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STRATEGIES AND COPING MECHANISMS UTILIZED BY NICU AND PICU SOCIAL WORKERS TO PREVENT PRIMARY TRAUMA, SECONDARY TRAUMA STRESS, COMPASSION FATIGUE AND BURNOUT

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STRATEGIES AND COPING MECHANISMS UTILIZED BY NICU AND PICU
SOCIAL WORKERS TO PREVENT PRIMARY TRAUMA, SECONDARY
TRAUMA STRESS, COMPASSION FATIGUE AND BURNOUT

A Project
Presented to the
Faculty of
California State University,
San Bernardino

In Partial Fulfillment
of the Requirements for the Degree
Master of Social Work

by
Amy Taber Margraf Hernandez

June 2017

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ABSTRACT

Neonatal Intensive Care Unit and Pediatric Intensive Care Unit social workers are a particularly vulnerable group of professionals due to their chronic exposure to trauma. Current research has overlooked how social workers specifically can adopt certain strategies and coping mechanisms to prevent the symptoms associated with primary trauma, secondary trauma stress, compassion fatigue, and burnout. Thus, the study that follows was designed to explore the strategies and coping mechanisms utilized by NICU and PICU social workers. Data for this project was collected through the use of open-ended questions in an electronic survey format and analyzed through a conventional content analysis approach. Seven participants fully completed the survey and thus only their responses were considered in the analysis. Results of this study indicate the need for NICU and PICU social workers to gain additional education and training on primary trauma, secondary trauma stress, compassion fatigue and burnout so that they can actively participate in prevention. NICU and PICU social workers reported a range of strategies and coping mechanisms including the awareness of personal and professional barriers, consultation, exercise, among others. This study provides crucial information to an understudied area of research, provides a foundation for future research, and promotes the use of positive strategies and coping mechanisms by NICU and PICU social workers so that they can continue to provide the best services possible for the patients they serve.

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DEDICATION

I would like to dedicate this project to my loving husband and nephew.
Thank you for supporting me, comforting me, and believing in me throughout this
journey. Your patience, understanding and love have meant the world to me.

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CHAPTER ONE

INTRODUCTION

Problem Statement

Social workers within the neonatal intensive care units (NICU) and pediatric intensive care units (PICU) are a particularly vulnerable group due to the chronic exposure to trauma that they face in their everyday work. The responsibilities of a social worker in the NICU and PICU range from providing individual and group counseling, assisting families in finding community resources and support, providing crisis intervention, assisting in communication and education among families and the health care professionals working with their children, case management, planning, assistance with navigating the health care system and so much more. Although social workers are not medically trained, they are a part of the interdisciplinary team involved with ensuring the care of infants, children, and their families. Research has been done on the mental health and trauma faced by infants, children, and families that are hospitalized; however, minimal research has been done on the strategies and coping mechanisms used by social workers to prevent mental health symptoms from affecting their abilities to provide proper care to their clients (Peebles-Kleiger, 2000).

According to Xu, Kockanek and Bastian (2016) as reported through the Centers for Disease Control and Prevention (CDC) there was a total of 3,988,076 births in the United States. Of those births, there was 23,440 neonatal deaths,

4,068 deaths for children one to four years of age, and 5,340 deaths for children aged five to fourteen (Xu et al., 2016). These deaths not only touch the lives of the families who are suffering from them, but also the professionals working with them (Peebles-Kleiger, 2000). For those admitted to the NICU and PICU that do not die (e.g. burn victims, cancer patients, children of abuse, accidental injury) there are still significant traumatic experiences faced by all those involved in their care (Peebles-Kleiger, 2000). Social workers within NICU and PICU departments are often responsible for a high –acuity and high volume of caseloads in a fast-paced environment that does not always leave time for them to accurately cope with the traumas they are exposed to daily (Badger et al., 2008). Furthermore, as the health field has advanced so has the life span of infants and children with chronic illnesses which leads to prolonged exposure to suffering and dying patients (Meadors & Lamson, 2008). This prolonged exposure as well as providers not effectively coping with their own feelings leads to negative mental health consequences. It is crucial that social workers in this setting take care of themselves so that they can effectively address the needs of their clients; however, many have endured unresolved traumas and exposures which impact their personal and professional lives (Badger et al., 2008; Bride, 2007; Meadors & Lamson, 2008).

Research has shown that individuals who work in a setting where they are repeatedly exposed to traumatic experiences or work with individuals who face traumatic experience are more likely to develop primary trauma (PT), secondary

traumatic stress (STS), compassion fatigue (CF), and burnout (Badger et al., 2008; Bride, 2007; Meadors & Lamson, 2008). Trauma levels are determined by proximity, duration, and intensity of the exposure to trauma (Meadors & Lamson, 2008). Therefore, a social worker may experience primary trauma if the medical event itself is traumatizing to the social worker or they may experience secondary traumatic stress if they are affected by the individual facing the primary trauma (Meadors & Lamson, 2008). The symptoms of the trauma impact the social worker's personal relationships, professional work and other areas until it is adequately addressed (Badger et al., 2008; Bride, 2007; Meadors & Lamson, 2008). If social workers do not cope well with the trauma they faced then they are more likely to develop compassion fatigue (Meadors & Lamson, 2008). This means that the social worker has a decreased level of compassion for their current and future clients (Bride, 2007; Meadors & Lamson, 2008; & Ray et al., 2013). Furthermore, the traumatization and fatigue lead to decreased workplace productivity, increased errors, decreased quality of care, increased number of sick days taken, and higher turnover rates due to burnout (Bride, 2007; Meadors & Lamson, 2008). Therefore, it is critical that social workers in the NICU and PICU actively practice using their coping skills to provide the services necessary for the families facing such a difficult time.

In a study done by Sage L. Nottage (2005), it was found that social work services are the most frequently used non-medical support services in the NICU. They also concluded that parents who feel supported by the staff and

environment are more likely to have improved interactions with their child and involvement in their medical care (Nottage, 2005). Given that the goal of the social worker is to assist the infant, children and families through such a difficult process, it is important that they take the time to process their feelings and grieve so that they can provide effective services to their clients. Social workers who are suffering from the symptoms of primary trauma, secondary traumatic stress, compassion fatigue and burnout are more likely to cost hospitals more money as well as prevent infants, children, and families from receiving the services they deserve (Meadors & Lamson, 2008).

Purpose of the Study

The purpose of this study is to explore the various coping mechanisms used to prevent primary trauma, secondary traumatic stress, compassion fatigue and burnout by medical social workers in the neonatal intensive care unit (NICU) and pediatric care unit (PICU) of hospitals. The existing literature confirms that hospital social workers are at increased risk for the development of primary trauma, secondary traumatic stress, compassion fatigue, and burn out (Aparicio, Michalopoulos, & Unick, 2013; Badger et al., 2008; Bride, 2007; Meadors & Lamson, 2008; Peebles-Kleiger, 2000; & Ray et al., 2013). The literature is focused on proving the existence of these psychological stressors in this population and the population of other health care providers. However, the research has overlooked how social workers specifically can adopt certain

strategies and coping mechanisms to prevent and combat the symptoms associated with these psychological stressors.

Badger et al., (2008) indicated in their study that additional research is needed to understand the variables contributing to the development of STS especially in hospital social workers. Additional research on STS has found that individuals who take care of their self needs and maintain balance in their lives are less likely to suffer from STS symptoms (Yassen, 1995). Moreover, Meadors and Lamson (2008) specifically state that additional research needs to be conducted to obtain further information on the specific coping strategies used to prevent compassion fatigue due to the gap in current literature. Research done by Alkema, Linton, and Davis (2008) on self-care in health care professionals in a home hospice setting showed that those who had higher rates of self-care had appeared to be protected from the impact of compassion fatigue.

Given that there is little research on social workers in the NICU and PICU departments, additional research is required to assist these professionals in acquiring effective strategies and coping mechanisms so that they can prevent primary trauma symptoms, STS symptoms, CF, and burnout. The following research will be addressed through an exploratory study. The study design will be qualitative as open-ended surveys will be electronically sent to NICU and PICU social workers within the Inland Empire of California. Follow-up calls will be done if necessary for clarification of responses in the survey. This design was chosen to be the most appropriate in addressing the proposed research question

because it allows for NICU and PICU social workers at various locations to provide input, thus increasing generalizability. Furthermore, the electronic distribution and submission of the survey will be most feasible given the time restraints of the study. This research does not require the collection of numerical data, but rather focuses on exploring the types of coping mechanisms used by NICU and PICU social workers.

