA FOR TREATMENT AT AN ACCREDITED BURN CENTER

According to the American Burn Association (2006), criteria for referral to an accredited burn center include the following:

(1) Partial thickness burns greater than 10% total body surface area (TBSA).
(2) Burns that involve the face, hands, feet, genitalia, perineum, or major joints.
(3) Third degree burns in any age group.
(4) Electrical burns, including lightening injury.
(5) Chemical burns.
(6) Inhalation injury.
(7) Burn injury in patients with preexisting medical disorders that could complicate management, prolong recovery, or affect mortality.
(8) Any patient with burns and concomitant trauma (such as fractures) in which the burn injury poses the greatest risk of morbidity or mortality.
(9) Burned children in hospitals without qualified personnel or equipment for the care of children.
(10) Burn injury in patients who will require special social, emotional, or rehabilitative intervention.

APPENDIX B: WFBMC IRB APPROVAL

MEMORANDUM

To: Laura Veach, Ph.D.
Surgery Trauma

From: Chair, IRB # 1
Institutional Review Board

Date: 2/3/2017

Subject: Human Protocol: IRB00041569
Lived experiences of nurses on a burn unit related to secondary traumatic stress.

Study Documents:
Protocol Version: shearer_dissertation_wakeIRBprotocol.doc; Informed Consent Version: shearer_dissertation_informedconsent.docx; Advertisements: shearer_dissertation_recruitmentemail.docx, shearer_dissertation_targetedrecruitmentemail.docx; Other Documents: shearer_dissertation_participantforms.docx

The Institutional Review Board (IRB) has approved the above-named protocol and study documents, after review at a convened meeting on 1/30/2017. A submission requesting renewal together with a summary progress report must be submitted to the Board at least one month prior to 1/30/2018.

This application indicates that advertising materials will be used for research purposes. Please consult with Creative Communications to ensure the appropriate visual identity is put forth.

A waiver for the requirements of signed consent and HIPAA authorization have been granted by the IRB for preliminary screening purposes.

Federal regulations and Board policy require that you promptly report to the Board for review/approval:

- Proposed changes in the research activity (e.g., protocol amendments; consent form revision; advertisements). Changes may not be initiated without IRB review and approval, unless necessary to eliminate an immediate hazard to subjects.

- Serious adverse events and unanticipated problems involving risks must be reported to the Board, institutional officials, FDA, sponsor and other regulatory agencies as required by the protocol, local policy and state or federal regulation.

Please provide a final report to the Board when the project is completed and Board approval can be terminated.
This IRB is in compliance with the requirements in Part 56, Subchapter D, Part 312 of the 21 Code of Federal Regulations published January 27, 1981 and Part 46, Subpart A of 45 CFR published January 26, 1981.

Sally A. Bulla, PhD, RN

Sally Bulla

APPENDIX C: UNCC IRB AGREEMENT WITH WF

To: Lindsay Shearer Counseling

From: Office of Research Compliance

Date: 2/15/2017 **Expiration Date of Approval by External IRB:** 1/30/2018 **RE**: Agreement to Rely on External IRB **External Organization: Study #:** 16-0974

Study Title: Lived experiences of nurses on a burn unit related to secondary traumatic stress.

This confirms that an IRB Authorization Agreement with the organization identified above has been executed to rely on their IRB for continuing oversight of this study. This agreement specifies the roles and responsibilities of the respective entities. The agreement has been uploaded to the Attachments section of the submission.

Study Description:

Nursing is a large and growing profession. Nurses provide a critical service to patients and families, often in highly stressful work environments (McGibbon, Peter, & Gallop, 2010; Theme Filha, Costa, & Guilam, 2013). The stressful nature of nursing work, and particularly the intense suffering nurses witness, puts nurses at risk for secondary traumatic stress (Beck & Gable, 2012; Morrison & Joy, 2016). Secondary traumatic stress is defined as the "natural consequent behaviors and emotions resulting from knowing about a traumatizing event" or "the stress resulting from helping or wanting to help a traumatized or suffering person" (Figley, 1995, p. 7). Nurses working on burn intensive care units face particularly traumatic content (Hilliard C & O'Neill M, 2010; Kellogg, Barker, & McCune, 2014; Martins et al., 2014), though have not been the specific focus of a study looking at secondary traumatic stress. This proposal is for a phenomenological qualitative study, using in-depth interviews with six nurses working at an accredited burn center in the Southeastern United States. Interviews will be transcribed and then analyzed using Moustakas' (1994) methods of textural and structural descriptions.

It is your responsibility to:

1. Inform the UNC Charlotte IRB about any actions by the external IRB affecting their approval to conduct the study, including suspension or termination of approval.

2. Submit a modification to the UNC Charlotte IRB (via IRBIS) if/when new personnel are added to the study team or the study is modified in such a way that additional institutional approvals are required (e.g., radiation safety, biosafety).

3. Submit a copy of the external IRB approval letter and current approved consent document to the UNC Charlotte IRB (via IRBIS) when the study is renewed; you will continue to receive reminder notices from the UNC Charlotte IRB for renewal, and

should provide the external approval and consent documents within 30 days of receipt.

4. Report all Unanticipated Problems protocol violations and unresolved subject complaints to the UNC Charlotte IRB *in addition to the external IRB*. You may submit a copy of the report you submitted to the external IRB; this should be done via the IRBIS UP reporting pathway.

5. Maintain compliance with all other UNC Charlotte policies (e.g., data security, conflict of interest).

CC: John Culbreth, Counseling

APPENDIX D: RECRUITMENT E-MAIL

Dear Nurses,

I am writing to invite your participation in a research study examining what it's like to be exposed to traumatic events as a nurse working on a burn unit. This research study is the topic of my dissertation and is being conducted as part of the final requirement for the completion of my doctoral degree.

