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## Compassion Fatigue: The Impact on Nurses During the COVID-19 Pandemic

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**Compassion Fatigue: The Impact on Nurses During the COVID-19 Pandemic**

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NURS 4500: Nursing Research and Senior Thesis

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**Abstract****Background**

Compassion fatigue comes from the physical, emotional, and psychological impact of helping others through stressful and traumatic experiences. It is a form of fatigue linked to burnout and secondary traumatic stress. Many nurses are vulnerable to compassion fatigue from repeated exposure to the trauma of their patients. While compassion fatigue has been a continuing issue, the COVID-19 pandemic has increased the risk and number of nurses developing compassion fatigue. This can affect patient care, workplace and personal relationships, and lead to development of more serious mental health issues.

**Objective**

To investigate the effects of compassion fatigue on the registered nursing population and identify practices of techniques that alleviate compassion fatigue in nurses. A literature review of past research will be completed and a proposal that illustrates a further study is provided.

**Summary of Findings**

Through review of the research, various screening tools were identified which determined if a nurse was experiencing compassion fatigue. Intervention methods were used by nurses to provide beneficial outcomes for participants, which improved their mental health. Methods included educational programs, mindfulness techniques, and self-care skills.

**Proposal**

Through a mixed-method study that employs quantitative and qualitative methods, the proposed study will investigate effects of the COVID-19 pandemic on compassion fatigue and bedside nurses. The researchers intend to use self-report surveys and interviews to find common themes within the information collected from participants.

## Introduction

The COVID-19 has reached over eight million deaths worldwide, exposing healthcare workers to various influences leading to compassion fatigue. Compassion fatigue is a cumulative outcome of prolonged contact with stress stemming from others (Zhang, et al., 2018). Nurses are repeatedly exposed to their patients' traumas which leads to emotional and physical exhaustion, resulting in a decreased ability to empathize or feel compassion for others (Stevensen et al., 2021). Many nurses are at risk for compassion fatigue which has been found to be due to work overload and stress, low workplace support, and contact with traumatized patients. Research has identified additional factors that have been exacerbated by the COVID-19 pandemic. Nurses have concerns of being exposed to the virus, witnessing the deterioration of their working conditions, and taking greater workloads (Stevensen et al., 2021). Nurses with compassion fatigue begin having thoughts of leaving the nursing profession and develop poor mental health.

Since February 2020, nearly one in five healthcare workers have quit their jobs (García-Hodges, 2022). The exodus of healthcare workers, including nurses, may place great strain on the healthcare industry and the remaining employees. The industry may see high turnover and low employee retention rates. As the healthcare workers are leaving, there is an increase in hospitalizations and positive COVID-19 cases (García-Hodges, 2022). Hospitals are overwhelmed with the number of patients, which has providers struggling. Many hospitals have paused or stopped elective surgeries because of hospital overcrowding and staffing shortages. Healthcare providers like Dr. Megan L. Ranney recounts her work as an emergency physician, "It has become nearly impossible for us to take the right care of the right patient at the right time" (Ranney, 2022). Healthcare workers are worn down by the surges of COVID-19 cases on

top of patients with different, but equally severe conditions. Hospital beds are being taken up and not discharged quickly enough to make room for other patients that need help.

Dr. Ranney describes the moral harm from other patients unrelated to the pandemic: “It’s knowing that an elderly man was on a stretcher for hours with a broken hip, lying in his own urine, because there was no one to care for him” (Ranney, 2022). Unsafe staffing ratios can lead to a drop in patient care quality and risk patient safety. Workplaces must change their conditions and help their staff combat compassion fatigue to retain the remaining staff and entice nurses to return to work. Nurses may also practice self-care techniques outside of work to decrease risk of compassion fatigue.

The purpose of this thesis is to identify compassion fatigue among registered nurses at various points in time: before, during the peak of the COVID-19 Pandemic, and the current state of healthcare. The literature review also seeks to identify effective methods that may manage and reduce the risk of developing compassion fatigue. Once compassion fatigue and its effects have been identified, nurses may begin to recognize whether they have been affected by it.

### **Literature Review**

The literature review explored and identified incidence of compassion fatigue in frontline nurses. The articles selected were based on the focus on nurse compassion fatigue before and during the COVID-19 pandemic, and interventions implemented to reduce stress and burnout. Articles were assessed based on the aims and methodology of the studies. The databases used were CINAHL, PubMed, Up-To-Date, and Dominican University’s Iceberg.

The search terms used were compassion fatigue, burnout, secondary traumatic stress, COVID-19, nurses, healthcare workers.

The research articles are listed and categorized into the following:

1. Identifying Factors of Compassion Fatigue
2. Impact of COVID-19 on Nurses and Compassion Fatigue
3. Intervention Methods to Manage Compassion Fatigue

A table containing a summary of each article presented in the literature review will be provided in the Appendix.