Significance of the Project for Social Work Practice

Social workers must be aware that when working in a field such as the NICU and PICU, there is a high probability that they will experience trauma, compassion fatigue, and potentially burnout and therefore they must be proactive rather than reactive in combating the problem when it arises (Peebles-Kleiger, 2000). Social workers must have strategies in place to foster the use of positive coping skills to nurture oneself and relationships, and to prevent emotional build up (Peebles-Kleiger, 2000). Therefore, this study will aid in exploring the coping mechanisms used by current NICU and PICU social workers in preventing these psychological consequences so that current and future social workers in this area of practice will be able to provide exceptional services to their clients. If more social workers in the NICU and PICU can effectively prevent these psychological consequences then the quality of their services will increase, there will be less staff turn-over, increased numbers of experienced staff, and increased personal satisfaction. Therefore, the following study will attempt to fill in these gaps in present day literature as well as add empirical research to an area that is

understudied. As a result, the field of social work will benefit from more effective social workers, more experienced social workers in the NICU and PICU departments, and more respect will be gained for the social work profession as other professionals observe the increased quality and effectiveness of care provided to clients.

The results of this study will provide information that aligns with the generalist intervention process. First, hospital policy for NICU and PICU social workers may be re-evaluated or implemented to ensure certain measures are taken so that their social workers are receiving proper education and training on coping and self-care. Second, social workers can use the results of this study to become more proactive and mindful of their responsibility to take care of themselves. Third, the results of this study will impact the quality of care provided to clients through NICU or PICU social workers. More specifically, if social workers are taking the proper measures for self-care then they will be able to provide exceptional service to their clients from the time they come into contact with them to the time they terminate with them.

More research needs to be done on NICU and PICU social workers especially when it comes to their self-care. Thus, the research to follow will address this important question: What strategies and coping mechanisms are social workers using to prevent primary trauma, secondary traumatic stress, compassion fatigue, and burnout when working in neonatal and pediatric intensive care units?

CHAPTER TWO

LITERATURE REVIEW

Introduction

This chapter is a review and examination of the current available research related to NICU and PICU social workers. The first section will discuss the limitations in current literature and will contain subsections related to primary trauma, secondary trauma, compassion fatigue and burnout respectively. The second section is dedicated to discussing the theories guiding conceptualization with subsections that include Ecosystems Theory and Professional Quality of Life Model. Given that this population of social workers has not been studied as thoroughly as others, then this review will provide support for the need of the study to follow.

Gaps in Current Literature

A thorough investigation has been done on current literature in relation to NICU and PICU social workers. This investigation has found that minimal research has been done on this unique population despite its increased risk for the development of primary trauma, secondary traumatic stress, compassion fatigue, and burnout (Aparicio, Michalopoulos, & Unick, 2013; Badger et al., 2008; Bride, 2007; Meadors & Lamson, 2008; Peebles-Kleiger, 2000; & Ray et al., 2013). There has been some research conducted showing the presence of these psychological consequences among social workers in general, but little

research has been done on the effectiveness of coping strategies and mechanisms used to prevent these symptoms. As a result of the limited literature, there was no conflicting findings noted. Further examination on the gaps and limitations in this literature will provide evidence for the importance of additional research among this population of social workers.

Primary Trauma

According to the American Psychiatric Association's Diagnosis and Statistical Manual of Mental Disorders, fifth edition (DSM-5) an individual is at risk for the development of a trauma-related disorder such as post-traumatic stress disorder or an acute stress disorder if they directly experience a traumatic event, witness a traumatic event, or experience repeated exposure to the details of a traumatic event (DSM-5, 2013). Current research confirms that many families and friends of children in NICUs and PICUs are at risk for the development of a trauma related disorder; however, minimal research has been done to show how social workers in the NICU and PICU are also at high-risk for developing a trauma related disorder (Peebles-Kleiger, 2000). Social workers assist families of the NICU and PICU which places them in close proximity to traumatic stressors. When a serious illness, injury, or death of an infant or child occurs, a social worker is not exempt from the natural feelings and emotions that arise from these events. Studies show that exposure to a traumatic stressor does not always result in a trauma related disorder, but there are approximately 17 to

23 percent of individuals who will develop PTSD after exposure to a traumatic event (Breslau et al., 1991; Peebles-Kleiger, 2000; Resnick et al., 1993).

The development of primary stress among NICU and PICU staff has been shown to further increase if individuals draw an emotional connection between the NICU/PICU child and their own children or if the circumstances of the hospitalizations bring up personal memories (Peebles-Kleiger, 2000). Furthermore, the professional may question their own competence when they feel that their efforts to assist the child are unsuccessful (Peebles-Kleiger, 2000). As a result, social workers are a vulnerable population and the chronic exposure to traumatic stressors without proper attention to self-care can cause negative psychological consequences (Peebles-Kleiger, 2000). The gap in literature among social workers in the NICU and PICU departments in relation to primary trauma is vast (Peebles-Kleiger, 2000) and although it is understood that there is a need for self-care, there is no evidence provided on what coping skills and strategies are most effective in combating primary traumatization in this population of social workers.

Secondary Trauma Stress

Secondary Traumatic Stress (STS) has been defined as “the natural consequent behaviors and emotions resulting from knowing about a traumatizing event experienced by a significant other [or] the stress resulting from helping or wanting to help a traumatized or suffering person” (Figley, 1995). Professionals in the helping services have reported secondary traumatic stress symptoms that

include flashbacks, avoidance behaviors, irritability, dissociation, and sleep disturbances (Badger et al., 2008; Bride, 2004; Dane & Chachkes, 2001; McCann & Pearlman, 1990).

Research conducted by Bride (2007) focused on social workers due to their frequent exposure to clients facing trauma. He found that 97.8 percent of social workers in his study had clients who had experienced trauma in their life time and 88.9 percent of social workers professionally address trauma concerns in practice (Bride, 2007). Furthermore, Bride (2007) found that 15.2 percent of the social workers who reported having clients who have faced trauma or who were addressing trauma related concerns met the criteria for the diagnosis of post-traumatic stress disorder (PTSD) while additional social workers met some of the criteria for a PTSD diagnosis due to their exposure to others facing trauma. This study's findings are limited since the survey was sent to multiple fields of social workers in the southern part of the United States and there was only a 47 percent response rate which impacts generalizability (Bride, 2007). Bride (2007) postulated that those who did not respond may have been experiencing STS symptoms and those symptoms may have been triggered through their participation. Although this study was on STS symptoms among different fields of social work, it provides a foundation into understanding that hospital social workers are at risk for the development of trauma related symptoms.

Findings from research by Badger et al., (2008) show that high levels of occupational stress contribute to the depletion of internal resources of social

workers which negatively impacts their ability to emotionally separate from their clients. In fact, those social workers who experience STS symptoms often reported that the stressors impacted their ability to meet their own personal needs which led to changes in coping and emotional stress over time and ultimately left them feeling emotionally drained and overwhelmed (Badger et al., 2008). Badger et al., (2008) concluded that social workers must find ways to proactively differentiate themselves from their clients in order to protect themselves while simultaneously exhibiting compassion. This study neglected to report what strategies and coping mechanisms were used by participants in order to prevent STS and instead provides a general statement that social workers should develop effective coping mechanisms. This study was also limited due to its cross-sectional design and self-selecting sampling method which limited its generalizability (Badger et al., 2008).

Compassion Fatigue

According to Joinson (1992), compassion fatigue is defined as “a natural consequence of working with those who have experienced a trauma or another stressful event.” This term is relatively new and has been used to describe populations that are at risk of developing primary and secondary trauma due to their work environment (Figely, 1995). The result of compassion fatigue has been noted to result in care providers’ decreased levels of compassion due to their repeated exposure to trauma which ultimately impacts the quality of care provided to their clients (Meadors & Lamson, 2008). Although the impacts of

compassion fatigue has been researched in populations of care providers such as doctors and nurses (Pfifferling & Gilley, 2000), there has been little research conducted on hospital social workers specifically in the NICU and PICU units. Furthermore, there appears to be even less research on the coping skills social workers are using in this environment to prevent compassion fatigue given that they are repeatedly exposed to clients dealing with traumatic events.

The debilitating symptoms of compassion fatigue result in high turnover rates for providers in critical care units which again affects patient care and impacts hospital resources (Meadors & Lamson, 2008). Research done by Meadors and Lamson (2008) revealed that participants with high levels of stress in intensive care units had statistically significant criteria met for the development of compassion fatigue. In contrast those who had lower levels of stress were less likely to develop compassion fatigue despite repeated exposure to trauma in the workplace (Meadors & Lamson, 2008). However, this study did not evaluate the strategies and coping mechanisms that were used by members with lower stress levels to prevent high stress levels and ultimately compassion fatigue. Moreover, the study was limited in its generalizability due to the sampling size of participants being primarily female, participants being primarily nurses, and there was more participation from NICU staff compared to PICU staff (Meadors & Lamson, 2008). Research conducted by Inbar and Ganor (2003) posed that professionals should be more self-aware of work place fatigue, daily routines, and time management in order to reduce compassion fatigue. Again, this

research neglects to discuss what strategies and coping mechanisms are useful and effective in decreasing compassion fatigue especially among social workers.