I spent over two years working on the Wake Forest Baptist Medical Center Burn Center developing programming to ensure universal patient screening for Post Traumatic Stress Disorder (PTSD). Despite the initiative to focus on patients, I found myself turning my attention toward the experiences of the nursing staff. I observed everything from changing out bed sheets to lengthy wound care procedures and was struck by the traumatic nature of the work.

As a normative response to witnessing traumatic content, and I emphasize the word normative, many people will find themselves experiencing intrusive thoughts or images related to what they have seen or heard about; some may feel on edge or high alert; some may have nightmares about it; some may avoid any reminders if possible; some may, more generally, feel more disconnected from others or have a change in how they see the world – sensing that the world is less safe. For example, nurses working on a burn unit may experience a great deal of worry over getting burned themselves.

If you're interested in talking, confidentially, about how these kinds of reactions impact you, please contact me to find out if you are eligible. Participating in this study will mean sitting down with me for an hour and a half to talk about how you experience working with traumatic content and how, or if, counselors can best serve you. The interview will be audio-recorded, though this recording will be kept secure, with any identifying information connecting you back to that recording removed. There will be some follow-up contact as well, mostly likely by phone.

If you're interested in hearing more about the study or want to participate, please contact me by email, or by phone, (443)454-3030.

In any regard, thank you for the important work that you do.

My best,

Lindsay M. Shearer, MS, LPC, NCC

APPENDIX E: TARGETED RECRUITMENT EMAIL

Dear (Insert Nurse's First Name),

You may or may not have had a chance to read about the research study I am conducting on secondary traumatic stress in nurses working with burn patients. If you have already and are not interested in participating, please disregard this e-mail. Otherwise, I wanted to be sure to draw your attention to this opportunity, as I believe you could make a valuable contribution as a participant. The original e-mail describing the details of the study is attached here for review. Please contact me by email lshearer@wakehealth.edu or by phone (443)454-3030 if you are interested in learning more.

Thank you,

Lindsay M. Shearer, MS, LPC, NCC

APPENDIX F: WFBMC IRB AMENDMENT APPROVALS

MEMORANDUM

To: Laura Veach, Ph.D.
Surgery Trauma

From: Protocol Analyst, Institutional Review Board

Date: 3/14/2017

Subject: Human Protocol: IRB00041569
Lived experiences of nurses on a burn unit related to secondary traumatic stress.
Amendment 1 for IRB Study #IRB00041569

Study Documents:
Protocol Version: shearer_dissertation_wakeIRBprotocol_ammendment1.doc; Informed Consent Version: shearer_dissertation_informedconsent.docx (approved); Advertisements: shearer_dissertation_flyer.docx, shearer_dissertation_recruitmentemail.docx, shearer_dissertation_targetedrecruitmentemail.docx; Other Documents: shearer_dissertation_participantforms.docx, shearer_dissertation_transcriptionservice_signedconfidentialityagreement.pdf, shearer_dissertation_transcriptionservice_signednondisclosureagreement.pdf

The amendments listed below have been approved in accordance with HHS regulations for the protection of human research subjects that provides for the expedited review and approval of minor changes in previously approved research [45 CFR 46.110(b)(2)]. This action of the Board does not extend the term of approval for this protocol.

The amendment includes the following:

(1) Eligibility criteria currently states that participants must have been working on the burn unit for at least a year. The change requested is that participants only will need to have worked with burns for 6 months.
(2) The co-investigator will enhance recruitment techniques to include attending scheduled nurse gatherings on-site at Wake Forest Baptist Medical Center (i.e. burn rounds, shared governance) to talk about the research and posting flyers in shared nursing areas (nursing stations, break rooms, conference rooms).
(3) The co-investigator will use a transcription service called rev.com rather than transcribing the interviews by hand.
(4) Language was changed in the last sentence of "Sample Size" section of protocol document to state that the study "may" proceed with 3 participants, rather than stating that the study "will" proceed.

This research meets the criteria for a waiver of HIPAA authorization according to 45 CFR 164.512.

A waiver for the requirements of signed consent and HIPAA authorization have been granted by the IRB for preliminary screening purposes.

This IRB is in compliance with the requirements of Part 56, 21 Code of Federal Regulations published as of April 1994 and Part 46, Subpart A of 45 CFR published January 26, 1981.

Jeannie Sekits

MEMORANDUM

To: Laura Veach, Ph.D.
Surgery Trauma

From: Protocol Analyst, Institutional Review Board

Date: 3/30/2017

Subject: Human Protocol: IRB00041569
Lived experiences of nurses on a burn unit related to secondary traumatic stress.
Amendment 2 for IRB Study #IRB00041569

Study Documents:
Protocol Version: shearer_dissertation_wakeIRBprotocol_ammendment2.doc; Informed Consent Version: shearer_dissertation_informedconsent.docx (approved); Advertisements: shearer_dissertation_flyer.docx, shearer_dissertation_recruitmentemail.docx, shearer_dissertation_targetedrecruitmentemail.docx; Other Documents: shearer_dissertation_participantforms.docx, shearer_dissertation_transcriptionservice_signedconfidentialityagreement.pdf, shearer_dissertation_transcriptionservice_signednondisclosureagreement.pdf

The amendments listed below have been approved in accordance with HHS regulations for the protection of human research subjects that provides for the expedited review and approval of minor changes in previously approved research [45 CFR 46.110(b)(2)]. This action of the Board does not extend the term of approval for this protocol.

The amendment includes the following:

-Participants working on a PRN basis may now be included if they previously worked full-time and their combined experience is at least 6 months.

A waiver for the requirements of signed consent and HIPAA authorization have been granted by the IRB for preliminary screening purposes.

This IRB is in compliance with the requirements of Part 56, 21 Code of Federal Regulations published as of April 1994 and Part 46, Subpart A of 45 CFR published January 26, 1981.