### **Identifying Factors of Compassion Fatigue**

*Empathy, Compassion Fatigue, Guilt and Secondary Traumatic Stress in Nurses* was a descriptive-correlational study done to consider the relationship between compassion fatigue and empathy in nurses with the role of guilt and secondary traumatic stress. The participant population consisted of a convenience sample nurses from five randomly selected hospitals in Kerman, Iran. The final sample study comprised of 300 nurses. The population of nurses invited to participate were from specialties such as the emergency department, intensive care units, oncology floors, and medical-surgical units. The data was collected in 2017 using a professional quality of life scale (ProQOL), interpersonal reactivity index, interpersonal guilt scale, and a set of demographic questions (Mottaghi, 2020). The ProQOL was made up of 30 items with three components: compassion satisfaction, burnout, and secondary traumatic stress. The test was answered with a five-point Likert-type scale and scores summarized the responses in a 10-item scale. The interpersonal reactivity test was developed in 1908 to measure empathy. It included 28 items and four components of perspective taking, fantasy, empathic concern, and personal distress (Mottaghi, 2020). The interpersonal guilt scale consisted of 67 articles and four types of guilt: survivor, separation, omnipotent, and self-hate.

The research results showed that there was no direct effect of empathy on compassion fatigue ( $p = 0.001$ ) (Mottaghi, 2020). Instead, empathy had an indirect effect on compassion

fatigue through survivor guilt, omnipotent guilt, and secondary traumatic stress. The findings showed that nurses with increased empathy had a greater feeling of guilt. Nurses would have feelings of responsibility for their patients who were exposed to distressing circumstances such as their ailments or have feelings of guilt because the nurses themselves were not suffering from disease and illness like their patients. The results bring to light that nurses experience great psychological stress in the hospital, which consisted of workplace stress, nursing care, communication with patients, and intra-organizational communications. Nurses continually encounter situations that require empathy, and increased empathy can lead to a uncontrolled feeling of guilt and sense of extreme and illogical responsibility toward their patients (Mottaghi, 2020). Eventually, the survivor guilt would start to affect personal and family life, as well as work and the nurse's ability to manage issues, causing compassion fatigue.

The results also validated that omnipotent guilt and empathy were correlated. When empathy increased, so did omnipotent guilt, but lowered compassion fatigue. Omnipotent guilt is when a person feels responsible for situations out of their control and the well-being of others. Some studies reference adaptive omnipotent guilt relates to positive social adjustment and healthy personal development, which could decrease compassion fatigue (Mottaghi, 2020). Researchers highlighted that the Iranian society is more a collectivist culture, to emphasize the needs of many others over the self (Mottaghi, 2020). This may elucidate why omnipotent guilt results in compassion fatigue lessening, as guilt was reframed into putting the well-being of others first. The research findings also reestablished the role of secondary traumatic stress between compassion fatigue and empathy in nurses (Mottaghi, 2020). Secondary traumatic stress was present when nurses experienced their patient's trauma, which would cause nurses to re-experience their own disturbances and would develop avoidance behaviors and compassion

fatigue. Empathy accounted for 77% of nurse compassion fatigue via feelings of guilt and secondary traumatic stress (Mottaghi, 2020). The nurses also experienced alterations to their memory and perception. The results of the study indicated that empathy-based guilt and secondary traumatic stress confirmed links between clinical empathy and symptoms of compassion fatigue (Mottaghi, 2020). It appears likely that nurses who are more empathetic experience more and misdirected responsibility for their patients. Nurses who are repeatedly exposed to trauma and show empathy to their patients are more likely to become tired of compassion with patients, as they are unable to feel like they can help their patients.

This study did not explore any interventions or training programs that would target empathic guilt and distress to reduce compassion fatigue. The researchers expressed that it was difficult to find the casual relationship between empathy and factors of guilt, secondary traumatic stress, and compassion fatigue. They suggested that future research should consider other variables such as the timing of the shift, work effort, and mental attributions to better understand aspects affecting compassion fatigue.

*Work Environment Characteristics and Emotional Intelligence as Correlates of Nurses' Compassion Satisfaction and Compassion Fatigue: A Cross-Sectional Survey Study* investigated the relationship between work environment characteristics, emotional intelligence, compassion fatigue, and compassion satisfaction of Canadian nurses (Maillet, 2021). The study found that psychological demands, decision latitude, supervisor and coworker support, and emotional intelligence were correlated with nurses' compassion satisfaction and compassion fatigue. The results of the study emphasized the importance of having reasonable demands, empowering nurse autonomy, having supportive relationships at work, and promoting nurses' emotional intelligence (Maillet, 2021). Researchers used a cross-sectional online survey of Canadian

registered nurses (RN). The data was collected between September to December 2016 using an online survey which contained demographic questions and self-report questionnaires. The study planned to examine two hypothesized models that linked work environment characteristics and emotional intelligence to compassion fatigue and compassion satisfaction among RNs. The RN participants spanned a variety of specialty areas, but the majority worked on a Medical/Surgical floor and another majority had between 0-10 years worked as a nurse.

Work environment characteristics were evaluated with a job content questionnaire, using the following subsets: psychological demands, decision latitude, supervisor support, and coworker support (Maillet, 2021). The Schutte Self-Report Emotional Intelligence test (SSEIT) was used to assess overall emotional intelligence. An amended ProQOL item and scoring method were used to evaluate compassion fatigue and compassion satisfaction. Results of the study showed an inverse correlational relationship between compassion fatigue and compassion satisfaction, the two main variables. Compassion satisfaction was positively correlated with the following work environment components: decision latitude ( $r = 0.40$ ), supervisor support ( $r = 0.33$ ), and coworker support ( $r = 0.31$ ) (Maillet, 2021). Psychological demands of the workplace were found to have a negative relationship with compassion satisfaction ( $r = -0.25$ ) and positively associated with higher levels of compassion fatigue ( $r = 0.22$ ) (Maillet, 2021).