Burnout

According to Johnson and Stone (1987), the term burnout has been defined as “a state of exhaustion resulting from involvement with people in emotionally demanding situations.” Burnout has also been linked to three critical components including: personal efficacy, emotional exhaustion, and cynicism (Leiter, Harvie, & Frizzell, 1998; Leiter & Maslach, 2004; Ray et., al. 2013). The focus on burnout in social workers has been primarily focused on those in the child welfare system (Daley, 1979 & Harrison, 1980); however, research conducted by the National Association of Social Workers (NASW) showed that hospital social workers are among those with the highest levels of stress and report the highest level of stress-like symptoms (Sze & Ivker, 1986). The burnout experienced by hospital social workers eventually leads to employment changes and thus decreases the number of experienced professionals in the field (Oktay, 1992). In an effort to prevent burnout and high rates of turn-over among hospital social workers, especially those in the NICU and PICU, further research needs to be conducted on the effective strategies and coping mechanisms for this population given that there is no literature on this current topic for this population of social workers.

Theories Guiding Conceptualization

The present day literature and research on or related to the topic of this research predominantly uses the theoretical frameworks of Ecosystems Theory and the Professional Quality of Life Model. These frameworks will continue to be used in this study.

Ecosystems Theory

Ecosystems theory is a term used in social work practice to describe the combination of concepts from Systems Theory and the Ecological perspective (Zastrow & Kirst-Ashman, 2013). This theory predominantly focuses on the concept of person-in-environment which is the foundation to social work practice (Zastrow & Kirst-Ashman, 2013). This theory recognizes the complex nature of the human experiences and describes how factors such as environment or other systems impact one another. In systems theory, the key is to remain in a state of homeostasis (Zastrow & Kirst-Ashman, 2013). However, the research that has been discussed shows that professionals exposed to trauma are at risk of psychological consequences. Thus, they are at higher risk for disequilibrium and as a result their output, interface and entropy are impacted which is seen through their work performance. Furthermore, the concepts of the ecological perspective place high emphasis on social environment, transactions, energy, interface, adaptation, interdependence, and coping (Zastrow & Kirst-Ashman, 2013). This theoretical concept provides a framework for understanding human behavior as well as the unique dynamics of the hospital setting.

Present day literature on social workers and primary trauma, secondary traumatic stress, compassion fatigue, and burnout has used ecosystems theory as a theoretical framework guiding practice. The current literature primarily discusses how the use of empathy impacts systems (Meadors & Lamson, 2008). This theory will also be used as a framework in the following research because of its incorporation of individuals in the environment which is crucial in understanding how social workers in the NICU and PICU are impacted by their environment and how they in turn impact the environment in which they practice. This framework also incorporates the key component of coping which is what is being explored in the following study.

Professional Quality of Life Model

The Professional Quality of Life Model (PQL) was designed by Beth Hudnall Stamm (2010) to address the professional quality of life experienced by care providers, especially those who are excessively exposed to trauma. The model takes into account that the care giver can possess either compassion satisfaction or compassion fatigue with effects of burnout, primary trauma, and secondary trauma (Stamm, 2010). This model is complex and varied depending on a multitude of aspects such as personal characteristics, work environment, and level of exposure to trauma (Stamm, 2010). This framework takes into account how emotions, in particular fear, can negatively impact an individual which compromises them professionally and leads to the development of trauma symptoms or burnout (Stamm 2010 & Ray et al., 2013). It is also important to

note that these negative symptoms tend to come on gradually, but care professionals that are at higher risk are those who practice empathy, those with unresolved trauma, those with a past traumatic experience, and those who work with children experiencing trauma (Baired & Kracen, 2006; Figely, 2001; Ray et al., 2013).

The Professional Quality of Life model has been used in present day literature to examine and understand the effects of primary trauma, secondary traumatic stress, compassion fatigue, and burnout (Ray et al., 2013). This model is also crucial in understanding the effects that these same psychological stressors have on social workers. This model will be used in the following research because it provides evidence of how these psychological stressors professionally impact the quality of care provided by social workers. Social workers in the NICU and PICU departments are particularly vulnerable and thus this model provides a map into understanding their unique circumstances as well as how to help this population develop compassion satisfaction through the use of effective strategies and coping mechanisms.

Summary

In summation, this literature review provides support for the need of additional research in this area. Since the field of social work prides itself on practicing through empirically based evidence, then it is crucial that the gap in current literature be resolved so that the field can benefit from the results found. The study to follow seeks to explore the strategies and coping mechanisms used

by NICU and PICU social workers in hospital settings so that appropriate measures can be taken to prevent the negative consequences discussed in this section. The study will continue to utilize both the Ecosystem Theory and The Professional Quality of Life model as they have been proven to be effective and appropriate in understanding the framework surrounding the population under study.

CHAPTER THREE

METHODS

Introduction

This study was designed to explore what strategies and coping mechanisms social workers in the Neonatal Intensive Care Unit (NICU) and Pediatric Intensive Care Unit (PICU) of hospitals are using to prevent primary trauma, secondary trauma stress, compassion fatigue and burnout. This chapter specifically, was designed to discuss how this study was carried out. The chapter is divided into sections which include the study design, sampling, data collection and instruments, procedures, protection of human subjects, and data analysis.

Study Design

The following research was designed to answer the question: What strategies and coping mechanisms are social workers using to prevent primary traumatization, secondary traumatic stress, compassion fatigue, and burnout when working in neonatal and pediatric intensive care units? The type of study that would best answer this research question is an exploratory study. An exploratory study is specifically designed to explore an area where there is little known information. Since the specified topic area has been shown to have scant information as seen in the literature review, then this was determined to be the most appropriate method. A qualitative method was used to collect data as it was the most appropriate method to address the research question. This research did

not require the collection of numerical data, but rather focused on exploring the types of coping mechanisms used by NICU and PICU social workers.

Support for using this study design was to allow for participants to voice their own personal strategies and coping mechanisms that they have developed over their professional careers in these unique hospital departments. The use of open-ended questions in an electronic survey format allowed the participants to elaborate on their responses rather than being restricted through the use of researcher provided answers. A survey method was utilized to allow for participants in varying geographical areas as well as those with unpredictable caseloads to participate in the study. When needed, the researcher followed up with participants via phone to ask clarification questions or follow-up questions based off the responses provided in the survey.

An electronic survey was used to access a higher rate of participants, but this was also a limiting factor to the study. Ultimately, a focus group would have been the be most effective in providing collaboration and exploration of the various techniques and strategies for coping; however, it was not feasible for the participants of this study who are in varied geographical locations with unpredictable caseloads. An electronic survey could prevent participants in fully explaining their responses, thus the researcher attempted to correct this by contacting participants via phone to gather any additional data as necessary. Furthermore, an exploratory/qualitative study does not provide support for the effectiveness that these strategies and coping mechanisms have on the NICU

and PICU social work population as a whole. Therefore, the findings of this study are intended to provide further exploration and discussion of this topic as well as provide a foundation for future research in this area.

Sampling

The sampling method that was utilized in this study was a non-random purposive sample. Thirty social workers specific to the NICU and PICU departments in a hospital setting were invited to participate in the study. The NICU and PICU social workers who participated in this study came from hospitals in the Inland Empire of Southern California. Participants of this study were required to have a MSW degree or LCSW certification with a minimum of six months of experience within the NICU or PICU departments. The sample was chosen for convenience and time restraints for this project. Of the thirty social workers invited to participate, seven participants completed the survey and three participants only completed some questions and thus their responses were removed from the data set. Additional demographic information on participants were collected and will be provided in the following chapter.

Data Collection and Instruments

Data collection was obtained from the use of Survey Monkey an online survey program that is user friendly, easily accessible, and has built in confidentiality measures. Survey Monkey allowed the researcher to design study-specific questions on a survey format for participants to answer at their

convenience. Participants were first asked basic demographic information such as age, gender, ethnicity, education level, and time employed in the NICU or PICU departments. Once the demographic data was completed, participants moved on to the research specific survey. Each question was presented in an open-ended format to allow participants to elaborate on their responses in the way they felt appropriate. Furthermore, the researcher asked for participant permission to contact them via phone for any necessary clarification questions or follow up questions. The researcher used the Automatic Call Recorder App for Android phones to record phone conversations. The recorded conversations were immediately transferred to an electronic Dropbox file that remained password protected. Once the phone conversations were transferred electronically to Dropbox, the researcher deleted the telephone recording from their phone.

The instrument that was used for this study was developed by the researcher and was approved by Dr. Rosemary McCaslin prior to administration. The questions that were asked in the survey include: Have you received any education or training on primary trauma, secondary trauma stress, compassion fatigue or burnout as a professional? If yes, please explain. What is your perception of primary trauma? What is your perception of secondary trauma stress? What is your perception of compassion fatigue? What is your perception of burnout? Have you ever experienced symptoms of primary trauma, secondary trauma stress, compassion fatigue or burnout? If so, please explain

what symptoms you developed. How do you feel that these [primary trauma, secondary trauma stress, compassion fatigue, and burnout] symptoms impact the work of NICU or PICU social workers? What strategies or coping mechanisms do you use to prevent primary trauma symptoms from impacting your work as a NICU or PICU social worker? What strategies or coping mechanisms do you use to prevent secondary trauma stress symptoms from impacting your work as a NICU or PICU social worker? What strategies or coping mechanisms do you use to prevent compassion fatigue symptoms from impacting your work as a NICU or PICU social worker? What strategies or coping mechanisms do you use to prevent burnout as a NICU or PICU social worker? In your experience, have you been actively involved in preventing primary trauma, secondary trauma stress, compassion fatigue and burnout symptoms or do you feel that you engage in your strategies or coping mechanisms after you notice the onset of these symptoms? If yes, please explain your experience. Have you sought out educational resources or adapted your current strategies or coping mechanisms if/when you noticed your current methods were not working? If yes, please explain.