Jeannie Sekits

APPENDIX G: RECRUITMENT FLYER

Seeking Full-Time Nurses on the Burn Unit for Research on Secondary Traumatic Stress

Secondary traumatic stress is defined as the "natural consequent behaviors and emotions resulting from knowing about a traumatizing event" or "the stress resulting from helping or wanting to help a traumatized or suffering person. (Figley, 1995, p. 7)

If you are interested in spending some time talking *confidentiality* about how secondary traumatic stress impacts you as a nurse working on a burn unit, please contact **Lindsay M. Shearer**, MS, LPC, NCC by email at lshearer@wakehealth.edu or by phone at (443)454-3030.

APPENDIX H: PARTICIPANT SCREENING

(1) Do you work on the burn unit full-time?
(2) Have you worked on the burn unit for at least a year?
(3) Do you identify with any of the symptoms described in the recruitment email? Here is a list of those:
-Experiencing intrusive thoughts or images related to what you have seen or heard about.
-Feeling on edge or high alert.
-Having nightmares about work.
-Avoiding reminders of disturbing things you have seen or heard about.
-Feeling disconnected from others or experiencing a change in how you see the word (i.e. less safe).

APPENDIX I: AMENDED PARTICIPANT SCREENING

(1) Do you work on the burn unit full-time?
(2) Have you worked on the burn unit for at least six months?
(3) Do you identify with any of the symptoms described in the recruitment email? Here is a list of those:
-Experiencing intrusive thoughts or images related to what you have seen or heard about.
-Feeling on edge or high alert.
-Having nightmares about work.
-Avoiding reminders of disturbing things you have seen or heard about.
-Feeling disconnected from others or experiencing a change in how you see the word (i.e. less safe).

APPENDIX J: PARTICIPANT FORMS

✓ **Phone Screening Data**:

1) Do you work on the burn unit full-time? Yes/No *(Circle one)*
2) Have you worked on the burn unit for at least a year? Yes/No *(Circle one)*
3) Do you identify with any of the symptoms described in the recruitment email? *(Check any that apply)*:

❑ Experiencing intrusive thoughts or images related to what you have seen or heard about.
❑ Feeling on edge or high alert.
❑ Having nightmares about work.
❑ Avoiding reminders of disturbing things you have seen or heard about.
❑ Feeling disconnected from others or experiencing a change in how you see the word (i.e. less safe).

✓ **Signature obtained on Informed Consent document**: Yes/No *(Circle one)*

✓ **Copy of Informed Consent document provided to participant:** Yes/No *(Circle one, If no, provide explanation here)*

✓ **Demographic Questionnaire Data**:

1) How old are you? _____
2) How do you identify in terms of your gender? _____
3) How would you describe your race or ethnicity? _____
4) Do you have children? _____
5) What are your nursing credentials? _____
6) How many years of experience do you have working as a nurse? _____
7) How many years or how long (approximately) have you been working with burn patients? _____
8) What is an estimate of your caseload percentages in terms of working with pediatric burns versus adult burns?

   % pediatric _____

   % adult _____

✓ **Secondary Traumatic Stress Scale** *(Follow instructions listed)*:

SECONDARY TRAUMATIC STRESS SCALE

The following is a list of statements made by persons who have been impacted by their work with traumatized clients. Read each statement then indicate how frequently the statement was true for you in the past **seven (7) days** by circling the corresponding number next to the statement.

NOTE: *"Client" is used to indicate persons with whom you have been engaged in a helping relationship. You may substitute another noun that better represents your work such as consumer, patient, recipient, etc.*

	Never	Rarely	Occasionally	Often	Very Often
1. I felt emotionally numb……..	1	2	3	4	5
2. My heart started pounding when I thought about my work with clients……..…	1	2	3	4	5
3. It seemed as if I was reliving the trauma(s) experienced by my client(s)……..	1	2	3	4	5
4. I had trouble sleeping……..	1	2	3	4	5
5. I felt discouraged about the future……..	1	2	3	4	5
6. Reminders of my work with clients upset me……..	1	2	3	4	5
7. I had little interest in being around others……..	1	2	3	4	5
8. I felt jumpy……..…	1	2	3	4	5
9. I was less active than usual……..…	1	2	3	4	5
10. I thought about my work with clients when I didn't					
11. I had trouble concentrating……..	1	2	3	4	5
12. I avoided people, places, or things that reminded me of my work with clients…….	1	2	3	4	5
13. I had disturbing dreams about my work with clients……..	1	2	3	4	5
14. I wanted to avoid working with some clients……..	1	2	3	4	5
15. I was easily annoyed……....	1	2	3	4	5
16. I expected something bad to happen……....	1	2	3	4	5
17. I noticed gaps in my memory about client sessions……..…	1	2	3	4	5

Intrusion Subscale (add items 2, 3, 6, 10, 13)	Intrusion Score	_____
Avoidance Subscale (add items 1, 5, 7, 9, 12, 14, 17)	Avoidance Score	_____
Arousal Subscale (add items 4, 8, 11, 15, 16)	Arousal Score	_____
TOTAL (add Intrusion, Arousal, and Avoidance Scores)	Total Score	_____

Citation: Bride, B.E., Robinson, M.R., Yegidis, B., & Figley, C.R. (2004). Development and validation of the Secondary Traumatic Stress Scale. *Research on Social Work Practice, 14,* 27-35.

- ✓ **Interview Prompts** *(For Co-PI's reference)*:

Tell me about yourself.
What made you decide to become a nurse?

What made you decide to work with burns?
Tell me about your experience working on the burn unit.
Describe what it means to you to experience secondary traumatic stress.
Follow up: Describe a specific experience of a situation that triggered secondary traumatic stress.
Follow up: How does witnessing the trauma and suffering of patients impact you?
How might a counselor assist you in dealing with feelings that come up in your work as a nurse on a burn unit?
What would make you seek help from a counselor?
What would get in the way of seeking help from a counselor?
How could a counselor better serve you in dealing with your work as a nurse in a burn unit?