The results also displayed RNs with higher general emotional intelligence had greater compassion satisfaction ( $r = 0.43$ ) and much lower compassion fatigue, as they were more equipped to handle other's and their own emotions. Researchers noted that emotional intelligence is an important resource for RNs to be able to cope effectively with job strain and compassion fatigue, as well as express their emotions in a constructive way (Maillet, 2021). Job strain can be unavoidable for nurses, however researchers noted that employees who received

support were less disposed to compassion fatigue and had improved coping regarding work demands (Maillet, 2021). Social support came in the forms of support, assistance, feedback, advice, and autonomy from their coworkers and supervisors. The results of this study could help healthcare organizations to support nurses to promote compassion satisfaction and prevent compassion fatigue. It was inferred that a difficult workplace environment would add on to the stress of nursing work, leading to difficulty retaining staff nurses during a nursing shortage.

### **Impact of COVID-19 on Nurses and Compassion Fatigue**

*Resilience as a mediator between compassion fatigue, nurses' work outcomes, and quality of care during the COVID-19 pandemic* was a cross-sectional study that used an online survey collecting data from nurses in the Philippines who had given care to coronavirus patients (Labrague, et al., 2021). Participants were registered and licensed nurses who worked in the hospital six months prior to the study and gave direct patient care to suspected or infected coronavirus patients in order to be eligible for the study. 270 frontline nurses from the region responded. Five self-report scales were used to collect data which used a version of the Compassion Fatigue Scale (CFS) and a 10-point Likert scale (Labrague, et al., 2021). The mean score was calculated from the answers and evaluated. A higher CFS mean score would mean a higher level of compassion fatigue. A four-item Brief Resilient Coping Skills scale used a five-point Likert scale to evaluate frontline nurses' ability to recover from stressful situations caused by the pandemic. Nurses' satisfaction with their current job during the height of the coronavirus pandemic was assessed with a five-point Likert Job Satisfaction Scale. A higher score on the Job Satisfaction Scale represented a higher level of job satisfaction. A five-point Likert scale with a single item was used to examine nurses' intention to leave their current job. The item asked

participants, “Given the current situation, I am more likely to leave my profession” (Labrague, et al., 2021). Participant data was collected from November 1, 2020, to December 1, 2020.

The results found that compassion fatigue was negatively associated with quality of care ( $\beta = -0.145$ ,  $p = 0.019$ ) and job satisfaction ( $\beta = -0.317$ ,  $p = 0.001$ ), and positively associated with intention of leaving their job ( $\beta = 0.301$ ,  $p = 0.001$ ) (Labrague, et al., 2021). The results also showed that resilience was positively associated with quality of care and job satisfaction, and negatively associated with turnover intention (Labrague, et al., 2021). In addition, resilience was discovered to facilitate the relationship between compassion fatigue and job satisfaction ( $\beta = -0.259$ ,  $p = 0.001$ ), as well as compassion fatigue and job turnover intention ( $\beta = 0.272$ ,  $p = 0.001$ ) (Labrague, et al., 2021). In conclusion, resilience reduced repercussions of compassion fatigue on job satisfaction, job turnover intention, and alleged quality of care for frontline nurses (Labrague, et al., 2021). Researchers compared their results of the prevalence of compassion fatigue in nurses during the pandemic to findings of previous studies done prior to the coronavirus crisis. The study done by Labrague, et al, was the first to report the consequences of compassion fatigue in frontline nurses during the pandemic related to job outcome and quality of care (Labrague, et al., 2021). The researchers found prevalence of compassion fatigue in frontline nurses in the Philippines was influenced by issues caused during the pandemic, which adversely affected work outcomes and quality of patient care provided. It was identified that psychological resilience was identified as a factor that would protect nurses from the adverse effects of compassion fatigue, which resulted in increased job satisfaction, higher job retention, and an increased perception of quality of patient care. The research suggested that interventions should be implemented to reduce compassion fatigue and build psychological resilience in nurses should be prioritized by hospital and nursing administrations (Labrague, et al, 2021).

*COVID-19 Patient Care Predicts Nurses' Parental Burnout and Child Abuse: Mediating Effects of Compassion Fatigue* explores the harmful effects of the pandemic on nurses' parental burnout, child abuse, and child neglect, which were mediated by compassion fatigue (Stevenson, et al., 2021). Nurses who are also parents are at risk for professional compassion fatigue and parental burnout. Authors Stevenson, et al., state recent research has shown that parents with COVID-19 related stressors have projected higher potential for engaging in child abuse. Participant criteria required registered nurses to be parents of young children. The researchers note that the results were skewed as participants were mostly younger parents with young children (Stevenson, et al., 2021). The results would not be able to generalize the nursing population regarding compassion fatigue throughout the profession. The study was conducted during May 2020. The participants completed a survey where they answered questions regarding direct care and exposure to COVID-19 patients and loss of family income. The research used a cross-sectional methodology which measuring compassion fatigue, compassion satisfaction, substance abuse, spouse conflict, parental burnout, child abuse, and child neglect (Stevenson, et al, 2021). The study hypothesized that care of COVID-19 patients, exposure to death and suffering during the pandemic, and loss of family income due to COVID-19 would predict higher levels of self-reported compassion fatigue, substance abuse, spouse conflict, parental burnout, and child abuse and neglect (Stevenson, et al, 2021). It was also expected that compassion fatigue would be correlated with the hypothesized effects of COVID-19 patient care, exposure to patient death and suffering during the pandemic, and loss of family income in relation to all variables (substance abuse, spouse conflict, parental burnout, child abuse, and child neglect) (Stevenson, 2021).