The instrument that was used in this study was developed to specifically answer the research question. An already established research tool was not found to be appropriate in fully addressing the topic at hand. Each of the questions asked in the survey were checked for clarity, tested for reliability, and approved by the researcher and Dr. Rosemary McCastlin. A limitation of this

newly developed instrument was that it is not evidence based. A strength in using this tool was that it is most appropriate in answering the research question posed by this study. Furthermore, the instrument allowed for open-ended responses from the participants and allowed for participants to voice their understanding and experience with primary trauma, secondary trauma stress, compassion fatigue and burnout.

Procedures

An email was sent to the NICU and PICU social workers who met the minimum criteria for the study at the hospital sites participating in this research project. The email discussed the purpose of the research, the approximate time that will be needed to complete the survey (about 30-60 minutes), and requested the participation of the social workers for the study. Embedded in the email was a Survey Monkey link to participate in the study. Participants were asked for their permission to contact them via phone if the researcher required clarification or had follow-up questions based on their survey responses. Participants were made aware that they can answer the questions at their leisure, but that survey would be closed on a scheduled date and time. Participants were also made aware that their responses will remain anonymous and confidential. A debriefing statement was provided at the end of the survey. Those who participated in the study were sent a thank you card and \$5 gift card to Starbucks to show appreciation for their participation in the study.

Protection of Human Subjects

All survey data remained confidential and password protected. Only the researcher had access to the results provided by the participants. Each participant was informed electronically of their rights to confidentiality. The hospitals that each participant works at also remained anonymous for protection of the agency as well as for the protection of the participants. Survey data was destroyed at the completion of the research project. Participants were informed of the hospital approval for the research, the IRB approval for the research, and were provided a debriefing statement at the close of the survey.

Data Analysis

The researcher of this project took a conventional content analysis approach to analyze the data gathered from this project. Conventional content analysis is the most appropriate method because it has been shown to work for qualitative studies that have limited research and the data is derived from open ended questions (Fang-Hsieh & Shannon, 2005). Once data was collected the researcher developed a transcript of the data, second the researcher read and re-read the transcript to develop themes, third the researcher used Atlas.ti, a program designed to consolidate and analyze qualitative data, to assist with the coding of themes and sub-themes gathered from the data. The researcher anticipates themes related to: training as a professional, perceptions of primary trauma, secondary trauma, compassion fatigue and burnout, symptoms, impact on the social worker, coping mechanisms, prevention, and self-care.

Furthermore, Survey Monkey was utilized for the descriptive statistics derived from this study.

Summary

A qualitative approach was taken to explore the strategies and coping mechanisms used by NICU and PICU social workers in preventing primary trauma, secondary trauma stress, compassion fatigue and burnout. The researcher provided participants with an electronic survey through the use of Survey Monkey so that social workers in different geographical locations and who have unpredictable caseloads could participate at their own convenience. Follow-up calls were placed to participants to ask clarification questions or follow up questions as needed. Participants were assured of their confidentiality and anonymity. Those who participated were rewarded with a \$5 gift card to Starbucks. The researcher took a conventional content analysis approach to analyze and code data for this study. The data gathered from this survey brought insight into this understudied topic and can serve as a foundation for future research.

CHAPTER FOUR

RESULTS

Introduction

This chapter is dedicated to discussing the results found from the NICU and PICU Social Workers who completed the electronic survey from March 3, 2017 to March 15, 2017. Ten participants attempted to complete the study; however, three participants did not fully complete the study disqualifying their responses from the data set. The results of this study sought to explore the strategies and coping mechanisms NICU and PICU social workers use to prevent primary trauma, secondary trauma stress, compassion fatigue and burnout. The researcher utilized Atlas.ti to assist in coding the data and five themes became apparent during the analysis of the participant's responses.

Presentation of Findings

Demographics

Ten total participants attempted the study; however, only seven participants completed the study and their demographic information is as follows. There were 5 responses (71.43% of the responses) from female participants and 2 responses (28.57% of the responses) completed by male participants. Of these seven participants, 2 participants (28.57% of the responses) reported an age range of 18-29 years-old while 5 participants (71.43% of the responses) reported an age range of 33-44 years-old. In reference to ethnic identity and race, 3

participants (42.86% of the responses) identified as White, 2 participants (28.57% of the responses) identified as African-American, 2 participants (28.57% of the responses) identified as Hispanic, and 1 participant (14.29% of the responses) identified as Asian.

The professional credentials of the participants included 2 participants (28.57% of the responses) who only have a Master in Social Work degree and 5 participants (71.43% of the responses) who are Licensed Clinical Social Workers. Five of the participants (71.43% of the response) only have experience in the Neonatal Intensive Care Unit (NICU), 1 participant (14.29% of the responses) only has experience in the Pediatric Intensive Care Unit (PICU), and 1 participant (14.29% of the responses) had experience in both the NICU and PICU departments. Three participants (42.86% of the responses) indicated working in a NICU or PICU department for 6 months-1 year, 2 participants (28.57% of the responses) indicated 1 year to 5 years within a NICU or PICU department, 1 participant (14.29% of the responses) indicated 5 years-10 years within a NICU or PICU department, and 1 participant (14.29% of the responses) indicated 10 plus years of experience within a NICU or PICU department.

Theme 1: Education and Training

Question 1 of the study was geared toward understanding what education and training participants have had in relation to primary trauma, secondary trauma, compassion fatigue and burnout. Participant #1 indicated that they have not had any education or training in relation to these categories as a

professional. Participant #6 indicated that they had received minimal training on compassion fatigue and burnout in their Master of Social work program, but denied any training in primary trauma or secondary trauma. Participants #2 & #5 reported only receiving education and training in compassion fatigue while participant #3 reported education only on the side effects of burnout during her educational career. Participants #4 & #7 indicated that they have had ongoing education and training in these areas.

Theme 2: Perceptions

Questions 2-5 were designed to grasp the perceptions of each of the participants on primary trauma, secondary trauma stress, compassion fatigue and burnout. These terms were not defined for the participants, as the researcher wanted to gain insight into each participant's current understanding of these terms. Participants were asked about each of their perceptions individually so that the researcher was better able to understand their view on each of the specific terms.

Primary Trauma Perceptions. The perceptions of primary trauma varied among the participants with only some participants recognizing that they themselves can also be affected by primary trauma as a professional. Participant #1 indicated their perception as "Something you experience." Participant #2 indicated their perception as "Primary trauma is the stressor the patient encounters." Participant #3 indicated their perception as "Primary Trauma occurs when a person is directly exposed/witnesses a traumatic event. Medical

Professionals/Staff can experience Primary Trauma while working with patients/families during hospitalizations.” Participant # 4 indicated their perception as “stress/ burnout.” Participant #5 indicated their perception as “it can have profound impact on an individual's functioning.” Participant #6 indicated their perception as “I perceive trauma as experiencing a distressing, disturbing, or life threatening event.” Participant #7 indicated their perception as “crisis for pt and pt's family.”

Secondary Trauma Stress Perceptions. Participant responses in their perceptions of secondary trauma stress were far more congruent compared to their perceptions of primary trauma. Participants agreed that secondary trauma stress was something the professional could experience when indirectly exposed to a traumatic event after caring for another or their situations (Participants #1, #2, #3, #4, & #6). Participant #4 specified that secondary trauma stress could be a result of stress and burnout brought on by shared experiences. Participant #5 indicated that STS “can have profound impact on an individual's functioning.” While participant #7 acknowledged that it [STS] could happen to a professional and reported that professionals “need to be aware of countertransference issues.”

Compassion Fatigue Perceptions. Participant #3 indicated their perception of compassion fatigue as “Compassion fatigue can occur when a person is very invested in caring/helping other individuals, but makes little to no time in meeting their own needs/doing activities that benefit their own physical, emotional, mental

well-being.” Participants #2 and #6 also indicated a similar perception as participant #3. Participant #1 indicated their perceptions as “When you can no longer be empathetic to your patient’s” whereas participants #4, #5 and #6 linked their perceptions of compassion fatigue to burnout. Participant #7 indicated that “it [compassion fatigue] happens more often than not. Boundaries and self-awareness are important.”

Burnout Perceptions. A majority of the participants agreed on their perceptions of burnout with the overall indication that burnout includes decreased motivation, decreased investment, exhaustion, stress, and impacts a professional’s work, personal relationships and professional relationships (Participants #1, #2, #3, #4, & #5). Participant # 1 specified that burnout could be “shown physically, emotionally and psychologically” and participant #2 specified “work is just a job and is often done without feeling.” Participants #4 and #6 linked burnout to being “overworked” or to “lack of control over your job and caseload.” Participant #7 indicated “in this field it [burnout] happens often. Self-care is important.” Participant #5 indicated “Hopefully with education and proactive techniques burnout could be prevented.”

