COMPASSION FATIGUE AMONG TRAVEL NURSES

by

Loretta Rose Kramer

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As members of the DNP Project Committee, we certify that we have read the DNP project prepared by Loretta Rose Kramer entitled "Compassion Fatigue Among Travel Nurses" and recommend that it be accepted as fulfilling the DNP project requirement for the Degree of Doctor of Nursing Practice.

Kate Sheppard — Date: November 14, 2017
Kate G. Sheppard, PhD, RN, FNP, PMHNP-BC, FAAN, FAANP

Donna B. McArthur — Date: November 14, 2017
Donna B. McArthur, PhD, APRN, FNP-BC, FAANP, FNAP

Rene Love — Date: November 14, 2017
Rene Love, PhD, DNP, PMHNP-BC, FNAP, FAANP

Final approval and acceptance of this DNP project is contingent upon the candidate's submission of the final copies of the DNP project to the Graduate College.

I hereby certify that I have read this DNP project prepared under my direction and recommend that it be accepted as fulfilling the DNP project requirement.

Kate Sheppard — Date: November 14, 2017
DNP Project Chair: Kate G. Sheppard, PhD, RN, FNP, PMHNP-BC, FAAN, FAANP

STATEMENT BY AUTHOR

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SIGNED: __Loretta Rose Kramer_____

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DEDICATION

Michael Henry Kramer

"I did it sweetie – I know you held my hand from above the whole way."

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ABSTRACT

Purpose: To describe an educational workshop delivered to travel nurses, with analysis of the shared discussion.

Background: Travel nurses work beyond the realm of traditional nursing positions as they typically are contracted for short periods of time, fill positions created by nursing shortages, and are willing to work in various capacities. As currently conceptualized, compassion fatigue is comprised of compassion satisfaction, burnout, and secondary traumatic stress. Travel nurses are at risk for compassion fatigue as they often work on high acuity units such as emergency room and ICU. Additionally, travel nurses lack natural support systems as they often work far from usual supports such as family, which may increase the risk of compassion fatigue.

Method: A two-part educational workshop was developed to reduce the risk of compassion fatigue among travel nurses (N=3). Workshops included education and skills training. Participants discussed their experiences, symptoms, and strategies they used to cope with the negative constructs of compassion fatigue. They journaled and make notations of personal and professional experiences including symptoms, triggers, and self-reflection of compassion fatigue and skills learned.

Findings: Commonalities included symptoms of fatigue, isolation, disassociation, second-hand grief, physical pain, dysfunctional communication, and questioning role as a nurse. Triggers to compassion fatigue included limited resources, patient complexity, length of shift, patient influences such as gratitude for nursing service, and witnessing loss. Outcomes included self-medicating with alcohol, self-isolating, working extra shifts, and not debriefing with clinical professionals.

Implications: Travel nurses experience symptoms of compassion fatigue including burnout and secondary traumatic stress that is consistent with other nursing professionals. The participants did not understand the phenomenon and had no knowledge of how to protect against compassion fatigue. Travel nurses would benefit from incorporating skills and strategies to address the phenomenon of compassion fatigue, burnout and secondary traumatic stress. The data from this educational intervention project magnify the knowledge currently known about the impact and experience of compassion fatigue in nursing populations, specifically travel nurse populations. It provides insight into the possible benefit of focus group discussions and self-care strategies in lessening the impact of compassion fatigue in travel nurse populations.

INTRODUCTION

Compassion Fatigue (CF) in healthcare professionals is a reaction to secondary trauma and burnout associated with caring for patients and their families (Sorenson, Bolick, Wright, & Hamilton, 2016). It has negative effects on both the healthcare system and consumers of the healthcare system. Long-term consequences of CF include sky rocketing healthcare costs, increased healthcare professional errors, hospital settings plagued with stress, healthcare professional shortages, and poor medical care delivery (Potter, et al, 2013; Faller, Gates, Georges, & Connelly, 2011).

As more researchers investigate CF among nurses, there is increasing awareness of the significant number of nurses at risk for CF (Wilkinson, 2014). CF is also associated with long-term adverse outcomes such as a deterioration of a person's physical and psychological state (Lachman, 2016). Nurses who experience CF often experience a poor relationship with co-workers and patients (Sorenson et al., 2016). In fact, many nurses have identified that the highly distressing effects of CF were their primary reason for prematurely leaving the profession (Sorenson et al., 2016). Although CF affects nurses of all experience levels, nurses born in the millennial generation (1982-2004) may experience CF at higher rates than non-millennial nurses (Kelly, Runge, & Spencer, 2015). Consequently, the healthcare industry is losing nurses within the first five years of their nursing careers (Kelly et al., 2015). In an attempt to meet the demand for nurses, healthcare organizations often turn to travel nurses, who are typically contracted for short periods of time (Yeh, Ko, Chang, & Chen, 2007).

In 2007, approximately 18,000 Registered Nurses (RNs) were identified as travel nurses (Faller et al., 2011).This number is expected to grow as more patients utilize healthcare systems

and more nurses leave their current employment and turn to travel nursing (Faller et al., 2011). Because they are employed by a contract agency, travel nurses frequently earn higher wages than nurses working in traditional healthcare institutions. Many travel nurses are described as preferring to work for a contract agency due to higher salary and the belief that they have more control over their schedules (Faller et al., 2011). Despite these preferences, it is possible that this transient work environment could create distance between travel nurses and their patients, and even diminish the sense of accomplishment or job satisfaction.

In fact, while research related to turnover among travel nurses is limited, Faller et al. (2011) found a two-fold increase in burnout among travel and temporary nurses compared to full-time nurses. Travel nurses with the greatest level of burnout were younger, single, did not have children living at home, and had a baccalaureate degree (Faller et al., 2011). However, at the time of this literature review, there were no reports of CF among travel nurses. Therefore, the purpose of this DNP project is to conduct an educational quality improvement intervention via focus groups to address the risk of CF among travel nurses.

Background and Significance

As currently conceptualized, CF is comprised of compassion satisfaction, burnout, and Secondary Traumatic Stress (STS) (Stamm, 2017). Compassion satisfaction is defined as the pride and satisfaction a professional helper such as a nurse gain from a job well done (Stamm, 2017). When compassion satisfaction is high, nurses are less at risk for CF (Kelly et al., 2015). Burnout, which is often slow growing, affects a person's ability to do good work, and triggers feelings of helplessness (Stamm, 2017). Burnout frequently stems from stressful work environments and increases the risk of CF. Secondary traumatic stress occurs when a patient's

physical or emotional trauma evokes symptoms of trauma in the nurse (Stamm, 2017); it is the nurse's emotional response to grief and suffering. Repeat association with traumatic events, paired with high-stress environments, are associated with workplace burnout, secondary traumatic stress, and CF (Flarity, Gentry, & Mesnikoff, 2013; Wilkinson, 2014).

As nurses begin to experience burnout and secondary traumatic stress, they become increasingly at risk for CF (Sorenson et al., 2016). Nurses at particular risk for CF often work on units with high human tragedy and stress such as oncology, emergency rooms, and psychiatric settings (Wilkinson, 2014; Flarity, 2013). Symptoms of CF include fatigue, poor health, diminished self-care, sleep disturbance, lack of attentiveness and diminished patient empathy (Flarity, 2013). As these distressing symptoms increase, the nurse's behavior, spiritual and psychological well-being is frequently negatively affected (Wilkinson, 2014; Flarity, 2013). Consequently, CF is correlated with high nursing turnover and low retention rates (Kelly et al., 2015). Nurses experiencing CF struggle to find meaning in their work and often change positions or leave the nursing profession (Potter et al., 2013).

The negative consequences of CF can also be felt by patients because nurses experiencing CF are frequently less able to provide empathic care to their patients (Lachman, 2016). When a nurse perceives that job demands far outweigh the capacity to meet those demands, secondary traumatic stress and burnout may be exacerbated and the nurse may experience less patient empathy (Lachman, 2016). As a result, nurses develop behaviors that often place patients at risk, such as patient avoidance, medical judgement errors, detachment, and diminished nursing care performance (Lachman, 2016). As hospital incentives and reimbursements are often tied to patient satisfaction (Papanicolas et al., 2017), it is possible that

CF among nurses could even negatively impact hospital reimbursement rates (Lachman, 2016). Therefore, to help improve the negative consequences of compassion fatigue among travel nurses, I conducted an educational intervention project to address CF among travel nurses.

Purpose and Aims

The purpose of this project was to conduct an educational quality improvement intervention via focus groups project to address the risk of CF among travel nurses in Tucson. Aims included:

1. Describe the symptoms, triggers, and outcomes of compassion fatigue among travel nurses;
2. Provide a focused, educational intervention to decrease compassion fatigue risk; and,
3. Provide self-care techniques to reduce further risk.

The design of this project was guided by the Institute for Healthcare Improvement Model (IHI, 2017). This model utilizes the "Plan-Do-Study-Act" (PDSA) steps to test small changes of improvement (IHI, 2017). The model for improvement is the framework to guide healthcare evolution and the change is tested on a small scale using Plan-Do-Study-Act (PDSA) cycle (IHI, 2017).Information gained from the project may lead to better recognition of CF trends and risk factors among travel nurses, ultimately reducing the impact of CF in this population of nurses.

Professional Quality of Life Framework

A theoretical model guides research, outcomes, and interventions, and strengthens research outcomes (Estabrooks, Thompson, Lovely, & Hofmeyer, 2006). The importance of

utilizing a theoretical model is to develop research that is testable and usable across disciplines (Estabrooks et al., 2006). For this research, the Professional Quality of Life (ProQOL) Model (Stamm, 2017) was utilized to develop an intervention to decrease CF among the travel nursing population.

Professional quality of life, as identified by Stamm (2017), assesses the impact of ones' work on his or her quality of life. The ProQOL model (Stamm, 2017) breaks down the negatives and positives of CF, into two areas: compassion satisfaction and compassion fatigue (see figure 1) (Stamm, 2017). Compassion fatigue is further divided into three areas: 1) burnout, defined as the frustration, exhaustion, anger, and depression related to the work environment; 2) secondary traumatic stress, defined as the nurse's internal emotional response to witnessing grief or trauma, and 3) compassion satisfaction, defined as the positive feelings and satisfaction gained from nursing (Figure 1) (Stamm, 2017).

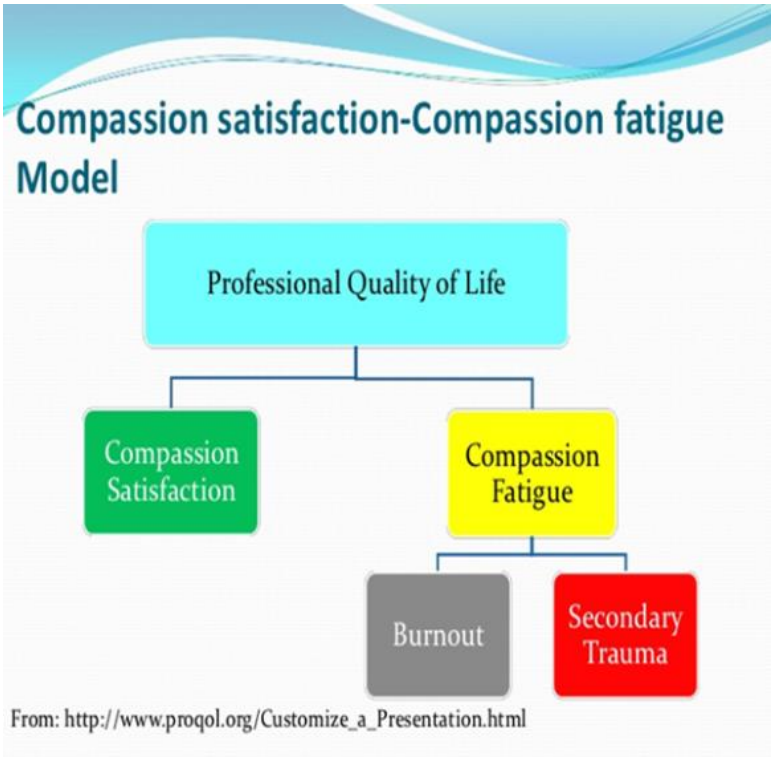

Figure 1. ProQOL: Professional Quality of Life (2017).

Compassion Fatigue is a complex combination of burnout, secondary traumatic stress, and compassion satisfaction. Compassion satisfaction is derived from the act of caregiving (Stamm, 2017). In nursing, the positive satisfaction gained from nursing and caring for others serves as a protective shield for the nurse (Stamm, 2017). Compassion satisfaction and devotion are reasons that drive individuals to choose and continue their nursing careers. Research indicates that a caring patient relationship is a protective shield for nurses, fortifying the physical health of the nurse through compassionate, deep caring within the nurse/patient relationship (Suliman et al., 2009). As compassion satisfaction begins to diminish, the joy of nursing is replaced with the negative experiences of CF, burnout and secondary traumatic stress.

Symptoms of burnout grow over time and are perpetuated by feelings of inadequacy, mounting inability to make an impact, a deep discouragement regarding the job, and slowly losing the spark that cultivated the very caring of nursing itself (Stamm, 2017). Burnout often leads to difficulty meeting the demands of the job. Many factors are attributed to the development of CF or burnout: primary and/or secondary exposure to traumatized patients, the work environment, long hours, exhaustion and feelings such as anger, frustration, and sadness (Stamm, 2017). These negative components of CF are often internalized by nurses leading to high rates of burnout (Stamm, 2017).

Secondary traumatic stress is a result of continued exposure to patient trauma, loss, and experiencing second hand the patient's painful events during the course of nursing care (Stamm, 2017). In nursing, repeat exposure to secondary trauma leads to a weakened sense of safety, impaired sleep, desensitization and avoidance of traumatized patients. Experiencing these negative outcomes often results in nurses attempting to avoid the repetitive thoughts and experiences associated with patient traumatization (Stamm, 2017).

Synthesis of Evidence

The purpose of a literature review is to ascertain what is known and unknown about a research topic. A careful review of the available research can provide information and direction for further study. Examining different databases and refining search filters can identify important strengths, weaknesses, and gaps in current and past research (Moran et al., 2017).

A search of the evidence through PubMed, CINAHL, PsychInfo, Google Scholar, and Web of Science databases was conducted. Search terms included compassion fatigue, burnout, secondary traumatization, compassion satisfaction, countertransference, vicarious traumatization

intervention, and travel nurse. The search began without a specific time restriction; however, due to the number of research articles in CINAHL (434 articles), more specific inclusion criteria were developed. Criteria for inclusion of articles from CINAHL included publication within the past 10 years, written in English, peer-reviewed, and my ability to access the entire article. Twenty-one articles were ultimately selected for review.