The research data supports the hypothesis that increased frequency of nurse COVID-19 patient care, exposure to patient suffering and death from COVID-19, and loss of family income due to COVID-19 were major predictors for nurse compassion fatigue, which predicted higher parental burnout, child abuse and neglect, substance abuse, and spouse conflict (Stevenson, 2021). Researchers noted that the results are consistent with growing research demonstrating the COVID-19 pandemic has increased risk of harmful effects to nurses and their families. The research suggests there is a need for interventions designed to reduce compassion fatigue can benefit nurses, as well as their spouses and children.

### **Intervention Methods to Manage Compassion Fatigue**

*Intervening to Improve Compassion Fatigue Resiliency in Forensic Nurses* was an exploratory study done to verify the prevalence of compassion fatigue symptoms and evaluate the efficacy of an educational intervention in forensic nurse participants (Flarity, 2016). 55 nurses voluntarily completed a Professional Quality of Life Tool (ProQOL). The nurses participated in a pre-test and intervention session. The ProQOL was used as a pre- and post-test, and participants were their own control group. The study utilized a four-hour interactive conference conducted by a certified compassion fatigue specialist. Forensic nurses were educated on sources of compassion fatigue, the subsequent physiological effects, signs and symptoms to be aware of, and factors that would lead to compassion fatigue. The conference showed participants a video of a documentary video which shared the experience of a nurse suffering from compassion fatigue (Flarity, 2016). The intervention seminar included an interactive lecture, paired with individual and group exercises, and engaging in group discussions. Forensic nurses learned about the importance of stress management and participated in demonstrations that allowed them to utilize the strategies. Participants learned skills promoting relaxation to

reduce acute stress. In addition, self-care activities were identified for forensic nurses to implement in their lives. 55 forensic nurses participated in the compassion fatigue intervention. The array of participant nursing experience spanned from 3-33 years, which 21 participants had been working as an RN for over twenty years.

Seven forensic nurse participants completed the ProQOL, as well as the compassion fatigue intervention. The ProQOL was used as a pre- and post-test to assess the success of the intervention on reducing compassion fatigue of forensic nurses. The ProQOL was a 30-item self-report tool that used three subscales which measured three concepts: compassion satisfaction, secondary traumatic stress, and burnout (Flarity, 2016). The scores from both tests were analyzed for changes. All participants were female ranging from 31-55 years of age. All the participants reported at least one symptom of compassion fatigue within the past 30 days. 69% of participants reported low moderate levels of compassion satisfaction on the pre-test, and 43% reported low to moderate levels of compassion satisfaction on the post-test (Flarity, 2016). A 21% improvement of compassion satisfaction was indicated after the intervention. When asked about burnout, 86% of the sample reported moderate to high levels burnout in the pre-test. During the post-test, 43% of participants reported moderate levels of burnout, indicating a 19% improvement (Flarity, 2016).

The intent of the study was to corroborate the prevalence of compassion fatigue within forensic nurses and evaluate the effectiveness of a compassion fatigue intervention (Flarity, 2016). More research is needed to assess the occurrence in larger populations of forensic nurses, as well as other registered nurse populations. Additional research is necessary to determine the efficacy of other interventions that target long term consequences of compassion fatigue. The leading limitation of the study was the small convenience sample size. These findings would not

be introspective of the general forensic nurse population. Since participants were self-selected for participation, there may have been a potential inaccuracy with self-reported data. The study showed short-term improvement, but longer studies would be more beneficial to consider long-term effects of the intervention seminar (Flarity, 2016). The study identified compassion fatigue may have unfavourable effects on nursing performance, morale, staff recruitment, and staff retention. Nurses who suffered from compassion fatigue were more likely to leave the profession. The study also stated that at the time of publication, there was a worldwide nursing shortage four years before the COVID-19 pandemic.

*An Exploratory Study of a 3-Minute Mindfulness Intervention on Compassion Fatigue in Nurses* was a study that showed breathing mindfully for three minutes over a period of four weeks will have a positive effect on compassion fatigue in nurses (Owens, et al., 2020). The study was carried out using a nonrandomized, pre- and post-intervention study conducted using a breathing intervention. Thirty-two nurses participated over four weeks (Owens, et al., 2020). The intervention revealed a significant reduction in compassion fatigue in nurses. The exploration evaluated the efficacy of the mindfulness intervention on compassion fatigue in acute care nurses. The intervention was also effective when applied to secondary traumatic stress, burnout, and compassion satisfaction. The methods used were quasi-experimental coupled with a single group pre- and post-test design (Owens, et al., 2020). Quantitative data was analyzed using descriptive statistics after each test. The sample population criteria recruited acute and critical care RNs within the New York City region. The study tool was a Professional Quality of Life Test used at two points of the study, once before the intervention and once four weeks after the intervention. The test contained thirty self-report items on a five-point Likert Scale, which was

then divided into subscales related to concepts of compassion satisfaction, burnout, and secondary traumatic stress (Owens, et al., 2020).