Theme 3: Personal Experience

Questions 6 and 7 related to the participant’s personal experience with primary trauma, secondary trauma stress, compassion fatigue and burnout and how their symptoms impacted their work. One participant specifically indicated that they have experienced secondary trauma stress with subsequent burnout,

one participant specifically indicated experiencing symptoms of compassion fatigue and burnout, four participants were non-specific in what they experienced, but listed symptoms, and one participant denied experiencing any symptoms of primary trauma, secondary trauma stress, compassion fatigue or burnout. All of the participants discussed how their symptoms impacted their work or how the symptoms could impact a NICU or PICU social worker's professional performance.

Symptoms Experienced. Those participants who listed symptoms they experienced included physical, psychological and emotional symptoms. The most common physical symptoms reported included headaches, body tension, and physical exhaustion. The most common psychological symptoms reported included depression, anxiety, insomnia, and mood changes. As for emotional symptoms, participants most often reported feelings of frustration, feeling apathetic, feeling emotionally exhausted, experienced times of self-doubt, lack of motivation, and experienced episodes of crying.

Impact on Work. All participants agreed that the symptoms they experienced or the symptoms that could be experienced by NICU or PICU social workers could negatively impact the services they provide to their patients. In general, the participants indicated most often that experiencing symptoms of primary trauma, secondary trauma stress, compassion fatigue and burnout makes the social worker "less effective" leading to a reduced ability to appropriately assess and intervene (Participants #1, #2, #3, #4, #5, #6, & #7).

Participants specified that symptoms affect the professional's ability to connect with or work with parents of the patients and other professionals due to issues of transference, judgment, feeling overwhelmed or anxious in the workplace (Participants #1, #3, #5 & #6). Furthermore, participants specified that symptoms could impact the attendance of NICU and PICU social workers (Participants #2 & #6).

Theme 4: Strategies and Coping Mechanisms

Questions 4-11 were utilized to indicate what specific strategies were used to prevent primary trauma, secondary trauma stress, compassion fatigue and burnout. Participants were asked what strategies and coping mechanisms they utilized to prevent each of the topic areas individually so that the researcher could see if different strategies were utilized to prevent experiencing primary trauma, secondary trauma stress, compassion fatigue and burnout. Although some participants utilized different methods for each topic area, other participants utilize the same strategies and coping mechanisms.

Prevention Strategies and Coping Mechanisms for Primary Trauma. The most common strategy utilized in preventing primary trauma included consultation with social work colleagues and supervisors (Participants #2, #3, #4, #5, #6, & #7). The second most common strategy included setting and being aware of personal and professional boundaries (Participants #1, #4, #6, & #7). The third most common strategy included participating in physical activities/exercise (Participants #2, #3, & #6). Other strategies and coping

mechanisms reported included participating in breathing exercises (Participant #6), relying on spiritual belief system (Participant #2), and spending time with family and friends (Participant #3).

Prevention Strategies and Coping Mechanisms for Secondary Trauma Stress. The most common strategies reported in preventing secondary trauma stress included being self-aware and recognizing personal and professional boundaries (Participants #2, #4, #5, #6 & #7). Participant #5 specified that they attempt to not get “overinvolved” and are learning that they “cannot always help everyone.” Three participants indicated consultation and/or clinical supervision as preventative strategies (Participant #1, #2, & #3). Three participants indicated exercise as a preventative strategy and coping mechanism (Participant #2, #4 & #7). Two participants indicated participation in “self-care” as a strategy and coping mechanism, but did not specify how they define self-care (Participants #4 & #5). Participants also discussed the use of counseling services (Participant #1) and religious faith (Participant #2) as strategies and coping mechanisms.

Prevention Strategies and Coping Mechanisms for Compassion Fatigue. Three participants reported participating in self-care as a preventative strategy and coping mechanism, although they did not specify what self-care means to them (Participants #4, #5, & #7). Three participants reported the use of personal and professional boundaries as a preventative strategy (Participants #1, #4, & #7). Three participants reported exercise as a useful strategy and coping mechanism (Participants #2, #4, & #5). Two participants reported the use of

consultation with colleagues as a preventative strategy (Participants #2 & #3).

Two Participants indicated early recognition of symptoms as an effective preventative strategy and coping mechanism (Participants #1 & #5). While other less common reported strategies and coping mechanisms included utilizing self-talk (Participant #3), relying on religious belief system (Participant #2) and taking a day off of work or changing work assignments (Participant #6).

Prevention Strategies and Coping Mechanisms for Burnout. The most common strategy and coping mechanisms for burnout as reported by the participants included participation in physical activities and exercise (Participants #2, #3, #5, & #6). Three participants reported the participation in non-specific self-care methods (Participants #4, #5, & #7) as preventative strategies or coping mechanisms. Three participants indicated consultation and/or clinical supervision as a preventative strategy and coping mechanism (Participants #2, #3, & #6). Two Participants indicated awareness of personal and professional boundaries as a helpful strategy (Participants #1 & #7). Two participants indicated healthy eating habits as a preventative strategy (Participants #5 & #6). Other strategies and coping mechanisms reported included prioritizing workloads (Participant #1), changing work assignments (Participant #2), self-talk (Participant #3), listening to music (Participant #3), spending time with family and friends (Participant #3), relying on spiritual belief system (Participant #2) and taking time for self (Participant #6).

Theme 5: Active Involvement in Prevention

Questions 12 and 13 were designed to discuss the participant's current active involvement in attempting to prevent primary trauma, secondary trauma stress, compassion fatigue, and burnout. Question 13 specifically asked if participants have independently sought out education or resources or adapted strategies and coping mechanisms if they noticed their current methods were not working.

Two participants indicated that they are not actively involved in preventing symptoms (Participants #1 & #7), two participants reported that they utilize their strategies and coping mechanisms after the onset of symptoms (Participant #3 & #6), two participants indicated that they are always utilizing their strategies and coping mechanisms for prevention (Participant #2 & #5), and one participant reported that they had not experienced symptoms and did not specify if it was due to their active involvement in preventative strategies or coping mechanisms (Participant #4).

Of the 7 total participants, 4 indicated that they had sought out educational resources or adapted strategies and coping mechanisms when theirs were insufficient. Participants #5, #6, and #7 reported reviewing educational literature, training materials and other personal research on coping while participant #2 indicated changing work assignments. Participants #1 & #3 reported that they have not sought out additional resources or adapted strategies or coping mechanisms in preventing primary trauma, secondary trauma stress,

compassion fatigue or burnout. Participant #4 indicated that this question was not applicable to them.

Summary

In summation, a total of five themes emerged through analysis of the participant's responses, with multiple sub-themes also present. According to the data, the seven participants had varying perspectives on what primary trauma means to them as a professional; however, there was congruency among their perceptions revolving around secondary trauma stress, compassion fatigue and burnout with the exception of personal specifiers. Furthermore, the educational background and training on these subject areas varied widely among the participants with only two of the seven participants reporting ongoing education and training.

Six of the seven participants reported experiencing negative symptoms as a result of their experiences in the NICU or PICU and all participants agreed that experiencing these symptoms impact a social worker's performance. However, each of the participants reported numerous coping strategies and coping mechanisms that they utilize to combat the onset of the negative physical and psychological symptoms. Although there are similarities in the strategies and coping mechanisms reported, there were some methods that participants reported that worked more in combating specific symptoms for primary trauma, secondary trauma stress, compassion fatigue, and burnout. Of the strategies and coping mechanisms reported, the most common included consultation,

awareness of personal and professional boundaries, exercise or participation in physical activities, and other non-specific self-care methods. Despite the strategies and coping mechanisms reported, participant's active involvement in preventing the negative symptoms associated with primary trauma, secondary trauma stress, compassion fatigue and burnout has room for improvement.

CHAPTER FIVE

DISCUSSION

Introduction

Medical Social Workers, especially those who work in the Neonatal Intensive Care Units (NICU) and Pediatric Intensive Care Units (PICU) are a vulnerable population at risk for developing negative symptoms associated with primary trauma, secondary trauma stress, compassion fatigue, and burnout. The acquisition of these symptoms has the ability to negatively impact the social worker's personal and professional life. This specific population of social workers has been understudied and thus this researcher attempted to fill in the gaps in current literature to provide more comprehensive data on the subject.

More specifically, this study was designed to understand what strategies and coping mechanisms social workers in the NICU and PICU are currently using to prevent primary trauma, secondary trauma stress, compassion fatigue, and burnout. It is in the best interest of the social worker, the hospital employing these professionals, as well as the patients that the professional engage in preventative self-care strategies rather than reactive self-care or no care at all. Therefore, this study sought to analyze how NICU and PICU social workers engaged in preventative care. This specific chapter is designed to discuss the results found from the study, the limitations observed, and the recommendations for social work practice, policy and research.