- ✓ **Any safety issues or reason to break confidentiality presenting?** *(If yes, documentation of presenting concerns and actions provided here):*

- ✓ **Researcher Impressions from interview** *(Informal notes)*:

- ✓ **Follow-up completed providing results for STSS and resources**: Yes/No *(Circle one), By phone/In person (Circle one), Include brief narrative of interaction here*

- ✓ **Transcription**:

- ✓ **Audio recording destroyed**: Yes/No (Circle one, If yes, include date, If no, include reason)

- ✓ **Member check completed**: Yes/No *(Circle one)*

- ✓ **Changes requested by participant during member check?** Yes/No *(Circle one, If yes, provide description here)*:

- ✓ **All non de-identified data destroyed**: Yes/No (Circle one, If yes, include date)

APPENDIX K: LINKAGE FILE SAMPLE

Participant's Full Name	**Code Name**	**Reason Screened Out (If Applicable)**	**Preferred e-mail address**	**Preferred phone number**	**Leave VM?**
e.g. Joe Smith	e.g. P1E		jsmith@gmail.com	(xxx)xxx-xxxx	yes
e.g. Sarah Wright	e.g. P2SO	e.g. Has not worked with burn patients for a year			

**All participants screened over the phone will be listed here in chronological order based on the time of first contact. The code name will include "E" at the end for participant's who ultimately enroll in the study. The code will include "SO" at the end for participant's who were screened out or did not ultimately enroll. For those participants who screened out, the reason they were screened out will be listed in the last column.*

APPENDIX L: INFORMED CONSENT

LIVED EXPERIENCES OF NURSES ON A BURN UNIT RELATED TO SECONDARY TRAUMATIC STRESS

Informed Consent Form to Participate in Research

Lindsay M. Shearer, MS, LPC, NCC, Co-Principal Investigator

INTRODUCTION

You are invited to participate in a qualitative research study looking at the impact of traumatic experiences encountered by nurses caring for burn patients, and seeking to better understand how counselors can help. This research is being conducted as part of the researcher's doctoral dissertation for a doctorate in counseling from the University of North Carolina at Charlotte. Qualitative research typically involves a smaller number of participants, more engagement with the researcher, and a focus on gaining in-depth information from the participants. The researcher aims to recruit six participants for the purposes of this study.

WHAT IS INVOLVED IN THIS STUDY?

Participation in this study will require scheduling an **hour and a half** interview with the researcher. You will work in collaboration with the researcher to determine an appropriate time. During the interview, the researcher will ask open-ended questions to elicit in-depth information about your experiences on the burn unit. In addition to responding to interview questions, you will complete a brief survey called the Secondary Traumatic Stress Scale (STSS), which looks at symptoms of secondary traumatic stress. Within a week following our interview, we will set up a phone call to discuss your score on the STSS after which I will provide you with educational resources. This conversation may also take place in person if appropriate.]

The interview will be **audio recorded** and eventually transcribed for analysis. Agreeing to the interview being audio recorded is a requirement for participation in this study and in order for data collected to be usable. You understand that you may, however, request the recording be stopped at any time during the course of the research study. You can also withdraw your consent to use and disclose the photograph/videotape/audiotape before it is used. The recorder will be kept secure, as will audio recordings. The researcher will generate a code name for you to ensure confidentiality. Transcribed interviews will be kept password protected. You will be asked to review a transcript of your interview to ensure it captures what you wanted to convey about your experiences. All data collected, forms obtained, and computer files generated will be stored securely for three years after the study has been completed, at which point they will be destroyed.

How Long Will I Be in the Study?

You will be in the study until you have reviewed and approved a transcript of your interview. The estimated time from initial contact until transcript review is two months.

What are the Risks of the Study?

You may find it beneficial to share your story in a safe and confidential space. However, because the research question deals with the traumatic content you may have witnessed as a nurse caring for burn patients, you may experience discomfort while being asked to reflect on and talk about these experiences. Focusing on the traumatic content may trigger any reactions you have had in the past to such content. The researcher may suggest taking a break or engaging in calming exercises throughout the interview if you do appear to be experiencing a negative reaction. You are also empowered to stop the interview at any point, for any reason, whether to take a break or to end the session entirely. The researcher may stop the interview at any time if you are observed having a severe negative reaction. Should you have concerns about your reactions or discover that this is an area you would like to explore further with professional support, the researcher will provide you appropriate resources.

As a Licensed Professional Counselor, the researcher has extensive experience maintaining confidentiality of information shared by others, as is required by ethical codes and laws that guide professional counselors. The American Counseling Association's Code of Ethics (2014, G.2.d) requires that researchers maintain the confidentiality of information obtained from participants. As well, given the ethical obligations professional counselors are beholden to, there are some situations in which confidentiality cannot be maintained. These situations include instances where the researcher believes you intend to harm yourself or someone else, or instances where the researcher believes a child or elder person has been or will be abused or neglected. In these cases, the researcher will take steps to ensure your safety and that of any others deemed at risk.

What are the Costs?

All study costs will be paid for by the study. Costs for your regular medical care, which are not related to this study, will be your own responsibility.

What are the Benefits to Taking Part in the Study?

If you agree to take part in this study, there may or may not be direct benefit to you. We hope the information learned from this study will benefit other people in the future.

Will Your Research Records be Confidential?

The results of this research study may be presented at counseling conferences or meetings, or published in academic journals. Your identity will not be disclosed unless it

is authorized by you, required by law, or necessary to protect the safety of yourself or others. There is always some risk that even de-identified information might be re-identified.

WILL YOU BE PAID FOR PARTICIPATING?

You will receive no payment or other compensation for taking part in this study.

WHAT ARE MY RIGHTS AS A RESEARCH STUDY PARTICIPANT?

As staff and Medical Center employees you are under no obligation to participate in this research. You may refuse to participate or withdraw at any time and for any reason without affecting your performance evaluations, employment, or assignments. You will not be pressured into participating by any statements or implied statements that your performance evaluations or assignments will be affected by your willingness to participate.