Conceptual Definitions

Compassion fatigue, burnout, and secondary traumatic stress are frequently used interchangeably, and there is not a clear consensus of definitions**.** The ProQOL (2017) appears to be the most widely used conceptual model among studies examining compassion fatigue. CF is most frequently defined as the cost of caring, and is comprised of the positive protective compassion satisfaction, balanced against the negative influences of burnout and secondary traumatic stress. A common finding within the literature is that CF is often manifested by both physical and emotional symptoms. The effects of CF include high rates of depression, disengagement, impatience, diminished empathy, anxiety, and somatic complaints by nursing staff (Wilkinson, 2014; Kelly et al., 2015). In addition, nurses experience increased somatic complaints, alcohol and/or tobacco use, and frequent thoughts of resigning (Potter et al., 2013). CF in a hospital setting is related to absenteeism, diminished job satisfaction, increased healthcare complexity, and lack of acknowledgment (Hersch et al., 2016). The elements leading up to the development of CF appear to be cumulative and are frequently associated with working in high-stress areas such as Emergency Room (ER), oncology or hospice (Craigie et al., 2016; Carter, Dyer, & Mikan, 2013). Of the 21 articles reviewed in this proposal, 14 utilized the ProQOL as the guiding conceptual model.

Compassion Satisfaction

Compassion satisfaction is the joy or satisfaction gained from a deep and pervasive caring of patients (Stamm, 2017). The joy and gratitude of nursing is a protective factor that can shield nurses from the negative outcomes associated with CF (Kelly, Runge, & Spencer, 2015). Nurses identified that caring for patients provided a level of satisfaction that brought some reprieve from their day-to-day stress (Kelly et al., 2015). Factors that increased compassion satisfaction included the ability to process work-related experiences, supportive management, flexible patient to nurse ratios, and environmental support. Nurses who work in Magnet hospitals may experience more compassion satisfaction and less burnout due to lower nurse to patient ratios and the use of transformational leadership (Kelly et al., 2015).

Burnout

Burnout stems from the work environment and is frequently cumulative. Factors that are often associated with burnout include patient acuity, repeat exposure to patient death and dying, chronic high nurse to patient ratios, and inability to meet patient demands (Flarity et al., 2013; Carter et al., 2013). Burnout causes emotional exhaustion, depression, reduced sense of accomplishment, depersonalization, and feelings of anger and hopelessness (Wilkinson, 2014; Flarity et al., 2013). Nurses with less than five years of experience suffer higher rates of burnout than more experienced or older nurses (Faller et al., 2011). In a systematic review of the literature Ke, Kuo & Hung (2017) found that 30 – 70% of nurses either leave their positions or the nursing field all together, within the fist year of working. Work environments that lead to job burnout include those with nursing shortages, poor management support, work conflict, and lack job of recognition (Faller et al., 2011).

Secondary Traumatic Stress

Secondary traumatic stress can be caused by exposure to traumatic events associated with the act of nursing (Stamm, 2017). Nurses with longer employment have higher degrees of secondary traumatic stress as compared to nurses with less experience (Mason, Leslie, Clark, Lyons, Walke, Butler, & Griffin, 2014). This is most likely a consequence of increased exposure to patient trauma and grief (Mason et al., 2014). This is in contradiction of the literature that indicates a high rate of burnout in new graduates who often leave the profession within the first two years of graduation (Mason, Leslie, Clark, Lyons, Walke, Butler, & Griffin, 2014; Faller et al., 2011). Symptoms of secondary traumatic stress are similar to symptoms experienced by those that encounter trauma first hand (Bride, Robinson, Yegidis, & Figley, 2004). Symptoms can include repetitive imagery, avoidant behaviors, physiological reactions, emotional and functional damage (Bride et al., 2004). Nurses may develop secondary traumatic stress upon witnessing the physical or emotional trauma or grief among patients or even patients' family, especially when associated with a feeling of helplessness (Potter et al., 2013; Mason et al., 2014; Flarity et al., 2013). Nurses have identified trauma associated with children as the most difficult to process (Wilkinson, 2014; Houck, 2014). Not being able to process this trauma, or feeling dismissed, often results in symptoms associated with secondary traumatic stress (Sheppard, 2016).

Specific Population: Travel Nurses

Substantial research is available on CF in the healthcare industry with a significant proportion of the evidence based on diverse nursing modalities. Nursing populations at higher risk of CF are those that have repeated exposure to secondary trauma such as emergency room or

oncology. Despite a growing population of travel nurses (Faller et al., 2011), an extensive review of the literature provided minimal evidence related to CF in travel nurses. At the time of this review, only two studies were found that described CF in travel nurses (Yeh et al., 2011; Faller et al., 2011). These are further described below.

Travel nurses appear to have higher than expected risk of CF (Yeh et al., 2011). Travel nurses often hold temporary positions in an institution; consequently, they have less commitment to their place of employment, and often view themselves as an outsider who can easily become dispensable (Yeh et al., 2011). As a result, travel nurses often have lower expectations from their employer as compared to permanent nursing populations with higher expectations that lead to frustration and increased risk of compassion fatigue (Faller et al., 2014). Travel nurse populations have higher rates of job satisfaction, potentially acting as a protection against disappointment and burnout (Faller et al., 2014). Travel nurses' highest area of burnout is related directly to the actual work of being a nurse (Faller et al., 2011). In addition, travel nurses often remain as bedside nurses on high-stress hospital units, increasing the risk of secondary traumatic stress (Faller et al., 2011).

Education and Interventions

As the negative consequences of CF are increasingly recognized within health care and the nursing profession, nurse leaders and scientists are searching for interventions to reduce the elements of CF. Rotating nurses to different duties within an institution may reduce the negative impact of caring for high acuity patients, and utilizing a mobile admissions nurse may help to reduce workload (Kirkbride et al., 2012).

Mindfulness has been shown to reduce the negative symptoms of CF. Utilizing a skill-based mindfulness and resiliency intervention among bedside nurses (N=21), Craigie et al. (2016) found it to significantly reduced burnout, a construct of CF. In addition, Potter et al. (2013) found that a five-week resiliency program among oncology nurses (N=13) reduced both personal and professional stress.

A review of the literature indicates that managerial support, education, and self-care strategies decrease the impact of the negative constructs of compassion fatigue, burnout and secondary traumatic stress. In a cross-sectional electronic survey of direct care nurses (N=491), researchers found that managerial assistance with difficult patient situations, consistent manager support, addressing secondary trauma in the workplace, and giving recognition to jobs well done significantly reduced nursing burnout (Kelly et al., 2015). A five-week, descriptive correlational intervention utilizing a cognitive behavioral therapy improved onset of sleep, sleep time and sleep efficiency in direct care nurses (N=9). An educational class on self-care of nurses (N=34) resulted in increased awareness of the grieving process associated with nurse-patient relationships and were more willing to reach out for support (Houck, 2014). A significant number of nurses (N=104), in a randomized controlled trial of a web-based stress management intervention, reported having diminished stress levels as compared to the control group (Hersch et al., 2016). This was found in six of seven subscales measuring nursing stress (Hersch et al., 2016)**.**

Caregiver Predictors

Determinants of CF appear include to include millennium and higher educated nurses, or those working in stressful nursing environments that place nurses routinely in contact with high

patient trauma or tragedy. In a cross-sectional survey of nurses (N=491), Kelly et al. (2015) found that millennial generation nurses (ages 21-33) experienced higher levels of CF and lower levels of compassion satisfaction while nurses with more experience, higher educated, single and without children nurses, were at a greater risk of experiencing CF overall. Furthermore, as nurses gained experience, their levels of compassion satisfaction frequently lowered, and they were more at risk for CF (Kelly et al., 2015). In a literature review, Wilkinson (2014) found that nurses faced with nursing shortages, demanding work with limited time to meet job demands, and settings in which nurses have little control of workflow experienced high rates of CF. Nurses most likely to experience CF, identified in a study by Flarity et. al., (2013), utilizing a pre-/posttest design (N=73) are those exposed to life and death situations or in repeat trauma areas. CF was more prevalent among nurses with considerably less time in the profession (Flarity et al., 2013).

Effective strategies in decreasing CF included a pre-post-follow-up intervention that incorporated mindfulness skills and resiliency strategies among bedside hospital-based nurses (N=21), resulting in a significant drop in burnout (Craigie et al., 2016). A resiliency and education program among oncology nurses (N=13), by Potter et al. (2013), was found to decrease personal and professional stress. Overall education and teaching self-care strategies resulted in overall decreased risk of CF.

Triggers

A review of the literature found consistent work stressors across a variety of hospital settings were identified as triggers for CF (Craigie et al., 2016). These work stressors included: demanding job duties; time constraints to complete nursing tasks; poor administrative support;

repeat exposure to traumatic events; patient aggression; lack of respect from peers or patients; and long hours (Wilkinson, 2014). Stress experienced by nurses was often manifested in both the physical and emotional health of the nurse (Craigie et al., 2016). Symptoms associated with increased stress often included: anger; apathy; feeling burned out or overwhelmed; increased irritability; loss of job enjoyment; avoidance of patients; disrupted sleep; hopelessness; and nurses changing jobs, or leaving the nursing professional altogether (Sheppard, 2015).

Consistent with Stamm's CF theory (2017), a review of healthcare research by Sinclair et al., (2017) noted that nursing stress was tied to burnout and increased CF, both major contributors to high nurse attrition and nursing shortages. For example, oncology nurses had high rates of CF after developing emotional attachments to cancer patients during the course of their work (Houck, 2014). To decrease burnout, a significant number of studies indicate that work place stress interventions can be instrumental in reducing stress among nurses (Hersch, et al., 2016; Houck, 2014).

Coping

Numerous studies identified that CF was associated with adverse behaviors among nurses (Wilkinson, 2014; Faller et al., 2011). Nurses, in these studies, described their coping strategies as: working longer shifts and fewer dayshifts; smoking; alcohol use; increased food intake; isolation; or choosing temporary positions to increase their sense of personal control (Wilkinson, 2014; Faller et al., 2011). In contrast, a qualitative study of emergency room nurses (N=73) determined that an education intervention that included self-care skills significantly increased compassion satisfaction; simultaneously decreased burnout and secondary traumatic stress (Flarity et al., 2013). Following an education and skill building intervention, nurses report

increased resilience and an improved ability to diminish the risk of future CF (Flarity et al., 2013). Educational web-based stress reduction intervention significantly reduced workplace stress across five different hospitals (Hersch, et al., 2016). An educational intervention aimed at increasing awareness of work-related grief, as well as self-care skills, was found to be widely accepted by oncology nursing staff (Houck, 2014).

Strengths of Literature

CF is widely described within the nursing profession and within other healthcare professions. While there are differences in terminology, there are also some consistencies in the descriptions of triggers and symptoms. A recurrent theme is the need to provide education and interventions aimed at addressing CF in the nursing profession (Houck, 2014; Carter et al., 2013; Flarity et al., 2013; Potter et al., 2013; Craigie et al., 2016; Hersch et al., 2016). There is clear and consistent evidence that CF is associated with decreased quality of patient care (Hersch et al., 2016; Houck, 2014). CF also causes financial strain on the healthcare industry due to nursing attrition secondary to CF (Hersch et al., 2016; Craigie et al, 2016). Finally, educating nurses about CF is paramount to minimizing the impact of CF in the nursing profession. The literature is consistent in identifying the three constructs of compassion fatigue that include burnout, compassion satisfaction, and secondary traumatic stress (Stamm, 2017).

Weaknesses of Literature

Clearly, healthcare workers are negatively impacted by their work physically, emotionally socially and spiritually (Hersch, et al., 2016; Kelly et al., 2015; Houck, 2014). However, there is little evidence that nurses are more prone to CF than other healthcare professionals (Sinclair et al., 2017). Finally, there is not clear evidence that interventions provide

a sustained improvement to nurses or to patient care (Houck, 2014; Carter et al., 2013; Flarity et al., 2013; Potter et al., 2013; Craigie et al., 2016; Hersch et al., 2016).

Gaps in Research

Unfortunately, many nurses experiencing symptoms of CF engage in avoidance behavior (Sheppard, 2015). Some nurses have expressed concern that identifying with CF could negatively impact their employment status (Sheppard, 2015). Nurses also pointed out that the term fails to identify their deep and profound compassion for the patient (Sheppard, 2015). As a result, nurses often ignore symptoms of CF (Sheppard, 2015).

While some interventions were successful at reducing CF (Houck, 2014; Carter et al., 2013; Flarity et al., 2013; Potter et al., 2013; Craigie et al., 2016; Hersch et al., 2016), a substantial gap in the literature still exists when trying to identify how CF affects nurses at different stages of their career. The majority of research identified in the literature review demonstrated short-term improvements in CF following the interventions (Sinclair et al., 2017). Future research would benefit from designs to include multifaceted, evidence-based practice interventions that have been tested over a longer period of time. Also, future research needs to explore the associations between interventions over different stages in a nursing career and burnout rates.

Methods of Study

Design

The design of this project was guided by the Institute for Healthcare Improvement Model (IHI, 2017). This model utilizes the "Plan-Do-Study-Act" (PDSA) steps to test small changes of improvement (IHI, 2017). The model for improvement is the framework to guide healthcare

evolution and the change is tested on a small scale using Plan-Do-Study-Act (PDSA) cycle (IHI, 2017). This model of testing change is widely utilized and accepted in the scientific literature and in the healthcare community (Taylor et al., 2013). This model is broken into two parts. The first part is three fundamental questions that can be addressed in any order (IHI, 2017): What are we trying to accomplish? How will we know that a change is an improvement? What change can we make that will result in improvement? These questions are meant to guide the healthcare setting, to make specific healthcare improvements (IHI, 2017). The second part of the model provides specific steps to guide the change (IHI, 2017). The PDSA steps are geared towards providing guidance on how to implement healthcare changes. Overall, the objective of the Institute for Healthcare Improvement Model is to apply change in a continuous fashion and utilize a small series of tests to measure the change (Crowl et al., 2015). Many healthcare institutions have successfully implemented changes in the healthcare setting by utilizing this model accompanied by the PDSA steps (IHI, 2017).

The PDSA steps start with planning an intervention to test, completing or trying out the test on a small scale, studying the results, acting on what is learned, and then starting the cycle over again. This project is part of a larger group DNP project that is addressing CF among four nursing specialties: travel nurses, transplant nurses, new graduate nurses and rural nurses. Joint planning among the larger DNP group was vital to ensure the design was consistent and replicable across the educational intervention project. The following sections describe the PDSA steps in detail.

The Plan part of the PDSA cycle was done as part of a group DNP project. The group consisted of four DNP students, each with a specific and unique nursing population of interest.

Planning included taking a formalized 8-week CF educational intervention and workshop (Sheppard, 2015) and modifying it to be delivered in two sessions. The group of four DNP students met frequently during the planning phase, and also with the group DNP project chair. The educational content for both workshops was outlined, and time for discussions was built into each content area. Open-ended questions were developed as a group, with each individual DNP student adding questions relevant to her specific nursing population. Planning sessions were also audio-recorded.

Recruitment and Participants

After receiving approval from the University of Arizona's Human Subject Protection program, recruitment flyers were placed in public venues such as restaurants, libraries, and grocery stores within the Tucson area. Interested participants were invited to contact me by telephone or e-mail for further information or any questions. Recruitment began with reaching out to professional colleagues who shared the project flyer with interested parties. Snowball sampling was used to further recruit participants.

Inclusion criteria consisted of registered nurses currently working in a Tucson hospital, who have worked as a travel nurse, and were willing and able to participate in both workshop sessions. No one who met the inclusion criteria was excluded from participating in these focus group sessions. While I had hoped to recruit five participants, ultimately four participants enrolled in this project and one had to withdraw due to work conflict.