Discussion

Before analyzing the strategies and coping mechanisms utilized by the unique group of social workers sampled, the researcher felt it best to understand what their level of education, training and perceptions of the terms were in order to better assess the strategies and coping mechanisms reported. What became apparent, was the fact that a majority of the participants reported little to no education or training on the subjects with some participants acknowledging only receiving some training on one or two of the areas being discussed in this study. This information is crucial in understanding participant responses as well as brought up the importance of additional research in this area. If NICU and PICU social workers have received minimal training in the area, how can they be expected to fully understand the importance of preventative self-care and coping strategies let alone fully participate in it.

Proper education and training in primary trauma, secondary trauma stress, compassion fatigue, and burnout is a crucial component when discussing prevention. Participants in this study reported that they did not believe that they are actively involved in preventing the negative symptoms associated with primary trauma, secondary trauma, compassion fatigue, and burnout while others reported that they engaged in self-care only after noticing the onset of these negative symptoms. Out of those who completed the survey, only two participants reported that they felt they are continuously engaged in self-care to prevent symptoms. However, participants were resourceful as they reported

seeking out materials such as empirical research and training materials when they felt as though their current strategies and coping mechanisms were insufficient in combating the negative symptoms they had acquired as a result of their work.

As made clear by these participants, there are numerous negative symptoms that could be acquired due to primary trauma, secondary trauma stress, compassion fatigue, and burnout. Participants reported physical symptoms, psychological symptoms as well as emotional symptoms. A majority of these participants acknowledged experiencing these negative symptoms, but one might ponder if these symptoms could have been prevented if these participants had a more comprehensive education and training on each of the terms discussed. As stated in the literature, primary trauma, secondary trauma stress, compassion fatigue, and burnout are distinct experiences; however, the researcher was able to observe through responses that terms such as compassion fatigue and burnout were linked in the eyes of the participants. Although one may lead to another, creating a domino effect, participants should have the basic understanding of each term so that they can be more self-aware when recognizing symptoms and participating in self-care.

The strategies and coping mechanisms reported by the PICU and NICU social workers were insightful in addressing the research question posed in this study by the researcher. Throughout observation of the electronic survey responses and follow up phone calls it became clear that some participants felt

as though they utilized the same strategies and coping mechanisms while other participants reported different ones. Unfortunately, three of the seven participants requested they not be contacted for follow up which did not allow the researcher to gain additional insight into their responses; however, the information they provided was still influential in the analysis process. When discussing primary trauma and secondary trauma stress it appeared that participants are more likely to use strategies such as consultation with staff or clinical supervisors or by being aware of their personal and professional boundaries. Although other strategies were voiced such as engaging in physical activity, relying on spiritual belief system and reaching out to loved ones, there appeared to be less strategies and coping mechanisms reported compared to the ones associated with compassion fatigue and burnout.

Participants did report the use of consultation and self-awareness of personal and professional boundaries in combating compassion fatigue and burnout; however, other strategies and coping mechanisms were vocalized or utilized more often. Participants were also more generic in reporting the use of non-specific self-care methods. The researcher recognizes that self-care is unique and individual to the participants; however, it appeared that participants were unable to report or vocalize what self-care met to them. This was interesting as this could be due to the lack of education and training participants have received in regards to this subject. It is possible that participants would benefit from education and training on what self-care can look like and the techniques or

resources available to them. The researcher anticipated to acquire a more extensive list of the strategies and coping mechanisms utilized by PICU and NICU Social Workers; however, there was consistency among the responses that were provided by the participants and are useful in providing a foundation for future research in the area.

Limitations

When looking into the limitations of the study, there are some important points to consider. The most prevalent limitation observable in the study was the small sample size. Although the researcher anticipated more responses, the reality of the possible participant's workloads largely impacted their time and availability to participate in the study. Overall, this sample size does not make the findings in this study generalizable to all NICU and PICU social workers; however, it does establish a starting point to which additional research can build from. Additional limitations include the disproportion of male to female participants as well as participants in the NICU departments and the PICU departments. Furthermore, the use of an electronic survey was not ideal in conducting a qualitative study. The researcher had hoped that this limitation could have been minimized with the addition of phone conversations as needed; however, some participants requested they not be contacted to clarify their responses. This left the researcher with some generic responses and no way to explore the responses further. Despite the limitations of this study, great insight was received as far as the need for additional education and training in the area

as well as a list of strategies and coping mechanisms that are currently being utilized by NICU and PICU social workers attempting to prevent the symptoms brought on by primary trauma, secondary trauma stress, compassion fatigue, and burnout.

Recommendations for Social Work Practice, Policy, and Research

When taking into consideration the literature review as well as the information gathered from the study conducted by this researcher it is abundantly clear that further education and training is required in understanding primary trauma, secondary trauma stress, compassion fatigue, and burnout especially in relation to how each of these can impact the professional. As discussed by Newell and Nelson-Gardell (2014) education in social work programs in relation to professional self-care is often overlooked, yet should be a requirement in program curriculum in order to create a comprehensive social work education. Given participant responses, this researcher completely agrees with the need for programs to require the implementation of self-care into their curriculum in order to assist future social workers in preventing the onset of negative symptoms caused by primary trauma, secondary trauma, compassion fatigue, and burnout. Furthermore, it would be beneficial on behalf of the hospitals employing NICU and PICU social workers to implement continuous training revolving around these subject areas. A majority of professional training takes place at the start of employment with some trainings to follow; however, this researcher postulates that the implementation of continued training in the area including providing

updated research or information to employees as well as having frequent and open communication on the topics would further benefit the professionals working in these departments.

As stated in the literature review and by the participants in this study, the symptoms experienced by NICU and PICU social workers can be physical, psychological and emotional all of which was agreed upon to make social workers less effective in their work. Without proper education, training, strategies or coping mechanisms to implement then it is not only the social worker who suffers, but everyone else with whom they interact with. If a NICU or PICU social worker is suffering symptoms of primary trauma, secondary trauma, compassion fatigue, or burnout then they open up the possibility of liability concerns for the hospital they work for. If social workers are less effective there is a possibility that they neglect to provide their patients or their families with adequate services. For example, a social worker who is experiencing primary trauma, secondary trauma, compassion fatigue, or burnout may not be as effective in conducting assessments which could lead to missing out crucial information impacting patients, such as the presence of child abuse which may have resulted in the need for the hospitalization. According to Richardson (2002) a hospital and employee create a master-servant relationship thus any negligence that takes place within the scope of a professional's employment can leave the hospital liable for the negligence. This alone provides the urgency for hospitals to employ ongoing education and training to their employees, further assisting in preventing

these negative symptoms from impacting their employees as well as impacting the patients serviced by the hospital.

Aside from the educational and professional trainings that could be utilized to assist these NICU and PICU social workers, it is also important for the professionals themselves to engage in a variety of self-care strategies and coping mechanisms as well as adjust them when necessary. As stated previously, some participants found it difficult to define what self-care meant to them; however, they maintained that they engage in self-care. Additional research revolving around self-care methods and coping strategies would go a long way in providing NICU and PICU social workers, among other professionals, with strategies that are most effective in combatting specific symptoms or mental health crisis. Furthermore, it may open these professionals up to methods that they had not considered in the past or strategies that are easy for them to integrate into their everyday practice which will assist in preventing the onset of symptoms to begin with. Acquiring the negative symptoms associated with the topics discussed in this study are difficult to avoid and can impact anyone especially those working in the NICU and PICU departments due to their repeated exposure to trauma; however, additional research on preventative strategies would go a long way in increasing the efficiency of staff, increasing the quality of care provided to patients and their families as well as create a happy and healthy workforce of social workers.

Conclusion

This research study was designed to explore the strategies and coping mechanisms utilized by NICU and PICU social workers in preventing primary trauma, secondary trauma stress, compassion fatigue, and burnout. Thirty participants from hospitals in the Inland Empire of California were emailed requesting their participation, ten participants attempted the study, but only seven completed the study. Only the responses from those who completed the study were used in the qualitative data analysis. Participants reported a range of strategies and coping mechanisms such as consultation, self-awareness of personal and professional boundaries, physical exercise, healthy eating, reliance on spiritual belief systems, self-talk, deep breathing, spending time with loved ones, among other non-specific self-care methods. However, it also became clear that participants would benefit from additional education and training on primary trauma, secondary trauma stress, compassion fatigue, and burnout. Furthermore, additional research and encouragement geared toward preventative measures are key in ensuring that there are effective social workers practicing in the NICU and PICU departments of hospitals.

It is an ethical responsibility on behalf of educational programs, professional agencies, and the professionals themselves to consistently seek out information geared at aiding individuals in self-care methods. It is not sufficient to send students out of school into highly trauma saturated professions without providing them with the resources to properly care for themselves. Moreover,

employers must not assume that their social work employees have been educated on this and must find time within the chaos to continue to train and discuss the importance of self-care and prevention on a regular basis. Individual social work professionals are not exempt from also educating themselves and taking responsibility for engaging in preventative care. The social work profession has an ethical responsibility to the patients served and thus the NICU and PICU social workers have an obligation to ensure they are doing everything in their power to combat the symptoms that they are subjected to given the nature of their work.