If you decide to stop participating in the study we encourage you to talk to the investigators first to learn about any potential health or safety consequences. The investigators also have the right to stop participation in the study at any time. This could be because it is in your best medical interest, you had an unexpected reaction, or because the entire study has been stopped. You will be given any new information we become aware of that would affect your willingness to continue to participate in the study.

WHAT OTHER OPTIONS ARE THERE?

This is not a treatment study. Your alternative is to not participate in this study.

WHOM DO I CALL IF I HAVE QUESTIONS OR PROBLEMS?

For questions about the study, please feel free to contact me, Lindsay M. Shearer, MS, LPC, NCC, at lshearer@wakehealth.edu or by phone at (443)454-3030.

It is important that you understand that the Institutional Review Board (IRB) is a group of people designated to review research to protect your rights. This research study has been approved and will be monitored by the IRB at Wake Forest Baptist Medical Center, as well as that of the University of North Carolina at Charlotte. If you have a question about your rights as a research participant or anything to do with this research, or would like to discuss problems or concerns, contact the Chairman of the IRB at **(336)716-4542**. You are also free to contact the Principal Investigator with any concerns or questions, Laura Veach, PhD, LCAS, LPC, CCS. She can be reached by email at lveach@wakehealth.edu or by phone at (336)713-6926.

You will be given a copy of this signed consent form.

SIGNATURES

I agree to take part in this study. I have had a chance to ask questions about being in this study and have those questions answered. By signing this consent and authorization form, I am not releasing or agreeing to release the investigator, the sponsor, the institution or its agents from liability for negligence.

Subject Name (Printed):_____

Subject Signature: _____Date: _____Time:_____ am pm

Person Obtaining Consent (Printed):_____

Person Obtaining Consent:_____Date:_____ Time:_____am pm

APPENDIX M: AMENDED INFORMED CONSENT

LIVED EXPERIENCES OF NURSES ON A BURN UNIT RELATED TO SECONDARY TRAUMATIC STRESS

Informed Consent Form to Participate in Research

Lindsay M. Shearer, MS, LPC, NCC, Co-Principal Investigator

INTRODUCTION

You are invited to participate in a qualitative research study looking at the impact of traumatic experiences encountered by nurses caring for burn patients, and seeking to better understand how counselors can help. This research is being conducted as part of the researcher's doctoral dissertation for a doctorate in counseling from the University of North Carolina at Charlotte. Qualitative research typically involves a smaller number of participants, more engagement with the researcher, and a focus on gaining in-depth information from the participants. The researcher aims to recruit six participants for the purposes of this study.

WHAT IS INVOLVED IN THE STUDY?

Participation in this study will require scheduling an **hour and a half** interview with the researcher. This interview will take place in person at Wake Forest Baptist Medical Center, or may also take place by phone if meeting in person is not feasible for you. You will work in collaboration with the researcher to determine an appropriate time. During the interview, the researcher will ask open-ended questions to elicit in-depth information about your experiences on the burn unit. In addition to responding to interview questions, you will complete a brief survey called the Secondary Traumatic Stress Scale (STSS), which looks at symptoms of secondary traumatic stress. Within a week following our interview, we will set up a phone call to discuss your score on the STSS after which I will provide you with educational resources. This conversation may also take place in person if appropriate.

The interview will be **audio recorded** and eventually transcribed for analysis by a transcription company called Rev.com. Agreeing to the interview being audio recorded is a requirement for participation in this study and in order for data collected to be usable. You understand that you may, however, request the recording be stopped at any time during the course of the research study. You can also withdraw your consent to use and disclose the audiotape before it is used. The recorder will be kept secure, as will audio recordings. The researcher will generate a code name for you to ensure confidentiality. Transcribed interviews will be kept password protected. You will be asked to review a transcript of your interview to ensure it captures what you wanted to convey about your experiences. All data collected, forms obtained, and computer files generated will be

stored securely for three years after the study has been completed, at which point they will be destroyed.

HOW LONG WILL I BE IN THE STUDY?

You will be in the study until you have reviewed and approved a transcript of your interview. The estimated time from initial contact until transcript review is two months.

WHAT ARE THE RISKS OF THE STUDY?

You may find it beneficial to share your story in a safe and confidential space. However, because the research question deals with the traumatic content you may have witnessed as a nurse caring for burn patients, you may experience discomfort while being asked to reflect on and talk about these experiences. Focusing on the traumatic content may trigger any reactions you have had in the past to such content. The researcher may suggest taking a break or engaging in calming exercises throughout the interview if you do appear to be experiencing a negative reaction. You are also empowered to stop the interview at any point, for any reason, whether to take a break or to end the session entirely. The researcher may stop the interview at any time if you are observed having a severe negative reaction. Should you have concerns about your reactions or discover that this is an area you would like to explore further with professional support, the researcher will provide you appropriate resources.

As a Licensed Professional Counselor, the researcher has extensive experience maintaining confidentiality of information shared by others, as is required by ethical codes and laws that guide professional counselors. The American Counseling Association's Code of Ethics (2014, G.2.d) requires that researchers maintain the confidentiality of information obtained from participants. As well, given the ethical obligations professional counselors are beholden to, there are some situations in which confidentiality cannot be maintained. These situations include instances where the researcher believes you intend to harm yourself or someone else, or instances where the researcher believes a child or elder person has been or will be abused or neglected. In these cases, the researcher will take steps to ensure your safety and that of any others deemed at risk.

WHAT ARE THE COSTS?

All study costs will be paid for by the study. Costs for your regular medical care, which are not related to this study, will be your own responsibility.

WHAT ARE THE BENEFITS TO TAKING PART IN THE STUDY?

If you agree to take part in this study, there may or may not be direct benefit to you. We hope the information learned from this study will benefit other people in the future.