Setting

The focus group workshops took place in a restaurant that had a private room or hotel conference room. For participant convenience, the setting was centrally located in Tucson. Food was available during the two workshops. Both focus group sessions were tape-recorded.

Quality Improvement Intervention

The DO part of the PDSA cycle consists of providing education on a small scale in a real life situation (IHI, 2017). The DO step of this project took place during the first and second workshop. The focus group workshops followed a predetermined script with open-ended questions (Appendix B).

First Workshop

The first focus group workshop began with a description of the purpose of the workshop, the format, and outlining that all information shared during the sessions should be kept confidential. Consents were given to the study participants. Demographic information was collected via paper and pen, to include participant's age, gender, years in nursing, years as a travel nurse, and length of time at the current assignment. The first workshop began with dialogue using open-ended questions to learn about the participants' experiences with CF, their symptoms, triggers, and experiences. The dialogue lasted 30 minutes. Questions are included in appendix B.

Following the baseline data collection and interview, the educational intervention was implemented. The educational intervention included information on the three constructs of CF: burnout, secondary traumatic stress, compassion satisfaction, as well as the signs and symptoms of CF. In addition, risk factors of CF such as unhealthy boundaries, nurse isolation, ethical or

moral dilemmas, grief, and other adverse outcomes were shared with the focus group (Sheppard, 2016). The intervention concluded with information on interventions that have been successful in reducing symptoms including self-reflection, kind self-talk, mindfulness, healthy boundaries, mind-body connection, reaching out for social connectedness and journaling (Sheppard, 2016). The intervention portion of the focus group lasted 15-20 minutes. Each intervention was presented in a simple manner so it could be easily utilized in the work environment. Participants were given journals in which they were encouraged to identify and track their triggers, events, and make note of any mind-body responses related to outcomes of CF. The focus group adjourned with instructions on how to utilize the intervention in their work or personal environment during the next two weeks.

Second Workshop

Following a two-week period, the focus group returned for a second workshop. The second phase of the workshop also began with dialogue in which the participants were asked describe their experiences with CF during the last two weeks. They related triggers, mental or physical responses, interpersonal responses, and unit responses including any difficulties maintaining boundaries, or experiences with ethical or moral dilemmas. They also shared their efforts to utilize any of the CF reduction skills and techniques presented in workshop one. After the discussion, I presented additional tools that help reduce the risk of CF, including concepts of reaching out for support and "unplugging" when off shift (Sheppard, 2016). A debriefing took place to ensure the members of the focus group were not experiencing psychological adverse effects from either of the two workshops. The next section of the paper describes the Study portion of the PDSA.

Analysis

The Study part of the PDSA cycle consisted of the analysis of the two workshops of the focus group. The tape recordings were translated into word format by a transcriptionist. The resulting narratives were then analyzed for commonalities such as triggers, symptoms, and experiences of CF. The project chair served as a mentor during analysis.

Ethical Considerations and Trustworthiness

At the beginning of each workshop, I reminded the participants that confidentiality is a group expectation. For some, discussing emotional stressors that cause compassion fatigue may trigger participant distress. A pre-determined list of mental health resources was available should any participant request this information. No identifying information is included in any descriptions, and pseudonyms are used in lieu of names. Taped recordings were destroyed after being transcribed. No identifying information is included in any descriptions, and pseudonyms are used in lieu of names.

In qualitative research rigor is called trustworthiness, with the aim of encouraging creativity while guiding research integrity. The essence of qualitative studies is gained through asking open-ended questions of the study participants. The five different categories include credibility, transferability, dependability, confirmability, and authenticity that support the framework of trustworthiness within research (Guba & Lincoln, 1994). In this study trustworthiness, which is used to address rigor in qualitative studies, is also used to guide rigor in the focus groups intervention.

Authenticity in research, according to Guba & Lincoln, (1994), is when the reader gains a sense of the experiences, feelings, and true ambiance shared by study participants that deepen the

understanding of the phenomena tied to the research focus of compassion fatigue in the lives of the study participants. The reader lives the experiences, second hand from the study participants and has a deep understanding of the phenomena, tied to the study's focus (Polit & Beck, 2012; Guba & Lincoln, 1994). For this project trustworthiness was met by careful design of the educational project. The project was approved by the principal investigator, the larger DNP group, DNP Project Committee and the University of Arizona's Internal Review Board. Following a strict adherence to a predesigned script and translation of the audio tape, verbatim provided a rich and true essence of the experience of compassion fatigue in the lives of the travel nurse population.

FINDINGS

The purpose of this project was to conduct an educational quality improvement intervention via focus groups project to address the risk of CF among travel nurses in Tucson. The three project aims were: to describe the symptoms, triggers, and outcomes of compassion fatigue among travel nurses; provide a focused, educational intervention; and to provide self-care techniques to reduce further risk among this population. Data analysis of content from a focus group that attended two workshops revealed commonalities that are consistent in the literature within other nursing populations. The additional content analysis identified unique commonalities that are specific to travel nurse populations. The project answers the question: Can an educational workshop help to reduce compassion fatigue among travel nurses?

Participants and Demographics

Travel nurses are unique in that they are hired temporarily to fill position left open by nursing shortages. Therefore, recruitment is challenging due to the transient nature of this

population. Although I had hoped to recruit at least five participants, only three actually completed both workshops. Table 1 outlines the participant demographics. One of the participants is very new to travel nursing, but she was included in the workshop as her brief experiences speak to her reasons for choosing travel nursing and her anticipated concerns that do relate to CF.

TABLE 1. *Demographics*

Participants Ethnicity	**Gender**	**Age**	**Years as a Nurse**	**Education**	**Marital Status**	**Children Age**	**Unit**	**Years as Travel nurse**
Participant #1 Caucasian	Female	58	35	BSN	Married	None	Med-surg & PCU	1
Participant #2 Caucasian	Female	28	3.5	BSN	Single	None	Tele	Less than one month
Participant #3 Hispanic	Female	50	14	BSN	Divorced	1 16	Ed ICU	7

Intervention: Workshops

Study participants (N=3) attended both of the workshops. The two workshops were each two hours in length. The first of the two workshops was divided into two parts. During part one I followed a script to ascertain the understanding and experiences of compassion fatigue. The second 30 minutes was dedicated to providing an educational intervention to define and increase awareness of the constructs of compassion fatigue. The constructs reviewed were burnout, secondary traumatic stress, and compassion satisfaction. Study participants unanimously reported a vague understanding of compassion fatigue without knowledge of the three constructs. All study participants felt that the term compassion fatigue was appropriate and was an excellent description to describe their experiences. They felt comfortable utilizing the term in their work settings and when interacting with peers and did not fear stigma associated with the term. All participants were highly interactive and openly identified individual experiences of compassion

fatigue in their private and professional lives. Participants identified most challenging factors that contributed to compassion fatigue were: physical, mental, and emotional symptoms; lack of support; scheduling; nurse-patient ratios; ethical and moral dilemmas; boundary; and patient behaviors.

Following the educational intervention, participants were given a journal to capture personal thoughts, experiences, and observations related to symptoms, triggers, and encounters associated with the constructs of compassion fatigue. Although private, participants were encouraged to bring back their journals to workshop two in order to facilitate discussion of the experiences of compassion fatigue among travel nurses.

Workshop two began with a review of the discussion and education shared in the prior workshop related to the three constructs of compassion fatigue: burnout, secondary traumatic stress, and compassion satisfaction. Study participants all returned with their journals, and openly shared their experiences related to compassion fatigue over the last two weeks. The last 30 minutes of the workshop consisted of a facilitated educational intervention focusing on strategies to alleviate the risk of compassion fatigue among travel nurse populations. The educational intervention included resilience, mindfulness, and coping mechanisms to diminish the negative construct of compassion fatigue and enhance the positive construct of compassion fatigue, which is compassion satisfaction.

The workshops were energized, interactive and fully utilized by all study participants. The following are commonalities related to the findings from the two workshops' discussions and interventions.

Commonalties Related to Compassion Fatigue

An analysis of the audio tapes and transcripts of the two workshops identified commonalties related to compassion fatigue. Commonalities included symptoms such as physical and emotional fatigue, triggers including lack of support, structural issues, boundaries associated with patient behaviors, and witnessing patient loss or trauma. Participants also shared commonalities associated with outcomes and coping mechanisms. Following is the commonalties that were identified.

Symptoms: Physical, Mental, Emotional

Participants identified conflict in their role as nurses. Overall, they expressed satisfaction in the nursing role, reporting that nursing was challenging and satisfying. In contrast, participants with more experience reported higher degrees of disenchantment with the nursing profession. One participant stated, "I'm a lot older than you guys—I think—I think there actually did come a particular point in my career where it stopped being a career and just started being a job." The participant with less experience reported that she was still excited about nursing, especially about traveling. All agreed that nursing provided variety and that there were opportunities with nursing that other professions did not provide. The participants agreed that bedside nursing was, inherently, "exhausting" and led to "fatigue."

The study participants acknowledged symptoms of compassion fatigue that they had personally experienced or that they had observed in other nurses. The physical, mental and emotional symptoms of compassion fatigue presented for these study participant as: physical fatigue; impaired communication; unhealthy coping; detachment; and dissociation.

A symptom experienced by all participants was fatigue or exhaustion. Physical and mental fatigue were intertwined. The consensus was that fatigue was brought on by the physical demands, coupled with the intense critical thinking and the long shift, that they worked. The participants also expressed not knowing if the physical fatigue they felt was due to the act of nursing itself or from compassion fatigue. Participants identified fatigue from the physical act of nursing such as turning or lifting patients. All participants liked the 12-hour shifts, however, reported that the shift was long, physically and mentally exhausting. Participants identified that certain shifts had a greater impact on how they felt the next day. Participants all agreed that fatigue was a significant factor and that it was difficult to identify if it was related to compassion fatigue. All participants identified that fatigue was difficult to manage and that it impacted their relationships, the ability to function the next day, and their energy level. As summarized by one participant:

> "*I come home from work—and-and the weird thing is that it doesn't necessarily—it doesn't necessarily have to be a bad day. I come home from work, and I'm like—I wanna sit in front of the TV with my husband, and I just wanna sit there, and it's gettin' closer to the time. I better start gettin' ready for bed. Better start gettin' ready for bed, and I just don't, and it's like there's something in me that's like, "I'm not gettin' up. "I just wanna sit right here. I don't care. I don't care," and then I end up gettin' to bed late, and then I'm worse the next day. But it's this weird—and is that a fatigue symptom? And if it's fatigue, is it fatigue, fatigue, or is it an accumulation of a—of compassion fatigue, so no clue. But that's—that was one symptom that I—that I notice, and I've had that for a long…*"

Participants agreed the fatigue included, emotional, physical, and mental fatigue and that it was consistent regardless of the unit, or hospital where they worked. Fatigue impacted their ability to communicate with peers and family, and engage in activities of interest after hours .

All participants reported that compromised communication was a result of compassion fatigue and of overall exhaustion that impacted their interactions with patients, peers, and family.

Participants agreed that at times communicating with the patients was too hard and they wanted to avoid communication with patients and peers. Participants also reported that it impacted their relationships with peers. Poor communication with peer, patients, and families left the participant feeling bad about themselves and contributed to compassion fatigue experiences. As explained by one participant:

> "*I don't want to listen. Um, things that aren't really—that generally, I will just roll off my back, just, you know, just don't roll off my back. I take it out on my coworkers just by the tone of my voice and, and being impatient. And, and I hate it. And then I—then I hate myself for being like that. And then I get even worse, 'cause then I think I'm terrible. Yeah, that's like getting beaten up.*"

Participants reported observing and experiencing altered communication in other nurses and in ancillary staff such as physicians. Participant-reported interactions with other professionals that are poor, can have a strong impact on their own personal reactions throughout the day. Other nurses often are "checked out" or have no interest in debriefing patient events. Participants would like to debrief or share about a patient, however, peers may avoid that discussion. Participants felt that negative communication and stress by peers transferred more stress to them. When nurses verbalized that they hated the department or that they were unhappy it set a tone of negativity that was difficult to overcome.

Symptoms of CF appeared to affect their personal lives and impacted their relationship at home. Participants reported avoiding social contact or isolating at home. As reported by one participant: "Yeah, well, like me, like, I think I just like to be-be alone and not be so so—social." One participant reported debriefing with her daughter who is 16 and realizing at the time that is was not appropriate. All agreed that there are times they debrief with friends or relatives just

because the need is so great. Participants agreed that debriefing inappropriately was a result of fatigue and lack of opportunity to debrief in the work environment or with peers.

Detachment/dissociation. Participants reported that zoning out while at work was a defense mechanism that temporarily protected them from the stress of the day as reported by one participant:

> "*Sometimes I think, too, it's like—it's like a-a traumatic kind of a situation and-and-and people will sometimes zone out. You probably see that in the emergency room—you know? They'll just kinda zone out, and that is a stress reliever because then you're not in—you know—you're not involved with it. So, sometimes I wonder if it's that or—well, and the other thing, too, is it is true. Once it's done, it's done. Why-why dwell on it.*"

Participants reported on occasion tuning out when patients are talking to them. One participant expressed that nurses often tuned out during morning or evening report. As one participant stated: "ER nurses-I don't know if that is part of compassion fatigue can be very cynical, I think all nurses can be, but just the ED is very, you know-and it scares me sometimes." All agreed that tuning out and becoming cynical was risky as it places patients and nurses at risk of a serious medical error. Participants verbalized that often they checked out emotionally at home, and disengaged from loved ones without being aware that it was connected to compassion fatigue.

> "*I just wanna sit right here. I don't care. I don't care," and then I end up gettin' to bed late, and then I'm worse the next day. But it's this weird—and is that a fatigue symptom? And if it's fatigue, is it fatigue, fatigue, or is it an accumulation of a the—of compassion fatigue, so no clue. But that's—that was one symptom that I—that I notice, and I've had that for a long—I've-I've done that for a long time. It's really, really, really hard.*"

All participants verbalized that disassociating at work and at home was a disservice to the patients as well as to their family and friends. In addition, participants expressed guilt and other

negative emotions associated with disengagement. Participants expressed interest in learning skills to change the behavior.

Triggers

Study participant identified several triggers. They proposed that the triggers may increase their risk of emotional distress. Triggers they outlined included lack of support, scheduling issues, nurse-patient ratios ethical and moral dilemmas and boundaries. These are all further described below.

Lack of support. General census among participants was that structural challenges such as high patient to nurse ratios, not having the equipment needed for patient care and lack of ancillary support staff added to the nursing stress, feeling overwhelmed, and exhaustion. All participants agreed that it felt hopeless to express frustration and that these structural challenges came with the position of nursing. The participants did not believe that it was tied to the general organization of healthcare or a factor of poor leadership as one participant summed it up as a stressful and frustrating fact of nursing care:

> *"And, and I know they don't do it on purpose. At least—at least the hospitals that I've worked at, you know, they really, really try to at least cap you at five. But, um, but once in a while, you have to do six. Um, having something happen—oh, here's something—having something happen right towards the end of the shift, so you know you're not gonna get off on time."*

Structural influences, although not intentional, are a factor that leads to compassion fatigue. Participants reported that despite working on different units in multiple hospital settings structural influences were consistent across the nursing spectrum and were associated with general job frustration. Structural influences were not perceived as organizational or leadership driven.