Prevention and/or early intervention through strategies and coping mechanisms are crucial in ensuring that current and future NICU and PICU social workers are efficient in their work, have decreased errors, increased workplace productivity, decrease in sick days taken, decrease in turnover rates and ultimately have a happier and healthier personal and professional lives. The behaviors, attitudes and personas given off by social workers who may be experiencing negative symptoms not only impact that professional, but also the patient's families they serve as well as the hospital or agency they represent. It is critical that attention be paid in the form of additional research to further explore the preventative strategies that NICU and PICU social workers can use in preventing these negative symptoms from occurring. In reality, due to the nature of their work, it is not completely avoidable to acquire such symptoms; however, it is the responsibility of all those involved to do their best in preventing the onset

of symptoms as much as possible. Only with additional research in this understudied area will we be able to fully educate and assist current and future generations of NICU and PICU social workers so that they can continue to provide services for those who truly need them.

APPENDIX A
INFORMED CONSENT



College of Social and Behavioral Sciences
School of Social Work

Informational Sheet

The study in which you are asked to participate is voluntary and designed to explore the strategies and coping mechanisms utilized by Neonatal Intensive Care Unit (NICU) and Pediatric Intensive Care Unit (PICU) social workers to prevent primary trauma (PT), secondary trauma stress (STS), compassion fatigue (CF), and burnout. The study is being conducted by Amy Margraf, a graduate student, under supervision of Dr. Rosemary McCaslin, Professor in the School of Social Work at California State University, San Bernardino (CSUSB). The study has been approved by the Institutional Review Board Social Work Sub-committee at CSUSB as well as the Institutional Review Board of Kaiser Permanente Southern California (KPSC).

Purpose: The purpose of this study is to explore the strategies and coping mechanisms utilized by NICU and PICU social workers in preventing PT, STS, CF, and burnout.

Description: Participants will be asked open ended questions and are encouraged to provide as much detail as necessary to answer these questions.

Participation: Your participation is completely voluntary. You can refuse to participate in the study or discontinue your participation at any time without any consequences.

Expected duration of participation: It will take 30-60 minutes to complete this survey. This survey will be open until March 28, 2017 and can be taken at your leisure.

Confidentiality/Anonymity: Your responses and any identifying information will remain anonymous. The agency in which you work will also remain anonymous for your protection as well as for protection of the agency.

Risks: Participants may be triggered to remember a traumatic event(s), may feel uncomfortable responding to questions, or realize that you need help in developing appropriate strategies and coping mechanisms. Resources will be provided at the completion of this study that you may find helpful.

Benefits:

There is no guarantee that you will benefit from participating in this study.

Compensation:

You will receive a \$5 Starbucks gift card for participating in this study.

Contact: If you have any questions, please feel free to contact Dr. Rosemary McCaslin at (909) 537-5507.

If you are a Kaiser Permanente employee and have any questions about your rights as a research subject, please contact: **Armida Ayala, PhD, Director, KPSC Human Research Subjects Protection Office, 626-405-3665; armida.ayala@kp.org**

Results: Results of the study can be obtained from the Pfau Library ScholarWorks database (<http://scholarworks.lib.csusb.edu/>) at California State University, San Bernardino after July 2017.

If you would like to participate in this study, but prefer to participate via a recorded phone interview or recorded in-person interview please contact the researcher or Dr. Rosemary McCaslin at: (909) 537-5507

Do you consent to a recorded phone call by the researcher for clarification on given responses or for follow up questions?

Yes No

This is to certify that I have read the above and I am 18 years or older.

Place an X mark here.

Date

909.537.5501

5500 UNIVERSITY PARKWAY, SAN BERNARDINO, CA 92407-2393

The California State University • Bakersfield • Channel Islands • Chico • Dominguez Hills • East Bay • Fresno • Fullerton • Humboldt • Long Beach • Los Angeles
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APPENDIX B
RECRUITING EMAIL

Recruiting E-mail

Subject: Seeking NICU and PICU Social Workers to Participate in Study

E-mail Message:

Hello Medical Social Workers,

My name is Amy Margraf and I am a Masters in Social Work graduate student at California State University, San Bernardino. I am currently seeking NICU and PICU Social Workers to participate in a study I am conducting in partial fulfillment for the degree of Masters of Social Work. The conduction of this research has been approved by the Kaiser Permanente Institutional Review Board as well as the Institutional Review Board Social Work Sub-committee at California State University, San Bernardino. |

Participation in this research is voluntary. You may withdraw your participation at any time without penalty.

I am interested in participants who are Licensed Clinical Social Workers (LCSW) who have had at least 6 months of experience in a NICU or PICU department in a hospital setting. Participants can be current NICU or PICU Social Workers or former NICU or PICU Social Workers. Participants may draw on their experience from their current employment or past employments at other hospitals. Participant information and the agency information will remain confidential and anonymous. Those who participate will be mailed a \$5 Starbucks gift card for their participation.

This study is a qualitative study designed to explore the strategies and coping mechanisms NICU and PICU Social Workers are using to prevent primary trauma, secondary trauma stress, compassion fatigue, and burnout. The study will be distributed electronically. Participants are encouraged to provide as much detail as they deem necessary in their responses. I may contact participants via phone to ask clarification or follow-up questions. The survey is expected to take 30-45 minutes of your time and can be done at your leisure. The survey will close at midnight on March 28, 2017. Any incomplete responses will be excluded from the data.

If you wish to participate, but are unable to do so due to special circumstances (i.e. pregnancy, visual impairment, etc.) on the electronic survey provided in this email please contact the researcher or Dr. Rosemary McCaslin at (909) 537-5507 to arrange a recorded phone interview or recorded in-person interview. Participants who do not meet the requirements of this study or who are not English proficient will be excluded from this study as the researcher is unable to accommodate languages other than English.

If you wish to participate in this study, please click the Survey Monkey link below.
(*Informed consent document as well as debriefing document will be provided in the Survey Monkey*)

If you any questions about this study, please feel free to contact Amy Margraf or Professor Rosemary McCaslin, PhD at (909) 537-5507. If you would like to obtain a copy of the group results of this study, please visit the Pfau Library ScholarWorks database (<http://scholarworks.lib.csusb.edu/>) at California State University, San Bernardino after July 2017

Sincerely,
Amy Margraf

Developed by: Amy Taber Margraf Hernandez

APPENDIX C
DEBRIEFING STATEMENT



College of Social and Behavioral Sciences
School of Social Work

Debriefing Statement

Thank you for your participation in this study. The purpose of this study was designed to explore the strategies and coping mechanisms utilized by Neonatal Intensive Care Unit (NICU) Social Workers and Pediatric Intensive Care (PICU) Social Workers in preventing primary trauma (PT), secondary trauma stress (STS), compassion fatigue (CF), and burnout. No deception was used in the completion of this study; however, if you experienced any distress, were triggered by any traumatic memories, or feel that you are experiencing any of the symptoms of primary trauma, secondary trauma stress, compassion fatigue or burnout please feel free to reach out to the following resources:

San Bernardino County of Behavioral Health: (909) 579-8100

Kaiser Permanente Behavioral Health Help Line: (800) 900-3277

National Alliance on Mental Illness Help line: (800) 950-6264

Or, contact your personal primary care physician or mental health provider

If you any questions about this study, please feel free to contact Amy Margraf or Professor Rosemary McCaslin, PhD at (909) 537-5507. If you would like to obtain a copy of the group results of this study, please visit the Pfau Library ScholarWorks database (<http://scholarworks.lib.csusb.edu/>) at California State University, San Bernardino after July 2017

909.537.5501

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Developed by: Amy Taber Margraf Hernandez

APPENDIX D
IRB APPROVAL NOTICE

CALIFORNIA STATE UNIVERSITY, SAN BERNARDINO
SCHOOL OF SOCIAL WORK
Institutional Review Board Sub-Committee

Researcher(s) Amy Margraf
Proposal Title Strategies and Coping Mechanisms Utilized by NICU and PICU Social Workers to prevent Primary Trauma
SIW 1732 Secondary stress, Compassion Fatigue and Burnout

Your proposal has been reviewed by the School of Social Work Sub-Committee of the Institutional Review Board. The decisions and advice of those faculty are given below.

Proposal is:

- approved
- to be resubmitted with revisions listed below
- to be forwarded to the campus IRB for review

Revisions that must be made before proposal can be approved:

- faculty signature missing
- missing informed consent debriefing statement
- revisions needed in informed consent debriefing
- data collection instruments missing
- agency approval letter missing
- CITI missing
- revisions in design needed (specified below)

[Signature] _____ Date 2/28/2017

Distribution: White-Coordinator; Yellow-Supervisor; Pink-Student

APPENDIX E
SURVEY QUESTIONS

Survey Monkey Questions for NICU and PICU Social Workers

Research Question: What strategies and coping mechanisms are social workers using to prevent primary traumatization, secondary traumatic stress, compassion fatigue, and burnout when working in neonatal and pediatric intensive care units?