WILL YOUR RESEARCH RECORDS BE CONFIDENTIAL?

The results of this research study may be presented at counseling conferences or meetings, or published in academic journals. Your identity will not be disclosed unless it is authorized by you, required by law, or necessary to protect the safety of yourself or others. There is always some risk that even de-identified information might be re-identified. The company being used to transcribe the recording of your interview has agreed to maintain confidentiality.

WILL YOU BE PAID FOR PARTICIPATING?

You will receive no payment or other compensation for taking part in this study.

WHAT ARE MY RIGHTS AS A RESEARCH STUDY PARTICIPANT?

As staff and Medical Center employees you are under no obligation to participate in this research. You may refuse to participate or withdraw at any time and for any reason without affecting your performance evaluations, employment, or assignments. You will not be pressured into participating by any statements or implied statements that your performance evaluations or assignments will be affected by your willingness to participate.

If you decide to stop participating in the study we encourage you to talk to the investigators first to learn about any potential health or safety consequences. The investigators also have the right to stop participation in the study at any time. This could be because it is in your best medical interest, you had an unexpected reaction, or because the entire study has been stopped. You will be given any new information we become aware of that would affect your willingness to continue to participate in the study.

WHAT OTHER OPTIONS ARE THERE?

This is not a treatment study. Your alternative is to not participate in this study.

WHOM DO I CALL IF I HAVE QUESTIONS OR PROBLEMS?

For questions about the study, please feel free to contact me, Lindsay M. Shearer, MS, LPC, NCC, at lshearer@wakehealth.edu or by phone at (443)454-3030.

It is important that you understand that the Institutional Review Board (IRB) is a group of people designated to review research to protect your rights. This research study has been approved and will be monitored by the IRB at Wake Forest Baptist Medical Center, as well as that of the University of North Carolina at Charlotte. If you have a question about your rights as a research participant or anything to do with this research, or would like to discuss problems or concerns, contact the Chairman of the IRB at **(336)716-4542**. You are also free to contact the Principal Investigator with any concerns or questions, Laura Veach, PhD, LCAS, LPC, CCS. She can be reached by email at lveach@wakehealth.edu or by phone at (336)713-6926.

You will be given a copy of this signed consent form.

SIGNATURES

I agree to take part in this study. I have had a chance to ask questions about being in this study and have those questions answered. By signing this consent and authorization form, I am not releasing or agreeing to release the investigator, the sponsor, the institution or its agents from liability for negligence.

Subject Name (Printed):_____

Subject Signature: _____ Date: _____Time:_____ am pm

Person Obtaining Consent (Printed):_____

Person Obtaining Consent:_____ Date:_____ Time:_____ am pm

APPENDIX N: DEMOGRAPHIC QUESTIONNAIRE

(1) How old are you?
(2) How do you identify in terms of your gender?
(3) How would you describe your race or ethnicity?
(4) Do you have children?
(5) What are your nursing credentials?
(6) How many years of experience do you have working as a nurse?
(7) How many years or how long (approximately) have you been working with burn patients?
(8) What is an estimate of your caseload percentages in terms of working with pediatric burns versus adult burns?

APPENDIX O: SECONDARY TRAUMATIC STRESS SCALE (STSS)

SECONDARY TRAUMATIC STRESS SCALE

The following is a list of statements made by persons who have been impacted by their work with traumatized clients. Read each statement then indicate how frequently the statement was true for you in the past **seven (7) days** by circling the corresponding number next to the statement.

NOTE: *"Client" is used to indicate persons with whom you have been engaged in a helping relationship. You may substitute another noun that better represents your work such as consumer, patient, recipient, etc.*

	Never	Rarely	Occasionally	Often	Very Often
1. I felt emotionally numb……..	1	2	3	4	5
2. My heart started pounding when I thought about my work with clients……..…	1	2	3	4	5
3. It seemed as if I was reliving the trauma(s) experienced by my client(s)……..	1	2	3	4	5
4. I had trouble sleeping……...	1	2	3	4	5
5. I felt discouraged about the future……....	1	2	3	4	5
6. Reminders of my work with clients upset me……..	1	2	3	4	5
7. I had little interest in being around others…….....	1	2	3	4	5
8. I felt jumpy……..…	1	2	3	4	5
9. I was less active than usual……..…	1	2	3	4	5
10. I thought about my work with clients when I didn't					
11. I had trouble concentrating……..	1	2	3	4	5
12. I avoided people, places, or things that reminded me of my work with clients…….	1	2	3	4	5
13. I had disturbing dreams about my work with clients……..	1	2	3	4	5
14. I wanted to avoid working with some clients……..	1	2	3	4	5
15. I was easily annoyed…….....	1	2	3	4	5
16. I expected something bad to happen……...	1	2	3	4	5
17. I noticed gaps in my memory about client sessions……..…	1	2	3	4	5

Intrusion Subscale (add items 2, 3, 6, 10, 13)	Intrusion Score	_____
Avoidance Subscale (add items 1, 5, 7, 9, 12, 14, 17)	Avoidance Score	_____
Arousal Subscale (add items 4, 8, 11, 15, 16)	Arousal Score	_____
TOTAL (add Intrusion, Arousal, and Avoidance Scores)	Total Score	_____

Citation: Bride, B.E., Robinson, M.R., Yegidis, B., & Figley, C.R. (2004). Development and validation of the Secondary Traumatic Stress Scale. *Research on Social Work Practice, 14,* 27-35.

APPENDIX P: INTERVIEW PROTOCOL

- Tell me about yourself.
- What made you decide to become a nurse?
- What made you decide to work with burns?
- Tell me about your experience working on the burn unit.
- Describe what it means to you to experience secondary traumatic stress.
- Follow up: Describe a specific experience of a situation that triggered secondary traumatic stress.
- Follow up: How does witnessing the trauma and suffering of patients impact you?
- How might a counselor assist you in dealing with feelings that come up in your work as a nurse on a burn unit?
- What would make you seek help from a counselor?
- What would get in the way of seeking help from a counselor?
- How could a counselor better serve you in dealing with your work as a nurse in a burn unit?