When asked about compassion fatigue and what it meant; all participants reported not having prior knowledge of the term compassion fatigue or concepts. One participant stated: "Um, and it was really interesting, and I've been thinking about it a lot anyway, because I, I notice I'm—I mean, I'm not a mean person." She further explained:

> *"But I noticed sometimes I, I would just like—I just don't care. "I don't care. You know, I don't. I don't care what's the matter with you. Don't even bother telling me about that lab. I'm just not even interested in that." And or I'd be mean or short and, and then I would be like, "God, I'm not—I'm not like that. Why am I like this?" And once I started learning about compassion fatigue, I'm like, "I betcha that's it. I betcha that's what it is."*

Participant expectation of support from organizational management, leadership or peers was minimal. All agreed that unique to the travel nurse role was the need to be flexible and able to adapt quickly to changing units, patient acuity, and hospital/unit specific operations.

When asked about burnout, all agreed that the complexity of nursing; the high level of critical thinking demanded the duration of a shift; and the need to adapt to manage critical situations quickly contribute to compassion fatigue. As one participant summarized:

> *"I think also as nurses coming into this patient's care with so much going on, I—it's kind of overwhelming to try to figure out all these different, uh, like consults and, and just coming into this huge mess. [Chuckles] Being like, "I don't even know where to start."*

The participants felt that changing units with varying degrees of acuity; admissions that required higher levels of care than reported; attention to detail; and the high level of critical thinking demanded of a nurse translates to compassion fatigue and exhaustion.

Scheduling and nurse-patient ratios. Bedside nursing traditionally encompasses 12-hour shifts, with three shifts scheduled per week. Study participants identified needing the four

days off to rekindle energy and emotional stamina. All agreed that the 12-hour shifts were factors in burnout associated with compassion fatigue. One participant reported:

> *"Twelve-hour shifts are long, long, long, long. And I know, for me at least, I can tell, come about 4:00 or so, you know, I'm just sort of—I have to be careful, 'cause that's kind of my time when, um, if I'm gonna get, um, you know, not, not do as good a job as I'd like to do, it's probably gonna be then."*

Participants identified feeling physical and emotionally fatigued after working a 12-hour shift, and that it was hard to determine if the fatigue was "just regular fatigue or compassion fatigue."

Clinical situations arising unexpectedly, such as a change of shift fall or code, added to the length of the shift, created additional frustration and translated to burnout-associated exhaustion. A participant agreed that certain patient situations were outside the realm of control, and others were considered stressful, risky and demanding, but leadership could intervene in situations such as having an admission at the change of shift.

The participants reported that due to the transient nature of travel nursing, the patient setting was not a significant factor in the enjoyment or challenge of the job. Factors perceived as adding to the nurse's compassion satisfaction was identified as characteristics and behavior or situation of the patent. Triggers that participants perceived as related to ethical and moral dilemmas were linked to the clinical complexity of the case.

Ethical and moral dilemmas. Participants noted that the clinical complexity of the case was a contributing factor to how exhausted they felt at the end of the day. Patients with high acuity demands increased nurse engagement and created an atmosphere of intensity. Participant felt ethical and moral dilemmas when caring for different levels of patient acuity. Participants noted that it was difficult to attend to what is perceived as trivial call lights when a patient is struggling for his/her life. As explained by one participant, it is difficult to have empathy with a

patient at times, when she/he calls for seemingly trivial request, when in the next room a patient may be dying. Everyone agreed that complexity of the case made it more difficult to meet the need for less acute patients. Patients with challenging and multi-tiered health issues were problematic to manage and required much more attention to detail and oversight. These patients significantly added to the physical and mental fatigue experienced by the participants at the end of a shift. Conflict or boundary related triggers were patient behaviors, and witnessing loss.

Boundaries. Study participant considered a number of boundary issues that contributed to compassion fatigue. Bounadary issues identificd by the participants included disruptive patient behaviors and the challenge of providing quality care to these patients.

Patient behaviors. Participants were in consensus regarding the joy they derived from patient care and from overseeing challenging and complex cases. Although they enjoy nursing, all found that certain patient or family behavior was especially challenging and left them questioning their decision to become a nurse. Behaviors particularly challenging was patients' perceived misuse of the health care's system, patients' high demands, families' or patients' criticism of nurses, and patients' or families' disrespect.

Patients who routinely use the healthcare system for needs not associated with acute illness were seen as problematic and caused annoyance on the part of the participants. As explained by one participant:

> *"And then sometimes, you know, like I said, like, you know, when you—when you're an ED nurse, you know, you're just like, like just like really like just over it. Like that would be my compassion fatigue. Like, "Get over it," and just like, like, "If I'm this—if I'm like this at home, you could be like this at home and get better and just not have to come here." You know? [Chuckles] That sounds so mean."*

A participant expressed concern that patients perceived as regulars precipitated a sense of frustration. As stated by one participant: “I’m done with you,” while another participant pointed out that “that is the fatigue.” All voiced concern that with regulars, important health needs could be overlooked, or missed. Patients that appear to need less care, or appeared to be using the system, triggered criticism by the participants and all voiced internal struggle to provide compassionate care to these patients.

Participants identified additional frustration when patients are not participating in their own care or are resistant to care. As stated by one participant:

> “*When patients aren’t cooperative with their—with their care, that—it just pisses me off. [Chuckles] That’s very, very, very hard, because, you know, you want to do what’s right for them. And if they’re not cooperating with that, then, you know, you have to kind of try and get them to understand why this is important and, and then deal with the behavior.*’

Study participants pointed out that demanding, complaining, manipulative patients were especially difficult to manage. Participants expressed goal was to manage the shift successfully with patients improving, medically and transitioning to a successful discharge. Patients that demand frequent attention distracts the nurse from her ultimate goal and increase stress. As one participant summarized:

> “*And they want water or they’ll say, “I’d like some—,” um, so we’re eating dinner, “Um, I’d like some salt.” “Okay. Fine. I’ll go get you salt.” I’ll go, get salt and come back, “Oh, and then could you—could you also bring me a glass of ice water, too?” “Okay.” Do that. Go out. Come back. “Oh, thank you. Hey, would, would you mind—?” … “I have actually said to patients, “Tell me all the things that you want right here and I’ll go ahead and do them, but I’m not gonna be doing this back and forth stuff.” I’ve actually had to say that before. And that just goes to show that compassion fatigue when you get a little short with the patients, too.*"

Participants also pointed out that while family involvement was important there was a balance between family perceived as a support and family that was a hindrance to care.

> "*That's—families, very—and they want to know everything. "And, and, by the way, why didn't do this? And don't you think because, you know—." Yeah. That's families. That's, that's tough, too. That's a—that's a compassion fatigue trigger right there. Families that are too involved*."

Family members who questioned nurse professionalism, covertly manipulated nurses, and/or were demanding, triggered nurse avoidance versus increased nurse attention. Participants agreed that family involvement was a factor in positive patient outcomes; over-involvement was seen as a deterrent to patient recovery. Families that complained about insignificant details such as a water pitcher that was partially empty in the midst of a code, were considered especially challenging.

Participants reported families who appear to manipulate the nurse with subtle threats such as working in the medical field, being a lawyer, or calling their lawyer were detrimental to patient care and resulted in the nurse avoiding the patient's room. As stated by one, with all others nodding in agreement:

> "*Or when they're calling their lawyer. [Chuckles]…"And what's your name and what is it that—?" Oh, yeah. Oh, yeah. Do you—do you think you want to take care of people like that? Hmm. There's some compassion fatigue right there. I have no compassion for people like that.*"

Participants agreed that the quality of the patient/nurse relationship was a significant factor that contributed to the joy of nursing. Patients who verbalized appreciation for the nurses' service were a draw to the participants, while patients who were disrespectful were avoided. Participant voiced the belief that patients who were demanding, disrespectful and abusive made them question their decision to be a nurse. As explained:

> "*Like abuses, you know, you as a nurse or, you know, comes in for help and then they decide that they're mad at the world. And so then they call you names, they tell you to get out of their room. You know, that would be like, "You know what?" Like, and then you like, "Why am I here? Like why?" You know, so that probably would be something for me, 'cause that's happened a lot.*"

All participants struggled with finding empathy and compassion for patients that exhibited a lack of respect for health care workers, or, verbally lashed out at nurses no matter the reason. Participants identified this as a trigger to personal burnout, increased fatigue, and increased ambivalence of nursing as a profession.

Witnessing loss. All participants reported not having any prior knowledge of secondary traumatic stress, however, all were able to identify what they perceived as traumatic stress prior to the compassion fatigue education intervention. Participants expressed deep personal emotional reactions to witnessing patient or family loss. The circumstance of the loss was a significant factor in the nurses' emotional responses. Patients who were in hospice or more prepared to die were less traumatic then patients not prepared or that passed suddenly. As explained by one participant: "The ones that affect me the most is, you know, I work in the ED and it's, you know, like sudden death, like not, um"… "Out of nowhere." Overall participants reporting that the emotional state of the patient, whether they appear prepared or unprepared, made a difference to the nurse.

Participants reported family dynamics and grief as the most difficult and as causing the most emotional pain for the nurses. All identified witnessing the grief of family members as the most difficult and most emotionally charged. A participant identified the struggle to provide support for the family, while the participants themselves needed emotional support. As one participant reported:

> *"…and then the families come in and there's like this screaming and crying and, you know, sometimes I'm like, "Oh, I can't. I can't watch this." You know, 'cause it's hard. It's hard to see. It really is. So that's probably the one that affects me the most*."

Participants felt that the loss of a young patient or a child as the most difficult, as family members had increased emotional needs and they required more support from the nurse. Supporting family members through the emotional trauma of a loss was emotionally draining. As summarized by one participant:

> "*Because you're with the family and you have to, you know, be strong for them and, you know, comfort them. And, and I just, you know, I, I have cried with families, but sometimes, you know, you feel like you have to be the bigger person and be supportive to them, because they're the ones that lost their family member, not you.*"

A participant identified, that witnessing loss was more difficult to leave at work, and often triggered emotional reactions after the shift was over. Participants reported feeling overwhelmed and stressed if the family remained for long periods of time and desiring the family to leave while honoring their loss. Participants reported the loss of a child was challenging as the families reactions were intense and powerful. As one participant reported: "But then you see how much they cry and, you know, especially if it's like a kid, you know, and then you just—you leave and you're like, 'Oh, gosh'." Participants identified lack of a supportive environment added to their stress level. Supportive environments were believed to be hospital units which encouraged nurses to share and process stressful events with peers or management.

Outcomes and Coping Mechanisms

Study participants shared common outcomes and coping strategies. These common outcomes and coping strategies are connected to the constructs of compassion fatigue. All found

the interventions provided in the two workshops as beneficial. The following sections are related to these findings.

Travel Nursing as a Choice

The participants reported several factors that contributed to their decision to become travel nurses, and all voiced that the variety and flexibility was their top priority. They all agreed that the different experiences as travel nurses led to personal and professional growth.

Participants reported that professionally they had to be skilled and independent, as often support was lacking at the work assignment; this independence substantially leads to added confidence professionally. As one participant explained: "because a lot of—when I think of traveling, and being in like a resource pool, you have to be very confident. Because sometimes you don't always get a lot of help. So you have to know what—I feel like you really have to know what you're doing." All participant reported traveling as being challenging and "fun". One participant explained that she enjoyed the social aspect of travel nursing, stating that she had friends on almost every unit she worked and felt supported from a social aspect. Participants also felt that the ability to explore new environments offset the stress of changing job environments every three to six months.

Unhealthy Coping: Self-Disparaging Self-Talk

Participants reported a variety of strategies for managing compassion fatigue. All agreed that the coping strategies were often ineffective. Participants reported not addressing the emotional impact of witnessing a loss in the work setting. They often were able to hold it together at work and later fell apart. As explained by one participant:

> *"And then it hits you, you know. It might not hit you because you, you know, if your adrenaline's going, you're trying to save somebody and then you can't. Then*

> *the family comes in. You're still kind of, you know—and then you get in your car and you're just like, "Oh, my gosh." And then you kind of start to come down from all of that and then you just cry."*

Participants reported sometimes crying for an hour. Participants reported, having alcohol as a coping strategy, such as: "Oh, yeah, say that all the time. Today's a wine day. [Laughing]." A participant agreed that deferring to other staff such as social workers helped to defer the families emotional pain elsewhere. One participant reported symptoms of memory loss and sleep disturbance, and wondering if it was related to hormone changes or early Alzheimer's disease. One participant found herself questioning her role as a nurse and if she needed to leave the profession:

> "*One day where I was like—it—it was a bad day and—you know—you—it—uh—I guess I just got a lot of critical patients in a short time, and I felt like I didn't have the help that I would've liked to have. So, then I was like, "Gosh—you know—what am I doing? Like, why am I here?" And I feel—that's part of compassion like…*"

Several of the participants expressed coping by inappropriately becoming angry at strangers or loved ones. All participants acknowledged that they were often not aware until after the anger had passed and then was left with guilt and regret regarding actions. As one participant reported: "What am—why am I here? And then—um—and then I remember going home that very day and being angry at my daughter for like, really, no reason." Another participant reported that she would "take it out on my coworkers, just by the tone of my voice." The participant further explained "hating herself" for the behavior.

Participants all reported having physical symptoms that they are not sure is related to compassion fatigue or to the task of nursing itself. Participants reported that they had observed nurses on the unit having pain that is significant and subsides quickly. All felt that physical

symptoms are often related to compassion fatigue. One participant noted that a nurse on the unit had a sudden onset of back pain, couldn't stand and was holding onto a wall, then later the pain was gone. The nurse told the participant it was pain that she was only getting at work. All agreed that is most likely related to compassion fatigue. One participant reported that she often works an extra shift, reporting that she had worked 60 plus hours that week.

Participants all expressed that they often find themselves isolating and canceling social engagements in order to relax. A participant agreed that coping by isolating and canceling social engagement was not in their best interest, however, all reported that they found reasons to justify their behavior. As one participant reported:

> "*You know—like, I was supposed to—like, I worked so much that week, and then, on Saturday, I was supposed to go see a friend with—I was gonna go with another friend to go visit someone else. I was like, "I don't—," I worked so much that I just didn't feel social.*"

All participant expressed interest in learning strategies to improve coping skills in their personal and professional lives.

Potential Interventions

The study participants all identified a need for interventions to address compassion fatigue. All three participants report agreeing to be part of this study in the hopes of gaining knowledge of what compassion fatigue is, to determine if they were experiencing it, and hoping to gain information to reduce the impact of CF in their professional and personal life and to renew the joy of nursing in their life. The participants reported having little information or knowledge regarding compassion fatigue. All participants identified interventions that they believed would be effective in the management of compassion fatigue specifically: increasing

awareness and education of compassion fatigue, increasing awareness of strategies to reduce risk of compassion fatigue and debriefing or sharing with other nurses.