The questions below will be asked via Survey Monkey. Participants who wish to participate, but have special circumstances and prefer a recorded phone interview or recorded in-person interview will be asked the same questions. The researcher may contact participants via phone (if granted permission on the informed consent) to ask clarification questions or follow-up questions if necessary. Participants are expected to take 30-45 minutes to complete the survey. Participants may withdraw at any time without penalty. Surveys that are not completed by March 28, 2017 will be excluded from the data.

1. Have you received any education or training on primary trauma, secondary trauma stress, compassion fatigue or burnout as a professional? If yes, please explain.
2. What is your perception on primary trauma?
3. What is your perception on secondary trauma stress?
4. What is your perception on compassion fatigue?
5. What is your perception on burnout?
6. Have you ever experienced symptoms of primary trauma, secondary trauma stress, compassion fatigue or burnout? If so, please explain what symptoms you developed.
7. How do you feel that these [primary trauma, secondary trauma stress, compassion fatigue, and burnout] symptoms impact the work of NICU or PICU social workers?
8. What strategies or coping mechanisms do you use to prevent primary trauma symptoms from impacting your work as a NICU or PICU social worker?
9. What strategies or coping mechanisms do you use to prevent secondary trauma stress symptoms from impacting your work as a NICU or PICU social worker?
10. What strategies or coping mechanisms do you use to prevent compassion fatigue symptoms from impacting your work as a NICU or PICU social worker?
11. What strategies or coping mechanisms do you use to prevent burnout as a NICU or PICU social worker?
12. In your experience, have you been actively involved in preventing primary trauma, secondary trauma stress, compassion fatigue and burnout symptoms or do you feel that you engage in your strategies or coping mechanisms after you notice the onset of these symptoms? If yes, please explain your experience.
13. Have you sought out educational resources or adapted your current strategies or coping mechanisms if/when you noticed your current methods were not working? If yes, please explain.

At the completion of the survey participants will be asked if they are open to being contacted by the researcher via a recorded phone call for clarification of responses or for follow-up questions. If the participant agrees they will be asked to provide their best contact number.

At the completion of the survey participants will also be thanked for their participation and asked for the mailing address they wish their \$5 Starbucks gift card to be sent.

A debriefing statement with resources for mental health services will be provided in the event that participants experiences distress from recalling traumatic memories or if they feel they are experiencing symptoms of primary trauma, secondary trauma stress, compassion fatigue or burnout.

Developed by: Amy Taber Margraf Hernandez

REFERENCES

- Alkema, K., Linton, J. M., & Davies, R. (2008). A study of the relationship between self-care, compassion satisfaction, compassion fatigue, and burnout among hospice professionals. *Journal of Social Work in End-Of-Life & Palliative Care, 4*, 101-119.
- American Psychiatric Association. (2013). Diagnostic and statistical manual of mental disorders (5th ed.). Arlington, VA: Author. ISBN: 0890425558
- Aparicio, E. , Michalopoulos, L. , & Unick, G. (2013). An examination of the psychometric properties of the vicarious trauma scale in a sample of licensed social workers. *Health & Social Work, 38*(4), 199-206.
- Badger, K. , Royse, D. , & Craig, C. (2008). Hospital social workers and indirect trauma exposure: An exploratory study of contributing factors. *Health & Social Work, 33*(1), 63-71.
- Baird, K., & Kracen, A.C. (2006). Vicarious traumatization and secondary traumatic stress: A research synthesis. *Counselling Psychology Quarterly, 19*, 181-188.
- Breslau, N., Davis, G. C., Anderski, P., & Peterson, E. (1991). Traumatic events and posttraumatic stress disorder in urban population of young adults. *Archive of General Psychiatry, 48*, 216-222.
- Bride, B.E. (2004).The impact of providing psychosocial services to traumatized populations. *Stress, Trauma, and Crisis, 1*, 29-46.

- Bride, B. (2007). Prevalence of secondary traumatic stress among social workers. *Social Work, 52*(1), 63-70.
- Daley, M.R. (1979). Burnout: Smoldering problem in protective services. *Social Work, 24*, 375-379.
- Dane, B., & Chachkes, E. (2001). The cost of caring for patients with an illness: Contagion to the social worker. *Social Work in Health Care, 33*, 31-50
- Figley, C. (1995). Compassion fatigue as secondary traumatic stress: An overview. In C. Figley (Ed.), *Compassion fatigue: Coping with secondary traumatic stress disorder in those who treat the traumatized* (pp. 1—20). New York: Brunner/Mazel.
- Figley, C. R. (2001). Compassion fatigue as secondary traumatic stress: An overview. In C. R. Figley (Ed.), *Compassion fatigue: Coping with secondary traumatic stress disorder* (2nd ed., pp. 1-20). New York, NY: Bruner/Mazel.
- Hamilton, B., Martin, J., Osterman, M., Curtin, S., & Mathews, T. (2015). Births: final data for 2014. Centers for Disease Control and Prevention National Vital Statistics Reports, *64*(12), 1-11.
- Harrison, D. (1980). Role strain and burnout in child-protective service workers. *Social Service Review, 54*, 31-44.
- Hsieh, H. , & Shannon, S. (2005). Three approaches to qualitative content analysis. *Qualitative Health Research, 15*(9), 1277-1288.

- Inbar, J., & Ganor, M. (2003). Trauma and compassion fatigue: Helping the helpers. *Journal of Jewish Communal Service, Winter/Spring*, 109-111.
- Johnson, M., & Stone, G. L. (1987). Social workers and burnout: A psychological description. *Journal of Social Service Research, 10*, 67-75.
- Joinson, C. (1992). Coping with compassion fatigue. *Nursing, 22*, 116-122.
- Leiter, M. P., Harvie, P., & Frizzell, C. (1998). The correspondence of patient satisfaction and nurse burnout. *Social Science & Medicine, 47*, 1611-1617.
- Leiter, M. P., & Maslach, C. (2004). Areas of work life: A structured approach to organizational predictors of job burnout. In P. Perrewé & C. D. Ganster (Eds.), *Research in occupational stress and well-being: Vol. 3, Emotional and physiological processes and positive intervention strategies* (pp. 91-134). Oxford, England: JAI Press/Elsevier.
- McCann, I. L., & Pearlman, L. A. (1990). Vicarious traumatization: A framework for understanding the psychological effects of working with victims. *Journal of Traumatic Stress, 3*, 131-14
- Meadors, P. , & Lamson, A. (2008). Compassion fatigue and secondary traumatization: Provider self care on intensive care units for children. *Journal of Pediatric Health Care, 22*(1), 24-34.
- Newell, J. , & Nelson-Gardell, D. (2014). A competency-based approach to teaching professional self-care: An ethical consideration for social work educators. *Journal of Social Work Education, 50*(3), 427-439.

- Nottage, S. (2005). Parents' use of nonmedical support services in the neonatal intensive care unit. *Issues in Comprehensive Pediatric Nursing, 28*(4), 257-273.
- Peebles-Kleiger, M. (2000). Pediatric and neonatal intensive care hospitalization as traumatic stressor: Implications for intervention. *Bulletin of the Menninger Clinic, 64*(2), 257-280.
- Pfifferling, J., & Gilley, K. (2000). Overcoming compassion fatigue. *Family Practice Management, 7*, 39-45.
- Ray, S. , Wong, C. , White, D. , & Heaslip, K. (2013). Compassion satisfaction, compassion fatigue, work life conditions, and burnout among frontline mental health care professionals. *Traumatology, 19*(4), 255-267.
- Resnick, H.S., Kilpatrick, D. G., Dansky, B.S., Saunders, B.E., & Best, C. I. (1993). Prevalence of civilian trauma and posttraumatic stress disorder in a representative national sample of women. *Journal of Consulting and Clinical Psychology, 61*, 984-991.
- Richardson, C. (2002). Physician/hospital liability for negligently reporting child abuse. *Journal of Legal Medicine, 23*(1), 131-150.
- Stamm, B.H. (2010). *The Concise ProQOL Manual, 2nd Ed.* Pocatello, ID: ProQOL.org.
- Sze, W. C. & Ivker, B. (1986). Stress in social workers: The impact of setting and role. *Social Casework, 67*, 141-148.

- Oktay, J. (1992). Burnout in hospital social workers who work with aids patients. *Social Work, 37*(5), 432-439.
- Yassen, J. (1995). Preventing secondary traumatic stress disorder. In C. Figley (Ed.), *Compassion fatigue: Coping with secondary traumatic stress disorder in those who treat the traumatized* (pp.1178-1208). New York: Brunner/Mazel.
- Xu, J., Murphy, S., Kockanek, K., & Bastian, B. (2016) Deaths: final data for 2013. Centers for Disease Control and Prevention National Vital Statistics Reports, 64 (2), 1-12.
- Zastrow, C., & Kirst-Ashman, K. K. (2013). *Understanding human behavior and the social environment*. Australia: Brooks/Cole, Cengage Learning.