APPENDIX Q: REV.COM NON-DISCLOSURE AGREEMENT

CLIENT NON-DISCLOSURE AGREEMENT

This CLIENT NON-DISCLOSURE AGREEMENT, effective as of the date last set forth below (this "Agreement"), between the undersigned actual or potential client ("Client") and Rev.com, Inc. ("Rev.com") is made to confirm the understanding and agreement of the parties hereto with respect to certain proprietary information being provided to Rev.com for the purpose of performing translation, transcription and other document related services (the "Rev.com Services"). In consideration for the mutual agreements contained herein and the other provisions of this Agreement, the parties hereto agree as follows:

1. Scope of Confidential Information

1.1. "Confidential Information" means, subject to the exceptions set forth in Section 1.2 hereof, any documents, video files or other related media or text supplied by Client to Rev.com for the purpose of performing the Rev.com Services.

1.2. Confidential Information does not include information that: (i) was available to Rev.com prior to disclosure of such information by Client and free of any confidentiality obligation in favor of Client known to Rev.com at the time of disclosure; (ii) is made available to Rev.com from a third party not known by Rev.com at the time of such availability to be subject to a confidentiality obligation in favor of Client; (iii) is made available to third parties by Client without restriction on the disclosure of such information; (iv) is or becomes available to the public other than as a result of disclosure by Rev.com prohibited by this Agreement; or (v) is developed independently by Rev.com or Rev.com's directors, officers, members, partners, employees, consultants, contractors, agents, representatives or affiliated entities (collectively, "Associated Persons").

2. Use and Disclosure of Confidential Information

2.1. Rev.com will keep secret and will not disclose to anyone any of the Confidential Information, other than furnishing the Confidential Information to Associated Persons; provided that such Associated Persons are bound by agreements respecting confidential information. Rev.com will not use any of the Confidential Information for any purpose other than performing the Rev.com Services on Client's behalf. Rev.com will use reasonable care and adequate measures to protect the security of the Confidential Information and to attempt to prevent any Confidential Information from being disclosed or otherwise made available to unauthorized persons or used in violation of the foregoing.

2.2. Notwithstanding anything to the contrary herein, Rev.com is free to make, and this Agreement does not restrict, disclosure of any Confidential Information in a judicial, legislative or administrative investigation or proceeding or to a government or other regulatory agency; provided that, if permitted by law, Rev.com provides to Client prior notice of the intended disclosure and permits Client to intervene therein to protect its interests in the Confidential Information, and cooperate and assist Client in seeking to obtain such protection.

3. Certain Rights and Limitations

3.1. All Confidential Information will remain the property of Client.

3.2. This Agreement imposes no obligations on either party to purchase, sell, license, transfer or otherwise transact in any products, services or technology.

4. Termination

4.1. Upon Client's written request, Rev.com agrees to use good faith efforts to return promptly to Client any Confidential Information that is in writing and in the possession of Rev.com and to certify the return or destruction of all Confidential Information; provided that Rev.com may retain a summary description of Confidential Information for archival purposes.

4.2. The rights and obligations of the parties hereto contained in Sections 2 (Use and Disclosure of Confidential Information) (subject to Section 2.1), 3 (Certain Rights and Limitations), 4 (Termination), and 5 (Miscellaneous) will survive the return of any tangible embodiments of Confidential Information and any termination of this Agreement.

5. Miscellaneous

5.1. Client and Rev.com are independent contractors and will so represent themselves in all regards. Nothing in this Agreement will be construed to make either party the agent or legal representative of the other or to make the parties partners or joint venturers, and neither party may bind the other in any way. This Agreement will be governed by and construed in accordance with the laws of the State of California governing such agreements, without regard to conflicts-of-law principles. The sole and exclusive jurisdiction and venue for any litigation arising out of this Agreement shall be an appropriate federal or state court located in the State of California, and the parties agree not to raise, and waive, any objections or defenses based upon venue or forum non

conveniens. This Agreement (together with any agreement for the Rev.com Services) contains the complete and exclusive agreement of the parties with respect to the subject matter hereof and supersedes all prior agreements and understandings with respect thereto, whether written or oral, express or implied. If any provision of this Agreement is held invalid, illegal or unenforceable by a court of competent jurisdiction, such will not affect any other provision of this Agreement, which will remain in full force and effect. No amendment or alteration of the terms of this Agreement will be effective unless made in writing and executed by both parties hereto. A failure or delay in exercising any right in respect to this Agreement will not be presumed to operate as a waiver, and a single or partial exercise of any right will not be presumed to preclude any subsequent or further exercise of that right or the exercise of any other right. Any modification or waiver of any provision of this Agreement will not be effective unless made in writing. Any such waiver will be effective only in the specific instance and for the purpose given.

IN WITNESS WHEREOF, the parties have caused this Agreement to be executed below by their duly authorized signatories.

CLIENT

Print Name: Lindsay Sneaver

By: Lindsay Sneaver
Name: Lindsay Sneaver
Title: Doctoral candidate
Date: 3/8/17

Address for notices to Client:

1 Medical Center Blvd.
Winston Salem, NC
27103

REV.COM, INC.

By: Cheryl Brown
Name: Cheryl Brown
Title: Account Manager
Date: January 3, 2017

Address for notices to Rev.com, Inc.:

251 Kearny St. FL 8
San Francisco, CA 94108

APPENDIX R: REV.COM CONFIDENTIALITY AGREEMENT

Confidentiality Agreement

Transcriptionist

I, Cheryl Brown transcriptionist, agree to maintain full confidentiality in regards to any and all audiotapes and documentations received from Lindsay Shearer related to his/her research study on the researcher study titled Lived Experiences of Nurses on a Burn Unit Related to Secondary Traumatic Stress. Furthermore, I agree:

1) To hold in strictest confidence the identification of any individual that may be inadvertently revealed during the transcription of audio-taped interviews, or in any associated documents.
2) To not make copies of any audiotapes or computerized titles of the transcribed interviews texts, unless specifically requested to do so by the researcher, Lindsay Shearer.
3) To store all study-related audiotapes and materials in a safe, secure location as long as they are in my possession.
4) To return all audiotapes and study-related materials to Lindsay Shearer in a complete and timely manner.
5) To delete all electronic files containing study-related documents from my computer hard drive and any back-up devices.