Collaboration and Colleague Support

All participants were given information on community resources and educated on employee assistance programs at the place of employment. While all were in agreement that debriefing with clinical professionals would be helpful, one participant found that attempting to debrief with other nurses was not effective. She reported that other nurses are not receptive and do not embrace or support others in this process. She stated: " …you're trying to tell them about a patient and they really don't care. They're like, "Okay." And I'm like, "Really? Like that's your response?" Participants were open to learning about community resources. One participant spoke about the need to debrief with other healthcare professionals however that it was difficult to take the time to care for herself. All participants agreed that as caregivers they were aware of how important taking breaks for themselves is yet they rarely did. One participant verbalized the need to debrief with other professionals rather than journaling alone.

Self-Care and Education

Participant-reported that the education intervention as beneficial and two of the participant shared the intervention with peers at work. Following are the findings of the self-care and education intervention.

Self-Care Strategies

All participants reported benefit from writing in the journal daily as part of workshop one's education and intervention. One participant reported journaling as being extremely helpful, although at the end of the shift she had to push herself to engage in journaling. Participants

reported struggling with being fatigued, however, found that journaling helped to diminish the exhaustion. Another participant reported knowing that she was going to journal later helped her be aware and more in tune with her reactions than when not journaling, she reported:

> Like, *"Well, yeah." Yeah, it was helpful to know—cuz there were some things that you told us a couple weeks ago that I would've never of thought would be compassion fatigue. So, I think it—if nothing else, it just made me look—and the other thing is, knowing that I wanted to write a few things down in here so I'd be like more aware during the day and go, "Oh, okay, now, remember to write that down," or—you know."*

Participants agreed that increased awareness and becoming more in tune to their own body and emotions was helpful and reduced overall stress as one participant reported: "Yes because I see—I see that. I was—I was more in tune—- the last two weeks with what was going on around shifts in the last two weeks—."

Participants discussed the benefit of debriefing rather than holding it in and carrying it forward. After receiving the educational component on the benefit of journaling physically and emotionally all expressed surprise and interest in continuing self-care strategies. As one participant stated: "And it—you know—and that—I think that's a really good point because I know, when I write about something, that it does. It releases the stress…" Participants expressed how difficult it was to not dwell on negative aspects of the day. One participant reported: "…what happened and how I could've done stuff differently and like dwell on it. I should journal." Participants all expressed interest in learning more self-care strategies.

Education - Compassion Fatigue

The study participants all report feeling that possibly they were experiencing compassion fatigue to some degree. One participant, having graduated in the last five years, reported having an education component during her BSN education focused on compassion fatigue. The other

participants identified having minimal knowledge of the topic, however at times wondering if they had compassion fatigue. One participant verbalized that at times she has had concerns in regards to her emotional presentation and behaviors and has questioned why she was feeling a certain way: " …Why am I like this? And once I started learning about compassion fatigue, I'm like, I betcha that's it. I betcha that's what it is." All participant reported that on the unit or hospitals they have worked, education and information on compassion fatigue, has not been presented and this study was the first experience or opportunity to discuss the topic. At the end of the second workshop, several of the of the participants suggested that an education and discussion platform be brought to the hospital units. One participant that works on the ICU and emergency room reported talking about it while at work. After the first workshop she reports sharing and educating co-workers, therefore, increasing their awareness of compassion fatigue.

All participant questioned their own behavior, feelings, and experiences measuring it against the knowledge they had gained in workshop one, and interpreting it to measure if it was compassion fatigue related. One participant questioned her role as a bedside nurse and if she needed to change to a different nursing role. All participants were fully engaged in both workshops, taking notes, and asking questions. Participants expressed plans to utilize self-care skills and interventions taught during the two workshops. Participants agreed that incorporating self-care strategies routinely is important however a challenge especially when working long shifts.

Reflection on the Workshops

Initially, all participants reported minimal knowledge of compassion fatigue. Only one of the participants had any structured education regarding compassion fatigue, symptoms, impact,

or intervention strategies. At the closure of workshop two participants verbalized benefit from the education and self-care strategies. As one participant reported:

> *"Well, yeah." Yeah, it was helpful to know—cuz there were some things that you told us a couple weeks ago that I would've never of thought would be compassion fatigue. So, I think it—if nothing else, it just made me look—and the other thing is, knowing that I wanted to write a few things down in here so I'd be like more aware."*

Participants expressed that attending the focus group and having the opportunity to talk share with others as helpful. All participants felt that the term "compassion fatigue" was appropriate and one participant felt that it was "descriptive and another way to say exhausted." Participants were tuned in to negative strategies for managing compassion fatigue, such as drinking alcohol, smoking, working extra shifts, and not taking breaks. All participants agreed that knowing what the symptoms of compassion fatigue are and strategies to protect against symptoms of compassion fatigue as beneficial, expressed by one participant: "Boy, that has been really helpful." Two participants reported sharing what they have learned with nurses they work with. Education and strategies to manage and address compassion fatigue were viewed by all participants as paramount in providing support to nursing staff.

DISCUSSION

The purpose of this project was to conduct an educational quality improvement intervention via focus groups project to address the risk of CF among travel nurses in Tucson. The project aims were to describe the symptoms, triggers, and outcomes of compassion fatigue among travel nurses; provide a focused, educational intervention and to provide self-care techniques to reduce further risk among this population. Through group discussions, the participants identified significant symptoms of compassion fatigue that impacted them in a

variety of ways in both their personal and professional lives. Participants expressed interest in learning strategies to protect against compassion fatigue and indicated probable interventions to combat compassion fatigue among travel nurses.

The project design was guided by the IHI model utilizing the PDSA steps (IHI,2017). Using this project's modality, it is helpful to first reflect back to the first question of the IHI model: What I was trying to accomplish? I expected to learn from travel nurses about their experiences of compassion fatigue. The participant narratives allowed me to understand their experiences and contributing factors and symptomatology similar to those in other nurse populations. Travel nurses are similar to other nurse population as structural and organizational challenges such as high nurse to patient ratios trigger symptoms of compassion fatigue (Faller et al., 2011). In contrast, other nursing populations often look to administration as causal for structural challenges; travel nurses have fewer expectations of management and expect that structural influences are a factor of the healthcare system rather than leadership or management.

The second question of the IHI model is: How will we know that a change is an improvement? The findings and reports following the first workshop indicate that the participants felt education, self-care skills, and even journaling can benefit travel nurses, by bringing about changes and awareness that can lessen the impact of compassion fatigue in their personal and professional lives.

The last question of the IHI model is: What change can we make that will result in improvement? The findings indicate that involvement in focus groups where nurses can share their experience with compassion fatigue or debrief can lessen the impact of compassion fatigue. Participants found that increasing awareness, engaging in the educational intervention, and

learning self-care skill such as journaling was helpful in lessening the impact of compassion fatigue in their lives.

Interpretation of Findings

The findings from this educational intervention project parallel much of the literature and offer a mirror into compassion fatigue and how it is experienced among travel nurses. The participants depict, symptoms; structural challenges such as scheduling and patient-nurse ratios; and patient influences such as disrespect of the nurse as probable factors to the development of compassion fatigue in this populations. The participants suggest and support interventions that they believe may prevent, reduce the risk, or minimize the impact of compassion fatigue professionally and personally. Following is a discussion of the findings and support from the literature.

Symptoms of Compassion Fatigue

Previously noted symptoms of compassion fatigue grow over time and can be driven by feelings of inadequacy, mounting inability to make an impact, a deep discouragement regarding the job, and slowly losing the spark that cultivated the very caring of nursing itself (Stamm, 2017). Symptoms can include: physical fatigue; emotional exhaustion; depression; reduced sense of accomplishment; depersonalization; poor health; diminished self-care; sleep disturbance; lack of attentiveness; diminished patient empathy; anger; and hopelessness (Wilkinson, 2014: Flarity, 2013). Of the previously noted symptoms, the study participants noted that they experienced physical and emotional fatigue, and feelings of inadequacy; they frequently questioned their role as a nurse, and considered leaving their current position or nursing all together. Compassion fatigue is a possible causative factor attributed to high nursing turnover and low retention rates

(Kelly et al., 2015). Compassion fatigue can cause nurses to struggle to find meaning in their work and subsequently leave or change positions (Potter et al., 2013). In a literature review, 57% of new graduate nurses leave their position within two years, and nurses with longer employment have higher degrees of secondary traumatic stress (Mason, Leslie, Clark, Lyons, Walke, Butler, & Griffin, 2014; Faller et al., 2011). In this study the participants with the longest nursing history experienced the greatest and most significant symptoms, and questioned their desire to remain in the nursing profession while the nurse with fewer than five years' experience reported continued excitement about nursing and was looking forward to working as a travel nurse. All of the participants had similar educational history, and none of the participants expressed interest in seeking higher levels of education. The participants all reported physical and emotional fatigue. Consistent with the literature, (Flarity, 2013), participants reported that fatigue impacted their personal and professional life, reduced energy to engage in activities outside the home, led them to cancel social engagements, increased their isolation, and resulted in a lack of involvement in usual activities.

Participants reported poor communication with family and coworkers, not feeling supported by peers, checking out of conversations with peers and patients, having inflexible opinions, experiencing negative interactions with peers leading to increased stress and isolation. Participants identified the feeling of guilt and remorse regarding poor communication with others and reported that it added to their personal and professional stress. This is consistent with the literature that indicates that compassion fatigue influences the nurse's relationships with coworkers and patients (Sorenson et al., 2016).

All participant reported utilizing a variety of coping skills that failed to mitigate symptoms of compassion fatigue. Participant-reported having deep, lasting emotional reactions to witnessing loss frequently holding it together for the shift and then crying on the way home, or stuffing and ignoring their feelings. Participants (N=2) reported using alcohol to decrease stress. Another participant reported periods of poor memory, disturbed sleep, and concerns she had Alzheimer's. This is consistent with the research in other nursing populations which indicates that secondary traumatic stress can trigger flashbacks, avoidant behaviors, physiological, emotional and functional reactions and damage (Bride et al., 2004). Studies have found that secondary traumatic stress can trigger similar symptoms of posttraumatic stress that include disturbed sleep and memory problems (Stamm, 2017; Flarity, 2013).

Participants identified periods of zoning out when talking to peers or patients, avoidance of traumatic events, lack of empathy for patients or peers and not caring or wanting to hear patient stories. All participants believed this was a coping strategy as a means to protect from further exposure, primarily when fatigued or overwhelmed. One participant expressed fear, that she may miss a critical patient issue. The literature substantiates that secondary traumatic stress can trigger errors in medical judgement, detachment, and diminished nursing performance (Lachman, 2016). Participants all sought to find alternatives to current coping strategies and felt that current behaviors may put patients at risk and was a significant factor in their overall physical and emotional health, and was detrimental their personal and professional self-image.

A review of the literature and most commonly utilized measure of compassion fatigue, the ProQOL (Stamm, 2017), encompasses many of the symptoms of compassion fatigue such as hopelessness, difficulties with work, fear, sleep difficulties intrusive images and avoidance. A

few of the symptoms identified in this study are not readily addressed in the ProQOL (Stamm, 2017), and are inconsistently reported current research. Specifically, symptoms such as: concerns regarding patient care; communications at work and at home; disengagement in the work environment; disassociation while at work; and questioning their role as a nurse. It appears that the ProQOL, does not address all symptoms expereinced by this population. In addition, the role of the travel nurse does not appear to be protectant factor in compassion fatigue in the nursing profession. The number of travel nurses is expected to grow and is important to determine symptoms of significance to this population in order to provide insight, possible interventions to address the symptoms, and if nurses enter the travel profession with compassion fatigue or it acquired after transitioning to travel nursing.

Triggers - Contributing Influences

Factors identified by the study participants as contributing to compassion fatigue parallel triggers and influences identified as causal in the literature review. As currently conceptualized, CF is comprised of compassion satisfaction, burnout, and secondary traumatic stress (Stamm, 2017). As reported by the study participants diminished compassion satisfaction was tied to structural and patient influences. Structural influences include lack of support, patient-nurse ratios, and scheduling. Patient influence include high-frequency users, patient-nurse interactions or demanding family members.

Structural Influences: Lack of Support

Participant identified increased emotional and physical fatigue associated with structural influences. They agreed that structural influences outside their control contributed to increased symptoms associated with the negative constructs of compassion fatigue, burnout, and secondary

traumatic stress. The consensus among the participants was that high patient to nurse ratios, disproportionate equipment or ancillary support staff, patients with complex and demanding health needs, increased nurse stress and diminished the quality of care given to the patient. This is consistent in the literture that found that nurses that perceive that job demands are greater than their capacity to meet those demands, secondary traumatic stress and burnout may be exacerbated and the nurse may experience less patient compassion (Lachman, 2016).

Nurse Patient-Ratios

As reported in the literature (Flarity et al., 2013; Carter et al., 2013), participants identified that nurse to patient ratios, inability to meet patient demands, and patient acuity were significant factor in symptoms of exhaustion, frustration, and diminished feelings of job satisfaction. Participants identified that the complexity of the patient needs, paired with demanding and seemingly trivial requests increased stress and decreased patient empathy.

While the literature found that nursing population frequently attribute these factors as being linked to compassion fatigue and nursing populations look to administration or management to address these issues (Faller et al., 2011); these participants verbalized that high nurse to patient ratio was a factor of the healthcare industry and outside the control of hospital administrations.

Scheduling

Participants aligned with other nursing population in the literature that identified significant causal factors related to CF as: work stressors; demanding positions; multiple nursing tasks with significant time constraints; patient aggression; lack of respect; long hours; and repeat exposure to witnessing loss (Wilkinson, 2014). A significant risk to nurses is that the physical

and emotional exhaustion that can arise from compassion fatigue may lead to nursing errors and professional fatigue (Sheppard, 2016). This is parallel with participants report that increased attentiveness at the last quarter of the shift was prudent and that change of shift codes and falls added to their emotional and physical fatigue. All participants reported that long shifts, stressful working environments, and demands of critical thinking left the nurses emotionally exhausted. Burnout, defined as the frustration, exhaustion, anger, and depression related to the work environment is triggered by the very experiences identified by these participants (Stamm, 2017).

Patient Influences

Patient influences include ethical, moral, and boundary dilemmas associated with the care of demanding critical or disrespectful patients or patients that are seen as misusing the health care system. A significant factor that participants identified as the most challenging is experiencing the loss or trauma of the patient in their care.

Ethical, Moral, Boundary Dilemmas

Compassion satisfaction strengthens the physical and emotional health of the nurse through compassionate, deep caring within the nurse/patient relationship (Suliman et al., 2009). Compassion satisfaction, defined as the positive feelings and satisfaction gained from nursing (Stamm, 2017). Negative and hostile patient behavior creates an adversary nurse/patient relationship, and research indicates that a caring patient relationship helps to build compassion satisfaction and is a protective shield for nurses (Suliman, et al., 2009).