The results of the study confirmed the hypothesis of registered nurses breathing mindfully for three minutes over a period of four weeks experienced reduced compassion fatigue (Owens, et al., 2020). The intervention also showed reduced burnout and secondary traumatic stress. The researchers found that participants only practiced the intervention an average of three days a week instead of the specified twenty-one days. Despite partial adherence to the mindfulness regimen, acute care nurse burnout and secondary stress levels decreased significantly to shift from “average” (23-41) to “low” ( $\leq 22$ ) levels of burnout and secondary stress when measured (Owens, et al, 2020). The study results also showed a positive and visible recovery in acute care nurse compassion fatigue when measuring with decreased burnout and secondary traumatic stress after the use of a three-minute breathing exercise over 4 weeks. The study has also shown that there are advantages from a short and partially adhered mindfulness-based intervention for compassion fatigue and shared notions. The researchers reported the positive results of breathing mindfully for three minutes several times per week reflect other study results that use a longer duration of mindfulness-based intervention (Owens, et al., 2020).

### **Discussion of Review**

This review has shown that the COVID-19 pandemic has put more stress on registered nurses working at the bedside and increased the presence of compassion fatigue. Compassion fatigue has been the focus of this review as it is like burnout but comes from the repeated exposure to the trauma of others. Nurses are generally people who want to help others and can become overwhelmed with feelings of exhaustion or powerlessness. When taking care of patients at the height of the pandemic and seeing patients with poor outcomes due to the COVID-19

illness, nurses can begin to blame themselves for not doing enough and start to lose a sense of accomplishment.

Studies done before 2020 revealed nurses reporting the presence of compassion fatigue, as well as studies done during the COVID-19 pandemic. Labrague, et al, found 38.5% of frontline nurses in a self-report survey to have experienced “medium” to “high” levels of compassion fatigue during the second wave of the pandemic (Labrague, et al, 2021). Several authors have identified the effects of compassion fatigue amongst nurses which include self-reports of poorer quality of care, lower job satisfaction, family conflict, and other harmful effects. Studies reviewed provided interventions in which nurses utilized to decrease compassion fatigue and improve nurses’ well-being. Interventions reviewed included an educational panel on compassion fatigue and self-care activities, in addition to mindfulness-based breathing interventions. Both interventions resulted in self-reported improvement after the intervention. When reviewing the literature, it is noted that high levels of compassion fatigue can affect delivery of good quality of nursing care. Increased compassion fatigue and negative patient outcomes, reduced patient satisfaction, and reported low quality of care were all found to be correlated.

## **Research Study**

### **Introduction**

With frequent bedside interaction with patients, registered nurses are exposed to others’ physical and emotional needs. The repeated exposure to stress and trauma of patients will overwhelm a nurse and drain their compassion and empathy. The research approach is to observe whether bedside nurses perceive a change or adverse effect on the quality of patient care as a result of compassion fatigue during the height of the pandemic. A descriptive correlational study

is proposed to collect information to describe the relationship between compassion fatigue and quality of patient care as perceived by bedside nurses who worked during the COVID-19 pandemic.

### **Theoretical Framework**

Nola J. Pender's Health Promotion Model represents a theoretical perspective that investigates the factors and links influencing health-promoting behavior to improve health and quality of life (Petiprin, 2020). The framework serves as a guide to explore the many aspects of a person which influence in their goal to enhance their health. Influences would include social and environmental factors that influence health promotion behavior. Health promotion behavior is a desired outcome and should improve health, enhance a person's functional ability, and better their quality of life (Petiprin, 2020). The health promotion model can be applied to registered nurses to identify what situational and interpersonal influences affect nurses and contribute to compassion fatigue. Registered nurses may then implement health promotion behaviors to manage compassion fatigue and learn to work within the constraints of the condition.

### **Research Question**

Do nurses perceive a change or adverse effect on the quality of patient care because of compassion fatigue during the height of the pandemic?

### **Research Model**

The research model will be a mixed-method study to collect data to create a hypothesis describing a correlation between a nurse's perceived decline in quality of patient care and the presence of higher levels of compassion fatigue in registered nurses. A modified Compassion Fatigue Self-Test with a Likert-Scale and open-ended questions will be used as tools of the study. Participation would be solicited from up to 300 registered nurses who have worked at the

bedside before the COVID-19 pandemic, during the height of the pandemic, and presently from the Bay Area of California. Participants would be selected through non-probability convenience sampling and continued to carry out via snowball sampling.

### **Recruitment Method**

Recruitment will be done using an online survey and shared via email. The survey will feature a description of the survey and the purpose of the research. The survey would allow participants to make an independent choice to participate. Data collected will feature no personal identifiers. No reimbursement or compensation of any value would be provided for participation in the research. The cost of participation would be personal time to complete the survey. The survey is voluntary, and participants can withdraw at any time and opt out of any questions.