I am aware that I can be held legally responsible for any breach of this confidentiality agreement, and for any harm incurred by individuals if I disclose identifiable information contained in the audiotapes and/or files to which I will have access.

Transcriber's name (printed)

Cheryl Brown - Account Manager

Transcriber's signature

Cheryl Brown

Date March 7, 2017

APPENDIX S: WFBMC IRB CONTINUING REVIEW APPROVAL LETTER

MEMORANDUM

To: Laura Veach, Ph.D.
Surgery Trauma

From: Jeannie Sekits, Senior Protocol Analyst,
Institutional Review Board

Date: 1/3/2018

Subject: Human Protocol: IRB00041569
Lived experiences of nurses on a burn unit related to secondary traumatic stress.

Study Documents:
Protocol Version: shearer_dissertation_wakeIRBprotocol_ammendment2.doc; Informed Consent Version: shearer_dissertation_informedconsent.docx (approved); Advertisements: shearer_dissertation_flyer.docx, shearer_dissertation_recruitmentemail.docx, shearer_dissertation_targetedrecruitmentemail.docx; Other Documents: shearer_dissertation_participantforms.docx, shearer_dissertation_transcriptionservice_signedconfidentialityagreement.pdf, shearer_dissertation_transcriptionservice_signednondisclosureagreement.pdf

This is to confirm for your record that the Institutional Review Board reviewed your progress report and consent form, containing compounded HIPAA authorization language, if applicable, for the above-named protocol. IRB approval was activated on 1/3/2018 and will expire on 1/2/2019. If the protocol is to remain active longer, a written request for renewal, together with a summary progress report, and a copy of the current consent form, if applicable, should be submitted to the Board at least one month prior to expiration.

This research meets the criteria for a waiver of HIPAA authorization according to 45 CFR 164.512.

This application indicates that advertising materials will be used for research purposes. Please consult with Creative Communications to ensure the appropriate visual identity is put forth.

A waiver for the requirements of signed consent and HIPAA authorization have been granted by the IRB for preliminary screening purposes.

This research, which was originally approved by the Full Board, is being renewed by the IRB under Expedited Review, Category 8c. The research has been closed to the accrual of new subjects and all subjects have completed intervention/interaction. Renewal is granted for data analysis only.

A waiver for the requirements of signed consent and HIPAA authorization have been granted by the IRB for preliminary screening purposes.

Please provide a final report to the Board when the project is completed and Board approval can be terminated.

This IRB is in compliance with the requirements in Part 56, Subchapter D, Part 312 of the 21 Code of Federal Regulations published January 27, 1981 and Part 46, Subpart A of 45 CFR published January 26, 1981.

APPENDIX T: UNCC IRB CONTINUING REVIEW APPROVAL LETTER

From: Office of Research Compliance

Date: 1/08/2018
Expiration Date of Approval by External IRB: 1/02/2019
RE: Agreement to Rely on External IRB
External Organization: Wake Forest Baptist Medical Center
Study #: 16-0974

Study Title: Lived experiences of nurses on a burn unit related to secondary traumatic stress.

This confirms that an IRB Authorization Agreement with the organization identified above has been executed to rely on their IRB for continuing oversight of this study. This agreement specifies the roles and responsibilities of the respective entities.

Study Description:

Nursing is a large and growing profession. Nurses provide a critical service to patients and families, often in highly stressful work environments (McGibbon, Peter, & Gallop, 2010; Theme Filha, Costa, & Guilam, 2013). The stressful nature of nursing work, and particularly the intense suffering nurses witness, puts nurses at risk for secondary traumatic stress (Beck & Gable, 2012; Morrison & Joy, 2016). Secondary traumatic stress is defined as the "natural consequent behaviors and emotions resulting from knowing about a traumatizing event" or "the stress resulting from helping or wanting to help a traumatized or suffering person" (Figley, 1995, p. 7). Nurses working on burn intensive care units face particularly traumatic content (Hilliard C & O'Neill M, 2010; Kellogg, Barker, & McCune, 2014; Martins et al., 2014), though have not been the specific focus of a study looking at secondary traumatic stress. This proposal is for a phenomenological qualitative study, using in-depth interviews with six nurses working at an accredited burn center in the Southeastern United States. Interviews will be transcribed and then analyzed using Moustakas' (1994) methods of textural and structural descriptions.

It is your responsibility to:

1. Inform the UNC Charlotte IRB about any actions by the external IRB affecting their approval to conduct the study, including suspension or termination of approval.

2. Submit a modification to the UNC Charlotte IRB (via IRBIS) if/when new personnel are added to the study team or the study is modified in such a way that additional institutional approvals are required (e.g., radiation safety, biosafety).

3. Submit a copy of the external IRB approval letter and currently approved consent

document to the UNC Charlotte IRB (via IRBIS) when the study is renewed; you will continue to receive reminder notices from the UNC Charlotte IRB for renewal and should provide the external approval and consent documents within 30 days of receipt.

4. Report all Unanticipated Problems protocol violations and unresolved subject complaints to the UNC Charlotte IRB *in addition to the external IRB*. You may submit a copy of the report you submitted to the external IRB; this should be done via the IRBIS UP reporting pathway.

5. Maintain compliance with all other UNC Charlotte policies (e.g., data security, conflict of interest).

CC:
John Culbreth, Counseling