Participants contributed the joy of nursing to the quality of the nurse to patient or nurse to peer interactions, and to the sense of accomplishment tied to positive patient outcomes. Participants reported that they questioned their roles as a nurse when faced with critical,

demanding, and disrespectful patients or families. A patient influence not identified in the literature review was the participants' response emotionally to patients' viewed as "regulars." Regulars are patients that frequent the hospital on a consistent basis. All participants identified varying degrees of frustration and low empathy for high frequent utilizers. Participants verbalized concerns that pertinent health care issues could be overlooked a result of nurse frustration surrounding high-frequency users. Additional research in this area should include strategies to prevent nurse fatigue and low attentiveness with these patients. Participants identified that these patients were not unique to emergency rooms and often were view by the study participants to be pain medication seeking.

Participant-reported that family over-involvement, patient or family members that were rude, disrespectful, and patients who did not appreciate the nursing service provided that patient, increase participant perceived burnout, frustration and decreased nursing satisfaction.

Witnessing Loss

Many nurses experiencing compassion fatigue engage in avoidant behavior or ignore symptoms of compassion fatigue (Sheppard, 2015). As identified by the participant's secondary traumatic stress, defined as the nurse's internal emotional response to witnessing grief or trauma, is a significant factor of stress in the work environment (Stamm, 2017). All participants spoke to deeply personal and emotional responses to witnessing loss reporting that often witnessing the family's reaction to loss as the most challenging.

Participants all were in agreement that the most challenging and difficult patient influence was witnessing patient loss. Participants reported that patients that did not seem ready to die or witnessing a family's grief were significantly more challenging. Participants

consistently described situations in which they struggled with their own emotions, or would cry long after the shift, often using descriptors such as “could not stand to hear it.” Participants description is consistent with secondary traumatic stress, a result of continued exposure to patient trauma, loss, and experiencing second-hand patient and family trauma (Stamm, 2017). Experiencing secondary traumatic stress can cause a variety of physical and emotional reactions and can result in nurses attempting to avoid the repetitive thoughts and experiences associated with patient traumatization (Stamm, 2017).

Outcomes and Coping Mechanisms

Study participants spoke of many ways that compassion fatigue impacts their personal and professional life. Following is a discussion of outcomes of compassion fatigue and how study participants cope.

Travel Nursing as a Choice

Despite the paucity of research in the area of travel nurses and compassion fatigue, the limited studies that do exist indicate higher than expected rates of CF in travel nurses (Yeh et al., 2011). While compassion fatigue exists in other nurse populations it is unclear if nurses turn to travel as a means to mitigate compassion fatigue.

Literature indicates that nurses often turn to travel nursing for higher salaries and the more control over their schedules (Faller et al., 2011). In contrast these participants did not mention salaries as a reason for turning to travel nursing. They indicated that variety and flexibility of the position was the number one reason. In addition, experiencing different locations and the personal and professional growth they have gained are reasons they continue as travel nurses.

Unhealthy Coping

In multiple studies, unhealthy coping strategies such as working longer shifts and fewer dayshifts, smoking, alcohol use, increased food intake, isolation, or choosing temporary positions to increase their sense of personal control were ineffective in the management of compassion fatigue (Wilkinson, 2014; Faller et al., 2011). Commonalties among the participants included coping by withdrawing from family and friends, irritability, anger, and disrupted communication with others. All identified a decrease in social activities or increased isolation. For example one participant reported working more shifts, often over 60 hours a week. Participants reported physical symptoms that included back or neck pain. Participants agreed that they often feel guilt and remorse and question their behavior.

Participants expressed interest in learning more about compassion fatigue and changing their unhealthy coping patterns.

Potential Interventions

Participants identified that the educational component of the project's intervention as beneficial and enlightening. In the literature review, educational interventions were found to repeatedly reduce the impact of the negative constructs of compassion fatigue in nursing staff (Craigie et al., 2016; Hersch et al., 2016; Houch, 2014). In the literature, two studies, one of emergency room nurses (N=73), and a second of beside nurses (N=34) determined that, after an educational intervention that included self-care skills, compassion satisfaction increased; burnout and secondary traumatic stress decreased; nurses increased their awareness of grief associated with the nurse-patient relationship; and nurses reached out for support more often (Flarity et al., 2013: Houck, 2014). Despite significant research on compassion fatigue, few hospitals have

initiated changes to address compassion fatigue in nursing staff. For the purpose of this study travel nurse (N=3) that attended were from two different hospitals in Tucson, and participants identified that neither facility offered information, awareness, or education focused on compassion fatigue.

Participants advocated for several interventions that they believed would be helpful based on their personal, professional experience, and the positive experience of the educational intervention during workshop one of this project. Interventions they suggested included: increase awareness and education of compassion fatigue, increasing awareness of strategies to reduce risk of compassion fatigue and self-care strategies, and debriefing or sharing with other nurses. Participants all identified that increased awareness was beneficial.

Lack of Collaboration and Colleague Support

Not being able to process trauma, or feeling dismissed, can exacerbate symptoms associated with secondary traumatic stress (Sheppard, 2016). Debriefing and engaging self-care are steps which can serve as a protective factor for secondary traumatic stress. Participants reported limited ability to debrief with peers on the unit and did not routinely engage in strategies to manage secondary traumatic stress. All participant reported that it was difficult to debrief as staff often is not receptive. Currently, participants report debriefing is not an option, they often cry on the way home, or bury their emotions and choose to ignore the feelings. Numerous studies identified that CF was associated with adverse behaviors among nurses and can exacerbate the symptoms of compassion fatigue (Wilkinson, 2014; Faller et al., 2011). However, participants expressed interest in a debriefing with other professionals; one participant reported she prefers to debrief versus journaling that was presented in workshop one. Management support of debriefing

significant events in the clinical setting would set a positive tone for the debriefing process. In a cross-sectional electronic survey of direct care nurses (N=491), researchers found that managerial assistance and support addressing secondary trauma in the work significantly reduced nursing burnout a construct of compassion fatigue (Kelly et al., 2015). Having a process and procedure in place, addressing significant events during staff meetings, or otherwise giving a voice to secondary traumatic stress, will decrease the impact on the nurse, improve compassion satisfaction, support the process of grief and loss for nursing staff.

Self-Care and Education

Studies indicate that nurses experiencing CF struggle to find meaning in their work and often change positions or leave the nursing profession (Potter et al., 2013). To reiterate long-term consequences of compassion fatigue include high healthcare costs, increased nursing errors, hospital settings plagued with stress, healthcare professional shortages, and poor medical care delivery (Potter, et al, 2013; Faller, Gates, Georges, & Connelly, 2011). Providing education on the signs and symptoms of compassion fatigue, increasing awareness and educating nursing staff on self-care skills can reduce the risk of CF and increase nurse retention. Study participants in this project reported improved mood and better understanding of themselves and others after the education and self-care intervention for workshop one. All felt it helped to mitigate compassion fatigue symptoms. Participants (N=3) identified that the education of compassion fatigue during workshop one was of great benefit.

Compassion Fatigue – Among Travel Nurse Populations

This educational intervention project's focus was the travel nurse, it appears that travel nurses continue to experience compassion fatigue despite frequently changing positions, moving

to different healthcare facilities and working in on different units. Participants in this study reported limited knowledge of compassion fatigue and only one study participant identified receiving minimal education on compassion fatigue during her BSN education. Personally, these nurses suffer from physical symptoms such as poor sleep, increase physical pain, emotional fatigue, depression, isolation, withdrawal, social isolation, crying spells, and disassociation from patients and family.

The findings in this study have nursing implications locally and nationally. Compassion fatigue is a significant factor in the nursing shortage and has health care risks for the patient and healthcare agencies. Compassion fatigue impact nurses professionally and personally, diminishing their ability to provide high quality, compassionate, and empathetic care. Interventions serve to decrease the devastating impact on nursing populations and to return the joy and commitment of nursing to the nursing population. Providing education and self-care can provide a reprieve from the devastating impact of compassion fatigue and return to the nurse a high quality of life.

Compassion fatigue is a complicated interaction between health care systems, management, patients and the healthcare industry that continues to grow unchecked despite significant research indicating a need for interventions. The advanced practice nurse is in a unique position to provide leadership and guidance in the area of compassion fatigue.

Leadership

The Essentials of Doctoral Education for Advanced Nursing practice address eight areas that include organizational and systems leadership for quality improvement and systems thinking, clinical scholarship and analytical methods for evidence-based practice, health care

policy, and inter-professional collaboration for improving patient and population health outcomes (American Association of Colleges of Nursing [AACN], 2006). This study has implications for Advanced Nursing Practice specifically in the area of organizational and systems leadership for quality improvement and systems thinking. Advanced practice nursing area of focus should reflect those identified by the study participants. Organizational and structural influences identified were: scarcity of resources; the complexity of nursing role; the impact of schedule; lack of awareness; education; absence of debriefing procedures; and a shortage of nursing leadership to implement compassion fatigue policy and education.

Nursing leadership is needed to guide changes in the healthcare industry that include opportunities to debrief following traumatizing patient events; educate and provide an opportunity for nurses to learn self-care strategies; establish focus groups that give nurses the opportunity to share in a safe atmosphere; and to establish an environment of support for nursing populations. An essential role for the advanced practice DNP nurse is to increase and support knowledge to improve nursing practice and patient outcomes (AACN, 2006). Addressing compassion fatigue within nursing populations can ultimately improve and stabilize them and improve patient care that leads to increased patient satisfaction and outcomes. In addition, the role of the advanced practice DNP is to forge new discoveries, to use analytic methods to evaluate literature and to design and apply processes for turning evidence-based research into practice. Advanced practice nurses have the opportunity to turn the findings from this and other studies into quality improvement practice and change that is relevant, safe, and effective (AACN, 2016).

Focus Groups as an Intervention

Due to the paucity of research of travel nurses in relation to compassion fatigue this study with, the focus group as an intervention , is the start of gathering rich insight into compassion fatigue within this specialized population. The project applied the strong theoretical framework of the ProQOL (Stamm, 2017) that has been immersed in research and has been well-documented in the literature, with the IHI as a model and PDSA as the structure (IHI, 2017). Summarizing the results of the project indicated that compassion fatigue is related to structural influences, patient influences, patient interactions, peer relationships, and the nurses' unique style of managing stress. The study participants freely shared in the focus group and reported that the opportunity to openly share with other nurses was of great value in learning about compassion fatigue and was emotionally gratifying. The focus group provided rich data for analysis, a window into the lives and experiences of travel nurses, and an opportunity for the participants to express themselves. All participants expressed feeling supported that other nurses were experiencing similar feelings. Focus group discussions may offer a quick and simple means to provide education, support, and an opportunity for nurses to share their own experiences with other nurses in like settings.

Plan-Do-Study-Act (PDSA) – 'Act'

The Act part of the PDSA cycle was a synthesis of the findings from the educational intervention, disseminated into the final defense paper, with recommendations for future research. Recommendations include duplication of the project with a larger number of study participants (travel nurses) and/or extending the project over a longer period of time. The project duplication can begin with the recruitment for a new focus group because the PDSA cycle

repeats the steps, starting with the planning phase. The benefit of further research is to clarify and validate the findings from this project and to gain additional knowledge of the experience of compassion fatigue in the travel nurse population.

Trustworthiness

The five categories that support the framework of trustworthiness within qualitative research include credibility, transferability, dependability, confirmability, and authenticity (Guba & Lincoln, 1994). For this project, trustworthiness began with authenticity in research. According to Guba and Lincoln (1994), carefully documenting and conveying what was shared in the workshop by the participants will give the readers of this study the true essence of the experience of compassion fatigue in the personal and professional life of the travel nurse. In this study trustworthiness, which is used to address rigor in qualitative studies, is also used to guide rigor in the focus groups intervention .Through this process, phenomena of compassion fatigue will be better understood.

For this project, trustworthiness was promoted by careful design of the educational intervention through the larger DNP group, and by the principal investigator. Questions for the participants and the education intervention followed a strict adherence to a predesigned script to ensure credibility and dependability (Polit & Beck, 2008). The principal investigator audiotaped workshop one and workshop two, and they were transcribed literally, and field notes were completed to support and substantiate data as authentic. The process of the larger DNP group, the conjoined study design, implementation, and sharing of data, served to increase confirmability and transferability of the study findings. Integrity was achieved by following carefully designed recruitment strategies, meeting the confidentiality guidelines previously

established, and following ethical research practice methods. The project was guided by the larger DNP project, committee chairperson, the project committee, and the University of Arizona Internal Review Board to ensure oversight, integrity, credibility, and authenticity. Finally, the research data and findings are being presented in a straightforward and unbiased manner, in order to share the true essence of compassion fatigue in travel nurse populations.

Limitations

The purpose of the DNP project is to represent the accumulation of education and information gained during the duration of the DNP education. This DNP educational intervention had time constraints associated with my date to defend before the DNP committee on November 14, 2017.

One limitation is that this is the first time that I have completed an intervention project, as such it was a learning process. I made every effort to recruit from 4-8 study participants. The nature of travel nursing it that they are hired during nursing shortages. For this study, based in Tucson, the greatest need and shortage is during the winter months. In a survey of area hospitals during the time of this study, late September and early October, hospitals were not hiring travel nurses, contracts were resuming in early November. Travel nurses were difficult to locate, had limited time, and were reluctant to participate. Potential study participants that verbalized they would come (N=2) did not attend for unknown reasons.

Larger DNP Group Process

This project is unique as it was part of a larger DNP collaboration among four students, all affiliated with the University of Arizona. Each student was the principal investigator of their own individual DNP project. Compassion fatigue was the topic of study for all of the projects

with one difference, each had different populations as the study focus. Populations included: travel nurses, new graduate BSN nurses, transplant nurses. and rural population nurses. The larger group collaborated in the design of the project, the two workshop scripts, the creation of the intervention, application of the model, theory, and delivery of workshops. Each principal investigator wrote individual proposals and defense papers. All had one focus group unique to their population study and two workshops. The larger DNP group communicated via text or email, often multiple times a day. Much of the communication was problem-solving, brainstorming, scheduling, and time-sensitive contact regarding the different studies. The group was a tremendous support, emotionally and academically. The larger group hopes to present as a symposium to the Western Institute of Nursing (WIN) conference in April 2018 and possibly continue by submitting a joint manuscript to nursing journals.

Dissemination and Direction for Future Research

Dissemination will begin with the completion of the final defense and submittal to the DNP committee. Several of the study participants expressed interest in reading the final defense manuscript, and in having it presented to hospital units they frequently worked. The results of the study will be presented to the hospital unit where I currently work. A description in the form of an abstract has been submitted to the annual conference, with the plans to present in the form of a symposium in April 2018. The larger DNP group hopes to combine study results , identify commonalities among the four different nursing populations, and present findings in the form of a manuscript to appropriate nursing journals.

Directions for future research are to repeat the study with a larger sample of travel nurses in Tucson and in other areas of the country. In addition, to increase the time length of the study

in order to follow up with study participants after workshop two. Information could be gathered regarding the effectiveness of the self-care strategies over a longer period of time-- possibly two weeks, three months, and six months following workshop two. Information with a greater number of participants, in different parts of the country over a longer period of time, can provide additional findings that can be generalized to travel nurses in other settings.

The findings in this study provide a window into the role of compassion fatigue in the lives of the traveling nurses and can be used as an opportunity by travel nurse organizations to recognize a need to support and educate travel nurses.