### **Tools of Study**

The survey tool will be modeled after the Compassion Fatigue Self-Test (CFST), which is a common instrument used to measure compassion fatigue, as it was one of the first measures developed (Figley, 1995). Compassion fatigue will be assessed answering questions about themselves, their patients, and scenarios in the workplace. The survey tool will include questions collecting demographic information asking the participant's age, gender, length of nursing practice, and unit of practice setting. The CFST uses a five-point Likert-type scale to answer each item. Participants will answer using numbers to rate their responses: 1 (rarely/never), 2 (sometimes), 3 (uncertain), 4 (frequently), 5 (very frequently/always). The numbers given will be compiled into a score which will fall into a category for risk of compassion fatigue. For this proposed study, only risk of compassion fatigue will be scored. The higher the score a participant obtains, the more at risk they are for compassion fatigue. An example of the modified CFST will be provided in the Appendix.

Open-ended questions will be featured to gather records of participants' perception of the individual experience and behaviors, as well as the state of the nursing profession. Each item will be tested for reliability and validity. Example qualitative questions will be provided in the Appendix. The study will be created and distributed through Google Forms and may be completed on a computer or mobile device. The tool to be used will provide appropriate data to answer the research questions and fulfill content validity.

### **Ethical Considerations**

The research proposal will be presented to the Institutional Review Board to obtain approval for the study. Potential participants will be assured that no identifying data will be collected from them. Participants will be instructed to avoid providing answers that would allow them to be identified when answering the survey and participating in interviews. Strict confidentiality will be maintained when gathering data from participants and will be kept on a secure and password-protected device. Before beginning the study, participants will be provided with a form to consent for participation. Participants will take part in the study voluntarily.

### **Analysis Proposal**

Participant demographics will be evaluated using descriptive statistics. Analysis of participant age, gender, years of nursing practice, and unit of practice will be performed. Descriptive statistics will be used to summarize the data collected from the CFST and divided into measures of variability and measures of central tendency. Data from the CFST will be used to find the standard deviation, and skewness of the study, in addition to the mean, median, and mode. An Analysis of Variance (ANOVA) will also be used to calculate and compare the averages of CFST scores across different groups. Participant groups can be categorized by age group, gender, number of years working as a nurse, and unit of employment. An analysis of the

survey results will include testing of reliability and tabulation of open-ended survey questions and summary of theme responses.

### **Significance to Nursing**

The significance to nursing of this proposed study is to bring awareness to compassion fatigue and how it affects bedside nurses and their patients. Many nurses are predisposed to compassion fatigue which is influenced by factors such as stressful work environments, repeated exposure to patient trauma, and continual self-giving. Several factors have been intensified by the COVID-19 Pandemic in addition to new factors, such as contracting the virus and spreading it to family and friends, increase exposure to patient mortality, and increased workloads. Exposure to these factors leaves nurses susceptible to developing compassion fatigue and its related consequences.

### **Conclusion**

Overall, the studies in the review presented that the pandemic did lead to greater incidence of compassion fatigue in bedside nurses and is associated with a decrease in quality of care. Effective interventions that reduced stress and lessened compassion fatigue promoted resilience and mindfulness in nurses. Emphasized by the COVID-19 Pandemic, support of nurses should be of utmost importance to the nursing profession and healthcare organizations. Prevention of compassion fatigue and nurturing job satisfaction can be achieved by offering work environments with reasonable demands for nurses. Hospital and nursing administrators should consider providing nurses with interventions to reduce compassion fatigue, which can result in higher job satisfaction, increased employee retention, and a higher perception of quality of patient care (Maillet, 2021). Further research into new contributing factors and other solutions

for prevention and management for potential compassion fatigue must be done to benefit the future of the nursing profession.

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**Appendix A**

Authors/Citation	Purpose/Objective of study	Sample – Population of interest, sample size	Study Design	Study Methods	Major Findings	Strengths	Limitations
Mottaghi, S., Poursheikhali, H., & Shameli, L. (2020). <i>Empathy, compassion fatigue, guilt and secondary traumatic stress in nurses</i> . <i>Nursing Ethics</i> , 27(2), 494-504. <a href="https://doi.org/10.1177/0969733019851548">https://doi.org/10.1177/0969733019851548</a>	Investigate the relationship between empathy and compassion fatigue (CF) in nurses due to the role of feeling guilty and secondary traumatic stress.	300 nurses in Iran in Kerman hospitals in 2017.	Qualitative: applied descriptive-correlation study, cross-sectional research; convenience sample.	Data collected in 2017 and analyzed using path analysis method and Amos software. Tools used to collect data: questionnaire packet containing professional quality of life scale (ProQOL); interpersonal reactivity index; interpersonal guilt scale; demographic questions.	The mediating role of omnipotent guilt between empathy and CF in nurses. Relation of empathy noted with nurses' CF through feelings of guilt and secondary traumatic stress (STS).	Approval from the researcher's university IRB for ethical review and the hospitals' ethics committees obtained. First research focused on concept of guilt and STS as factors affecting CF in Iranian society.	Study was carried out in one area of Iran. Future studies should be carried out in other regions for more general data.
Maillet, S., & Read, E. (2021). <i>Work Environment Characteristics and Emotional</i>	Examine relationship between Canadian nurses' work environment	1271 Canadian nurses	Quantitative; Cross-sectional survey study	Data collected from online survey between September and December 2016.	Psychological demands, decision latitude, supervisor and coworker	Ethical approval was obtained from University Ethic Review Board prior to	Research design prevented researchers from drawing conclusions about causality