Concluding Remarks

Compassion fatigue is a phenomenon that is clearly documented in the scientific literature (Stamm, 2017). Despite clear evidence that compassion fatigue triggers emotional and physical symptoms in nurses, leading to nursing errors, burnout, and significant financial burden on the healthcare system, little is done to educate and provide interventions to minimize the impact of compassion fatigue in the nursing profession. Additionally, travel nurse populations are growing throughout the United States and in the local Tucson community (Kelly et al., 2015). A search of several databases resulted in minimal research surrounding compassion fatigue among travel nurse populations.

The findings in this educational intervention project indicate that travel nurses have no protection against the development of compassion fatigue. The study participants identified similar contributing influences, symptoms and coping strategies as nurses that work in other specialties. Secondary traumatic stress was a significant factor and was a predominant factor in emotional reactions after ending a shift. Interestingly, despite traveling to different facilities

across local and regional areas, the study participants reported having received no education about compassion fatigue, how it presents in nursing populations, contributing factors, or self-care techniques that can reduce risks. Travel nurses are less likely to look at supervisors or management to help with compassion fatigue and believe that the structural influences of compassion fatigue are outside the control of administrations. By providing an educational intervention on compassion fatigue, as well as providing training on risk reduction behaviors, this educational intervention project provides a glimpse into ways to reduce compassion fatigue in travel nurses.

APPENDIX A:

EVIDENCE APPRAISAL

Evidence Appraisal

Project Aim:

1. Describe the symptoms, triggers, and outcomes of compassion fatigue among travel nurses.
2. Describe information pertaining to focused educational intervention to decrease compassion fatigue risk among travel nurses; and,
3. Provide information on self-care techniques to reduce further risk of compassion fatigue among travel nurses.

Author / Article Reference	**Qual: Concepts or phenomena** **Quan: Key Variables Hypothesis Research Question**	**Theoretical Framework**	**Design**	**Sample (N) Setting**	**Data Collection (Instruments/tools)**	**Findings**
Beck, C. T. (2011). Secondary Traumatic Stress in Nurses: A Systematic Review. *Archives of Psychiatric Nursing*, 25(1), 1-10. (Beck, 2011)	Quan: Research Question: "Is there a cost of caring for health- care providers of traumatized patients?"	None	Systematic Review CINAHL PubMed, PsychIN-FO databases searched	Inclusion criteria: Samples: Included nurses, secondary traumatic stress symptoms measured, English language **Sample size:** 7 studies	Tools: Secondary traumatic stress scale Compassion fatigue self-test for helpers Compassion fatigue scale - revised	A variety of nurse modality rates of elevated secondary traumatic stress symptoms were identified in all studies & ranged from 25% - 78%. Lack of research on psychiatric nurses. No studies on travel nurses were included.
Carter, P. A., Dyer, K. A., & Mikan, S. Q. (2013). Sleep disturbance, chronic stress, and depression in hospice nurses: Testing the feasibility of an intervention. *Oncology Nursing Forum*, 40(5), E368-E373. (Carter, Dyer, & Mikan, 2013)	Quan: Experimental Is it feasible and significantly beneficial to offer a cognitive-behavioral therapy intervention for insomnia in chronically	None identified	Five week descriptive correla-tional study design Focus study group	Inclusion criteria: Nurse Direct care Hospice	Pittsburgh Sleep Quality Index Center for Epidemiological Studies-depression scale	Hospice nurses experience moderate to severe sleep disruption with moderate depressive symptoms

Author / Article Reference	Qual: Concepts or phenomena Quan: Key Variables Hypothesis Research Question	Theoretical Framework	Design	Sample (N) Setting	Data Collection (Instruments/tools)	Findings
	bereaved hospice nurses?		Cognitive behavior therapy	setting **Sample size:** 13 nurses		Intervention: Accepted by study group Improved sleep onset, sleep time, sleep efficiency Not a longitude study Cost effective
Faller, M. S., Gates, M. G., Georges, J. M., & Connelly, C. D. (2011). Work-related burnout, job satisfaction, intent to leave, and nurse-assessed quality of care among travel nurses. *Journal of Nursing Administration*, 41(2), 71-77. (Faller, Gates, Georges, & Connelly, 2011b)	Quan: Observational What is the rate of work-related burnout, job satisfaction, nurse-assessed quality of care, and intent to leave in travel nurse populations?	None identified	On-line survey Sent to travel nurses	Inclusion criteria: Travel nurse Work in acute care setting All values included **Sample size:** 976 surveys	Copenhagen Burnout Inventory Single measure job satisfaction and quality of care Intent to leave: 3 survey items Bivariate correlation analysis Ordinary least-squares regression analyses Tests and t test for significance	Possible triggers to compassion fatigue: Work place environment Ratio/number of patient to nurses Magnet status Burnout is high in travel nurses Age, marital status, children in home, education factors in high versus low burnout for travel nurses

Author / Article Reference	Qual: Concepts or phenomena Quan: Key Variables Hypothesis Research Question	Theoretical Framework	Design	Sample (N) Setting	Data Collection (Instruments/tools)	Findings
						Younger nurses more apt to leave and higher burnout Higher education lead to higher dissatisfaction
Flarity, K., Gentry, E. J., & Mesnikoff, N. (2013). The effectiveness of an educational program on preventing and treating compassion fatigue in emergency nurses. *Journal of Advanced Emergency Nursing*, 35(3), 247-258. (Flarity, Gentry, & Mesnikoff, 2013b)	Quan: Experimental To determine if a multifaceted education program to decrease compassion fatigue and burnout and increase compassion satisfaction in emergency nurses is effective?	Theory of biological basis of stress Stamm ProQOL compassion fatigue theory	Pre-/post-test design partici-pants are own control group with resiliency intervention program	Two emergency department in Colorado Conven-ience sample **Sample Size:** 73 emergency room nurses	ProQOL (version 5)	Qualitative report: Positive comments and ratings by study sample Compassion satisfaction increase of 9-11% Decrease in burnout of 34% improvement Not a longitude study
Kelly, L., Runge, J., & Spencer, C. (2015). Predictors of compassion fatigue and compassion satisfaction in acute care nurses. *Journal of Nursing Scholarship*, 47(6), 522-528. (Kelly et al., 2015)	Quan: What is the extent of compassion fatigue and compassion satisfaction in acute care nurses in a variety of specialties in hospital settings?	ProQOL Theory	Cross-sectional, quantita-tive survey research study	Southwest United States in a large quaternary care teaching facility-Magnet recognized	ProQOL scale Analysis of Variance Regression analysis on the ProQOL subscales	Nurses scored in the average range for subscales of compassion fatigue Millennial generations (ages 21-33) higher rates

Author / Article Reference	Qual: Concepts or phenomena Quan: Key Variables Hypothesis Research Question	Theoretical Framework	Design	Sample (N) Setting	Data Collection (Instruments/tools)	Findings
				Sample Size: 491 direct care nurses		of burnout & secondary traumatic stress, and lower levels of compassion satisfaction More experience leads to higher compassion fatigue
Lachman, V. D. (2016). Compassion fatigue as a threat to ethical practice: Identification, personal and workplace prevention/management strategies. *Medsurg Nursing*, 25(4), 275-278. (Lachman, 2016)	Quan: Is compassion fatigue a personal and workplace risk? What are preventatives and management strategies?	ProQOL theory of compassion fatigue	Literature review	Research review terms: Burnout Compas-sion fatigue Secondary traumatic stress Vicarious traumatiza-tion **Sample size:** 7 studies	Inclusion Criteria: Utilizing research terms	ProQOL subgroups common environmental factors increase prevalence Compassion fatigue management strategies include: Nurse awareness Education Stress coping strategies Leadership support
Mason, V. M., Leslie, G., Clark, K., Lyons, P., Walke, E., Butler,	Qual: What are the	ProQOL Stamm	Pilot study survey	Inclusion criteria:	ProQOL 5	Compassion fatigue, compassion

Author / Article Reference	Qual: Concepts or phenomena Quan: Key Variables Hypothesis Research Question	Theoretical Framework	Design	Sample (N) Setting	Data Collection (Instruments/tools)	Findings
C., & Griffin, M. (2014). Compassion fatigue, moral distress, and work engagement in surgical intensive care unit trauma nurses. *Dimensions of Critical Care Nursing*, 33(4), 215-225. (Mason et al., 2014)	correlations between four key variables: compassion fatigue, moral distress, level of nursing education and work engagement? How does nurse educational level and hospital shift work relate to compassion satisfaction or fatigue, moral distress and work engagement? Does compassion satisfaction, fatigue, or moral distress have a direct relationship to work engagement? Do nurses identify themes in their work-related experience?	theory of compassion fatigue Watson's human caring theory		Registered Nurse greater than or equal to 50% of on duty work in direct nursing in an ICU setting Computer literacy **Sample size:** Con-venience sample 34 trauma surgical intensive care nurses	Work and well-being survey and work engagement scale by Shift Moral situations by shift Spearman correlation coefficients Krippendorff's content analysis of themes	satisfaction, moral distress and work engagement are significant factors in ICU nurses Sharing and processing unresolved issues is important for nurses
Potter, P., Deshields, T., Berger, J. A., Clarke, M., Olsen, S., & Chen, L. (2013). Evaluation of a compassion fatigue resiliency program for oncology nurses. *Oncology Nursing Forum*, 40(2), 180-187. (Potter et al., 2013)	Quan: Experimental Can a resiliency program educate nurses on the impact of compassion fatigue on them?	ProQOL Stamm theory of compassion fatigue	Pilot study con-venience sample Siteman Cancer Center with resiliency education	Inclusion criteria: Oncology direct care staff nurses employed outpatient Over the age	Maslach burnout inventory – human services survey Impact of event scale – revised Nursing job	Resiliency program rated positively by nurses Initially and at three months instruments indicated a positive

Author / Article Reference	Qual: Concepts or phenomena Quan: Key Variables Hypothesis Research Question	Theoretical Framework	Design	Sample (N) Setting	Data Collection (Instruments/tools)	Findings
			program including discussion	of 20 Employed at Siteman Cancer Center Willing to complete 5 week program **Sample size:** 14 nurses	satisfaction scale ProQOL IV	effect At six months all instruments were essentially at previous baseline
Sheppard, K. (2015). Compassion fatigue among registered nurses: connecting theory and research. *Applied Nursing Research,* 28, 57-59.(Sheppard, 2015)	Qual: To clarify the phenomena of compassion fatigue through specific constructs	ProQOL conceptual model	Literature review Concept develop-ment study Field phase qualitative Phenom-logical interview Synthesis of two qualitative studies	Nurses working in a level one trauma center **Sample size:** 16 nurses	ProQOL Stamm Theme analysis	Compassion fatigue term is stigmatizing Themes connect compassion fatigue: Life is unfair, bad things happen to good people and bad people survive Endless suffering Nurses that are unable to let go – breaks, long hours have increased compassion fatigue Wanting support and often not getting it

Author / Article Reference	Qual: Concepts or phenomena Quan: Key Variables Hypothesis Research Question	Theoretical Framework	Design	Sample (N) Setting	Data Collection (Instruments/tools)	Findings
Sheppard, K. (2016). Compassion fatigue: are you at risk? *American Nurse Today*, 11(1), 53-55. (Sheppard, 2016)	Qual: Causes, symptoms, interventions of compassion fatigue and burnout.	None	Report	Discussion and synthesis of study	Nurses self-report and themes	Compassion fatigue equates to emotional symptoms that lead to performance issues Reducing compassion fatigue through self-awareness, self-care, self-reflection, mindfulness
Sinclair, S., Raffin-Bouchal, S., Venturato, L., Mijovic-Kondejewski, J., & Smith-MacDonald, L. (2017). Compassion fatigue: A meta-narrative review of the healthcare literature. *International Journal of Nursing Studies*, 69, 9-24. (Sinclair, Raffin-Bouchal, Venturato, Mijovic- Kondejewski, & Smith-MacDonald, 2017)	Qual: To explore the constructs of compassion fatigue and to determine if it is an appropriate descriptor of work stress tied to healthcare providers and if it is a reliable variable for interventions in order to identify if the constructs are measurable.	None	Meta-narrative review of literature Search of databases: PubMed, Medline, CINAHL Psych-INFO Also: Canadian Nurses Asso-ciation, American Nurses Associ-ation, Compas-sion fatigue awareness project,	Inclusion criteria: Term compassion fatigue, nurses, physicians, couns-elors, Emer-gency, definition, concept, symptoms, measure, intervene-tion	Summarization, tables, synopses	Construct of compassion fatigue be reestablished as compassion is not lacking in healthcare providers Explore burnout, secondary traumatic stress, counter-transference, vicarious traumatization all be addressed Increase evidence-based multifaceted

Author / Article Reference	Qual: Concepts or phenomena Quan: Key Variables Hypothesis Research Question	Theoretical Framework	Design	Sample (N) Setting	Data Collection (Instruments/tools)	Findings
			ProQOL. org, Google scholar **Sample size:** 90 articles			intervention programs on all constructs
Stamm, B. H. (2017). The concise ProQOL manual. Retrieved from Pocatello: ProQOL.org(Beth Hudnall Stamm, 2017)	Quan: Research manual of construct of compassion	Stamm's Theory of Compassion Fatigue	Research-based report	Synthesis of research of construct of compass-sion fatigue	ProQOL 5 Self-test Reverse items Sum items t-score	ProQOL-5-Professional Quality of Life is tied to the work environment, personal and individual characteristics, and exposure to trauma.
Wilkinson, S. (2014). How nurses can cope with stress and avoid burnout.(Wilkinson, 2014a).	Quan: Literature review	None	Literature review Database searched: EBSCO-host Ovid	Inclusion criteria: Terms: Accident and emergency Anxiety Burnout Compas-sion Fatigue Depression Emergen-cy Nurse Post-	Tools: Review of the six articles	Themes from literature review: Causes of stress include work demands and lack of time, staff shortages, level of paperwork Lack of managerial support Patient abuse, aggression and violence

Author / Article Reference	Qual: Concepts or phenomena Quan: Key Variables Hypothesis Research Question	Theoretical Framework	Design	Sample (N) Setting	Data Collection (Instruments/tools)	Findings
				Traumatic Stress Disorder (PTSD) Stress Trauma Peer-reviewed articles, original research, published English, since 2002 **Sample size:** 29 articles reduced to by committee to 6 articles that were general healthcare providers		Exposure to traumatic events Impact of stress: Burnout Compassion Fatigue Somatic complaints and health concerns Personal problems Difficulty coping.
Job stress and work attitudes between temporary and permanently employed nurses. *Stress and Health,* 23, 111-120. (Yeh, Ko, Chang, & Chen, 2007)	Quan: Experimental Hypothesis 1: Temporary nurses experience greater stress than permanent nurses.	None	Question-aires 400 sent to all nurses in two urban hospitals in Taiwan	Inclusion criteria: Con-venience sample size Question-aires completed	Nurse stress checklist Affective organizational commitment measure Global perceptions of contract breaches	Temporary nurses have higher levels of job stress Temporary nurses have lower levels of affective organizational commitment