<p><i>Intelligence as Correlates of Nurses' Compassion Satisfaction and Compassion Fatigue: A Cross-Sectional Survey Study.</i> Nursing Reports (Pavia, Italy), 11(4), 847-858. <a href="https://doi.org/10.3390/nursrep11040079">https://doi.org/10.3390/nursrep11040079</a></p>	<p>characteristics, emotional intelligence, CF, compassion satisfaction.</p>			<p>Karasek's Job Content Questionnaire (JCQ) used to assess work environment characteristics. Schutte Self-Report Emotional Intelligence test (SSEIT) used to assess overall emotional intelligence. ProQOL-21 item and scoring approach used to assess compassion fatigue and compassion satisfaction.</p>	<p>support, and emotional intelligence were correlated with nurses' CF and compassion fatigue.</p>	<p>participant recruitment. No missing values were estimated to maintain the integrity of the data. One of the first studies to use a revised ProQOL scale and questionnaire.</p>	<p>and directionality. Convenience sample may result in data that is not representative of the entire population. May be common method bias due to the use of self-report questionnaires.</p>
<p>Labrague, L. J., &amp; de los Santos, Janet Alexis A. (2021). <i>Resilience as a mediator between compassion fatigue, nurses' work outcomes,</i></p>	<p>Examine the mediating role of resilience in relation between CF and frontline nurses' job outcomes and care quality.</p>	<p>270 frontline nurses in Philippines.</p>	<p>Quantitative: descriptive, cross-sectional survey.</p>	<p>Five Likert-style self-report scales: Compassion Fatigue Scale (CFS); Brief Resilient Coping Skills, Job Satisfaction Scale, single</p>	<p>38.5% frontline nurses experienced medium to high CF during second wave of pandemic. Increased CF was associated with poorer</p>	<p>Ethical approval was granted by the IRB committee of Samar State University. Data collected from Nov. 1, 2020, to Dec. 1, 2020, during</p>	<p>Participants from single region of country, results cannot be generalized. Researchers suggest other factors were not accounted for to</p>

<p><i>and quality of care during the COVID-19 pandemic.</i> Applied Nursing Research, 61, 151476. <a href="https://doi.org/10.1016/j.apnr.2021.151476">https://doi.org/10.1016/j.apnr.2021.151476</a></p>				<p>question on nurses' intention to leave, single question measure nurses' judgement and quality of care.</p>	<p>nurse-reported quality of care, lower job satisfaction, and higher organizational turnover intention.</p>	<p>height of COVID-19 crisis. First study to report consequence of CF in frontline nurses during the pandemic, contributing to new knowledge.</p>	<p>support the hypothesis. Future research should investigate measures that reduce risk and consequence of CF in frontline nurses.</p>
<p>Stevenson, M. C., Schaefer, C. T., &amp; Ravipati, V. M. (2021). <i>COVID-19 patient care predicts nurses' parental burnout and child abuse: Mediating effects of compassion fatigue.</i> Child abuse &amp; neglect, 105458. Advance online publication. <a href="https://doi.org/10.1016/j.chiabu.2021.105458">https://doi.org/10.1016/j.chiabu.2021.105458</a></p>	<p>Explore harmful effects of COVID-19 pandemic on nurses' parental burnout, child abuse, and child neglect, mediated by CF.</p>	<p>244 nurses who were parents of young children.</p>	<p>Quasi-experimental. Quantitative cross-sectional study. Qualitative snowball study.</p>	<p>Recruitment through chain referral sampling. Anonymous survey. CF, compassion satisfaction, substance abuse, spouse conflict, parental burnout, child abuse, and child neglect self-reported and measured.</p>	<p>Direct care of COVID-19 patients, exposure to patient suffering and death from COVID-19, loss of family income predicted greater CF, substance abuse, parental burnout, child abuse and neglect, and spouse conflict.</p>	<p>Study was IRB-approved by the researchers' institution. Study was limited to nurses who were parents to children aged 12 or younger. Criterion was selected for relevant evidence.</p>	<p>Narrow focused study, intentionally limiting the sample. Research suggests participants have less experience than average nurse, having less resilience to CF.</p>

<p>Flarity, K., Nash, K., Jones, W., &amp; Steinbruner, D. (2016). <i>Intervening to Improve Compassion Fatigue Resiliency in Forensic Nurses</i>. <i>Advanced Emergency Nursing Journal</i>, 38(2), 147-156. <a href="https://doi.org/10.1097/TME.000000000000101">https://doi.org/10.1097/TME.000000000000101</a></p>	<p>Determine the prevalence of compassion fatigue (CF) and examine treatment effectiveness of multifaceted educational program in an intervention subset.</p>	<p>55 forensic nurses (FN)</p>	<p>Qualitative – exploratory study with pre- and post-test and intervention.</p>	<p>The intervention intends to increase compassion satisfaction (CS) and decrease CF symptoms in FN who participated in the training.</p>	<p>69% FN had moderate to low CS, 73% FN had moderate to high burnout, 73% FN had moderate to high levels of secondary traumatic stress (STS). Current study result reveal lower levels of CF than previous studies.</p>	<p>Intervention presented increase in compassion satisfaction and decrease in STS and burnout in participating FNs. First intervention study for CF in FNs.</p>	<p>Small convenience sample size. Findings not reflective of general FN population. Potential inaccuracy of self-report data.</p>
<p>Owens, R., Alfes, C., Evans, S., Wyka, K., &amp; Fitzpatrick, J. (2020). <i>An Exploratory Study of a 3-Minute Mindfulness Intervention on Compassion Fatigue in Nurses</i>. <i>Holistic Nursing Practice</i>, 34(5), 274-281. <a href="https://doi.org/10.1177/0898010120953333">https://doi.org/10.1177/0898010120953333</a></p>	<p>Explore efficacy of short, practical, adaptable mindfulness-based intervention. Study tests hypothesis if breathing mindfully with three-minute exercise will positively affects CF in</p>	<p>Final sample size of 32 registered nurses (RNs) working in acute/critical care in New York City area hospitals.</p>	<p>Quasi-experimental study. Exploratory intervention study with pre- and post-test design.</p>	<p>ProQOL used twice, pre-test given before intervention, and four weeks after intervention as post-test.</p>	<p>Intervention showed statistical reductions in CF measures, confirming hypothesis that nurses breathing mindfully for three minutes over period of four weeks experience reduction of CF. Negative effects of CF compared</p>	<p>Introduction of method offering stress management and intervention with convenience to participants. Outcomes showed a statistically significant reduction of compassion fatigue, burn out, and</p>	<p>45 nurses initially recruited. 29% of sample dropped out of study and could not be tracked at conclusion of study.</p>

.1097/HNP.0000 000000000402	acute care nurses.				to burnout and STS appeared to be reduced after intervention participation.	secondary traumatic stress despite participant partial adherence.	
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**Appendix B**

**Compassion Fatigue Self-Test for Nurses**

Please describe yourself: Age: \_\_\_\_ M/F/Other/Rather not say: \_\_\_\_\_

Years as a nurse: \_\_\_\_ Unit of employment: \_\_\_\_\_

Answer the following questions about yourself and your current situation. Write the number that reflects your most honest response. Use one of the following answers:

1 (rarely/never)	2 (sometimes)	3 (uncertain)
4 (frequently)	5 (very frequently/always)	

Answer as many items possible. Please be aware that skipping any questions can prevent accurate results. Then follow the instructions to calculate your score.

About you:

1. \_\_\_\_ I force myself to avoid certain thoughts or feelings that remind me of a frightening experience.
2. \_\_\_\_ I find myself avoiding certain activities or situations because they remind me of a frightening experience.
3. \_\_\_\_ I have gaps in my memory about frightening events.
4. \_\_\_\_ I have difficulty falling or staying asleep.
5. \_\_\_\_ I have outbursts of anger or irritability with little provocation.
6. \_\_\_\_ I have had flashbacks connected to my patients and family.
7. \_\_\_\_ I have had firsthand experience with traumatic events in my adult life.
8. \_\_\_\_ I have had firsthand experience with traumatic events in my childhood.
9. \_\_\_\_ I have thought that I need to “work through” a traumatic experience in my life.
10. \_\_\_\_ I have thought that I need more close friends.
11. \_\_\_\_ I have thought that there is no one to talk with about highly stressful experiences.
12. \_\_\_\_ I have concluded that I work too hard for my own good.

Items about your patients and their families:

1. \_\_\_\_ I am frightened of things traumatized people and their family have said or done to me.
2. \_\_\_\_ I experience troubling dreams like a patient of mine and their family.

3. \_\_\_\_ I have experienced intrusive thoughts of interactions especially with difficult patients and their families.
4. \_\_\_\_ I have suddenly and involuntarily recalled a frightening experience while working with a patient or their family.
5. \_\_\_\_ I am preoccupied with more than one patient and their family.
6. \_\_\_\_ I am losing sleep over a patient and their family's traumatic experiences.
7. \_\_\_\_ I have thought that I might have been "infected" by the traumatic stress of my patients and their families.
8. \_\_\_\_ I remind myself to be less concerned about the well-being of my patients and their families.
9. \_\_\_\_ I have felt trapped by my work as a nurse.
10. \_\_\_\_ I have felt a sense of hopelessness associated with working with patients and their families.
11. \_\_\_\_ I have been in danger working with some patients and their families.

**Scoring Instructions:**

Add up the numbers you wrote next to the items.

Note your risk of Compassion Fatigue.

26 or less = extremely low risk

27 to 30 = low risk

31 to 35 = moderate risk

36 to 40 = high risk

41 or more = extremely high risk

This instrument, by C.R. Figley, may be reproduced without charge and freely distributed, as long as no funds are exchanged.

## Appendix C

### Qualitative Open-Ended Questions

1. How has the COVID-19 Pandemic changed nursing care for you?
2. What are some new challenges you have faced in the workplace that has only occurred during the pandemic?
3. How would you describe the quality of your care for your patients?
4. What are some things you would like to change about your workplace?
5. What would make you want to leave bedside nursing?