Author / Article Reference	Qual: Concepts or phenomena Quan: Key Variables Hypothesis Research Question	Theoretical Framework	Design	Sample (N) Setting	Data Collection (Instruments/tools)	Findings
	Hypothesis 2: Temporary nurses express lower organizational commitment than permanent nurses. Hypothesis 3: Temporary and permanent nurses do not differ in terms of occupational commitment. Temporary nurses perceive more psychological contract breaches than permanent nurses.			**Sample size:** 249 question-naires returned	Chi-square One-way analysis of variance Regression analysis	Temporary nurses have a lower level of occupational commitment Temporary nurses perceive higher levels of psychological contract breaches Temporary nurses are younger, less experienced, single, without children
A Pilot Evaluation of a Mindful Self-Care and Resiliency (MSCR) Intervention for Nurses (Craigie et al., 2016)	Quan: Pre/post intervention study of mindful resiliency program Hypothesis: Can a mindfulness-based intervention reduce compassion fatigue and improve emotional well-being in nurses?	Stamm's Theory of Compassion Fatigue	24 nurses volunteer Recruited through advertise-ment Pre- post self-report question-naire	Large study hospital inclusion criteria: Working as a Registered Nurse Not clinically depressed or having symptoms of PTSD or	Tools: ProQOL-5 Patient health questionnaire-9 Short screening scale for DSM IV PTSD CAGE Demographics	20 nurses completed Significant improvement in symptoms such as : Burnout Stress Improved compassion satisfaction Directly after

Author / Article Reference	Qual: Concepts or phenomena Quan: Key Variables Hypothesis Research Question	Theoretical Framework	Design	Sample (N) Setting	Data Collection (Instruments/tools)	Findings
				substance abuse		intervention and 1 month
Reducing nurses' stress: a randomized controlled trial of a web-based stress management program for nurses. *Applied Nursing Research, 32*, 18-25. (Hersch et al., 2016)	Quan: Research question: Can a web-based stress management program be effective for nurses?	None	Ran-domized controlled trial Pre- and post-test	Inclusion criteria: Employed at one of five hospitals **Large sample:** 104 nurses	Tools: Nursing stress test	Web-based stress education program significantly reduced stress over a three month period
Helping nurses cope with grief and compassion fatigue: an educational intervention. *Clinical Journal of Oncology Nursing, 18*(4), 454-458. (Houck, 2014)	Quan: Research question: Can education help nurses cope with grief and loss in the work place?	None	Survey	Inclusion criteria: Nurses on oncology unit at Magnet hospital: 21 nurses	Tool: Survey	Education and information can decrease impact of grief at the work place
Reducing the rate of re-hospitalization from post-acute care: A quality improvement project. *Rehabilitation Nursing, 40*, 12-19. (Jacelon, Macdonald, & Fitzgerald, 2015)	Quan: Can a strategy be developed to reduce re-hospitalization rates	None	PDSA Method	Inclusion Criteria: One identified hospital unit: sample size ratio	Tool: Chart audit	PDSA model effectively guided change to reduce re-hospitalization
Weathering the storm: nurses' satisfaction with a mobile	Quan:	Berwick's rapid cycle	PDSA method	Inclusion criteria:	Tools: Nurse survey	PDSA method effectively

Author / Article Reference	Qual: Concepts or phenomena Quan: Key Variables Hypothesis Research Question	Theoretical Framework	Design	Sample (N) Setting	Data Collection (Instruments/tools)	Findings
admission nurse service. *Journal of Nursing Management*, 20, 344-353. (Kirkbride, Floyd, Tate, & Wendler, 2012)	Research Question: Can the PDSA method create an admission program to increase nurse satisfaction and decrease patient wait times?	change process		Staff nurses at one hospital ER unit **Sample size:** 104	Chart audit Self-developed tool	implemented intervention that remained successful for nurse satisfaction and patient wait times
Accelerating quality improvement within your organization: applying the model for improvement. *Journal of the American Pharmacists Association, 55*(4), e364-e376. (Crowl, Sharma, Sorge, & Sorensen, 2015)	Quan: Research Question: Can the Model for Improvement effectively guide quality improvement?	None	Literature review	Inclusion criteria: Authors discretion based on relevance to quality improve-ment process	Tools: PDSA Method	Health care improvement can be improved by following the Model for Improvement guidelines

APPENDIX B:

FOCUS GROUP SCRIPT

Focus Group Script

- ❖Welcome everyone!
- ❖ My Name is Loretta Rose Kramer and I would like to begin by thanking each of you for coming today and being willing to participate in this an educational intervention project.
  - ❖ The reason we are here today is to seek your thoughts about experiences you may have had with compassion fatigue while practicing as a travel nurse.
  - ❖ I will be leading our discussion today and I will be asking you questions and then encouraging an open discussion among our group. Then I will lead us through an intervention designed to provide additional education and awareness of risks associated with compassion fatigue.
  - ❖ This is a confidential discussion and your names will not be included in any feedback or research documentation. Hopefully, this sets a tone of openness and encourages you to speak freely about your experiences and feelings associated with our discussion topic. I ask that you also keep what we discuss today confidential.

To allow our conversation to flow more freely, I would like to go over some ground rules.

- ❖Please allow only one person to speak at a time. This will help me as I create a written transcript of our conversation, and will allow for others to hear what is being shared in the discussion.
- ❖Please place your cellphones on vibrate to prevent disruptions.
- ❖Please avoid side conversations.
- ❖And… I would like you to know this focus group will be tape recorded. However, the identities of all participants will remain confidential. The recording will allow me to revisit our discussion for the purposes of developing my research documentation
- ❖Finally, I hope that we will be able collectively enjoy our time together!
- ❖Each session should last approximately 1 hour. I will be posing a series of questions, in addition to making any necessary comments to keep everyone on task. Everyone will have the opportunity to answer each question; however, you may choose to not answer any of the questions.
- ❖Are there any questions?
- ❖You will notice a couple of documents at your seat that includes a disclosure about today's focus group session, and a brief demographics survey. The disclosure gives you information, including exclusion and inclusion criteria, risks, benefits, and numbers to call should you have any concerns now or after the study is complete. ……
- ❖The demographic survey will allow me to gather brief information so that I can report the number of focus group participants. Again, your name will not be placed on these forms to ensure anonymity with this project.
- ❖I am interested in hearing about your perspectives and experiences as nurses, so please do not share any patient personal information. Then we will spend about 30 minutes talking about compassion fatigue and ways that help reduce symptoms or risk of symptoms. Does anyone have any questions before we begin?

❖Session 1: Discussion questions:
❖ How satisfied are you with being a nurse? An (your specialty)?
❖ What do you like best about being a travel nurse?

❖ What do you know about the phenomenon of compassion fatigue? How would you define it?

❖ What do you think about professional burnout? How does it feel and what causes it?
❖ What do you think about secondary traumatic stress? How does it feel and what causes it? Are there specific patient situations that affect it the most?
❖·How do you think compassion fatigue affects you?
❖ How have you observed others experience with compassion fatigue?
❖ What are some triggers that you may recognize that increase your risk of compassion fatigue?

❖ ***Allow time for participant responses…..***

Education:

❖The next segment of our focus group involved education, an intervention and strategies on increasing awareness of compassion fatigue.

❖The most commonly used definition of compassion fatigue includes the negative factors of burnout, secondary traumatic stress, and positive factors of compassion satisfaction among health care providers.

❖Burnout is defined as the frustration, exhaustion, anger and depression related to the work environment. Burnout causes emotional exhaustion, depression, reduced sense of accomplishment, and feelings of anger and hopelessness among nurse. *I will provide an example here.*

❖Secondary traumatic stress is a physical or emotional response experienced through second hand exposure of patient grief, trauma, or tragic loss. It can be triggered by even one event when witnessing the painful and traumatic experiences of others. *I will provide an example here.*

❖Compassion satisfaction is defined as the pride and satisfaction a professional helper such as a nurse gains from a job well done. In nursing, the positive satisfaction gained from nursing and caring for others serves as a protective shield for the nurse.

❖The positive effects of compassion satisfaction help to balance the negative effects of burnout and secondary traumatic stress that leads to compassion fatigue.

❖Possible signs and symptoms of compassion fatigue can vary among individuals, however common manifestations may include the following:

- ➢ Physical manifestations: pain, headaches, muscle tension, GI and digestive upset, fatigue,
- ➢ Mental changes: confusion, inattention, memory loss, and sleep disturbances,
- ➢ Emotional mood swings: anxiety, depression, restlessness, frequent crying,
- ➢ Spiritual: loss of faith, questioning of beliefs, guilt, apathy, and fear,
- ➢ Work/Social behavior: isolation, withdrawal, missed events, increased sick days

❖Compassion fatigue impacts personal and social settings, as well as impacting performance within the work environment. Possible outcomes of compassion fatigue can include increased errors, diminished job performance, calling off sick more frequently, difficulty with completion of tasks and personal effectiveness, low self-esteem, impaired functioning, and disappointment with the nursing career, resulting in job changing within the unit, outside of the unit, and for many, choosing to leave the profession of nursing.

❖To understand how you experience compassion fatigue, it is important to self-reflect, or take time to think critically, about how you are feeling, physically and emotionally, after a new or even stressful experience on the floor. Ask yourself, did this event put me in a situation where my personal boundaries, morally or ethically, were crossed? For some, these questions can be answered by thinking, other need to write or talk to others for support.

❖Self-reflection is your ability to understand how your emotional mood impacts your physical state of being. Think about a time where you were very nervous, how did you feel physically? Perhaps your hands were sweating or your heart was beating very fast, maybe you felt dizzy? Compassion fatigue manifests both emotionally and physically, there is a connection between our mind's emotions and our physical well-being. Some experience headaches or nausea when asked to come into work or after a stressful event on the floor. When you feel as if your boundaries have been pushed or crossed by a work situation, ask yourself, how do I feel emotionally and physically; this can help you to recognize symptoms of compassion fatigue early.

Healthy Boundaries:

❖Examples of healthy boundaries are:

- ■ Taking breaks
- ■ Not saying yes every time you are asked to work
- ■ Not calling into work on days off to check on 'your' patients
- ■ Not adding patients/families on social media

❖Journal directions:

❖After work daily, what should be recorded:

- Discuss any situations of the day
- Did these situations trigger any physical/emotional symptoms
- How did you feel?
- When/if your boundaries were pushed, how did it make you feel?
- Both physically and mentally/emotionally
- Do any ethical or moral dilemmas stick out from the day?
- How did you feel physically and emotionally when dealing with the dilemma?

Session 2:

Experiences/Events:

❖Does anyone have any situations that stick out to them from the week that they would like to talk about?

- ➢ Ethical/moral dilemmas
- ➢ Were boundaries pushed

❖In the last two weeks what were two or three specific triggers either that you witnessed in another nurse or that you experienced first-hand that resulted in increased symptoms of compassion fatigue?

❖In relation to those triggers, what physical and/or emotional symptoms did you recognize that may be indicators of being at risk for compassion fatigue? How did you handle the onset of those symptoms?

❖In what ways did the education from two weeks ago allow you to understand compassion fatigue as you experience it? Please explain.

Protective Strategies:

❖Coping strategies that nurses report utilizing that are unhealthy include working longer shifts and fewer days shifts, smoking, alcohol use, increased food intake, isolation, or choosing temporary positions, and poor peer or personal relationships in order to increase their sense of personal control. Remind yourself to use positive coping strategies every day.

❖Utilize kind positive self-talk. Instead of focusing on the areas of the shift that did not go well, focus on all the things that you did do right. Remind yourself that nursing is a tough job, and that your compassion and caring made a difference today.

❖Journal every day after work, even if it is for five minutes. Journaling reduces not only physical illness such as cold and flus, but helps to decrease emotional pain and stress. Realize you are human; as such your experiences will have an impact on you. Write about the human experience of nursing.

- ❖Practice self-care through deep breathing and self-guided imagery. Finding a happy place is more than just a saying. Research indicates that mentally focusing upon a happy memory, or memorable peaceful location, can actually lower blood pressure. Although this technique is simple, it can be a powerful instant remedy to reduce the impact of stress.

- ❖Find ways to bring humor and laughter into challenging situations. It is known that laughter can release tension, boost the immune system, and relieve stress. When humor is not appropriate in the moment, a smile can relax head and neck tension, while relaying empathy and kindness that support compassionate care.

- ❖Remember that there is a connection between your mind's emotions and your physical well-being. Self-reflect and ask yourself, how do these positive or negative feelings impact the way I'm feeling physically; your ability to understand your body is a great way to know how and when to intervene when situations that cause compassion fatigue are experienced.

Thank you for your participation in this quality improvement project. With the number of nurses that are leaving the nursing profession, I hope these techniques provide relief from compassion fatigue. I care about you and hope that you remain in a profession that deeply needs you.

APPENDIX C:

THE UNIVERSITY OF ARIZONA INSTITUTIONAL REVIEW BOARD APPROVAL LETTER

Research
Office for Research & Discovery

Human Subjects Protection Program

1618 E. Helen St.
P.O Box 245137
Tucson, AZ 85724-5137
Tel: (520) 626-6721
http://rgw.arizona.edu/compliance/home

Date: August 29, 2017 **Principal Investigator:** Loretta Rose Kramer

Protocol Number: 1708755290

Protocol Title: Compassion Fatigue Among Travel Nurses

Level of Review: Exempt

Determination: Approved

Documents Reviewed Concurrently:

Data Collection Tools: *Attachment 6 IRB Demographics Questionnaire.docx*
Data Collection Tools: *Attachment 7 IRB Group Workshop interview script and questions.docx*
Data Collection Tools: *Attachment 9 Workshop education.docx*
HSPP Forms/Correspondence: *Attachment 1 f107_v2016-07_0 Loretta Kramer.doc* **HSPP Forms/Correspondence:** *f200_v2016-07.doc Loretta Kramer final 8 22 17.doc* **HSPP Forms/Correspondence:** *Signature page.pdf*
Informed Consent/PHI Forms: *Attachment 3 t502a_icf_consent_form_v2016-07_0 (1).doc* **Informed Consent/PHI Forms:** *Attachment 3 t502a_icf_consent_form_v2016-07_0 (1).pdf*
Participant Material: *Attachment 10 mental health resources.docx*
Recruitment Material: *Attachment 4 IRB Recruitment Flyer.docx*
Recruitment Material: *Attachment 5 IRB Group Workshop confirmation Email Response.docx*
Recruitment Material: *Attachment 8 recruitment script or email.docx*

This submission meets the criteria for exemption under 45 CFR 46.101(b). This project has been reviewed and approved by an IRB Chair or designee.

- The University of Arizona maintains a Federalwide Assurance with the Office for Human Research Protections (FWA #00004218).
- All research procedures should be conducted according to the approved protocol and the policies and guidance of the IRB.
- Exempt projects do not have a continuing review requirement.
- Amendments to exempt projects that change the nature of the project should be submitted to the Human Subjects Protection Program (HSPP) for a new determination. See the Guidance on Exempt Research information on changes that affect the determination of exemption. Please contact the HSPP to consult on whether the proposed changes need further review.
- You should report any unanticipated problems involving risks to the participants or others to the IRB.
- All documents referenced in this submission have been reviewed and approved. Documents are filed with the HSPP Office. If subjects will be consented, the approved consent(s) are attached to the approval notification from the HSPP Office.

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