Compassion Fatigue and Satisfaction Among Nurses at a State Psychiatric Hospital: An Opportunity to Educate

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Table of Contents

I. Abstract

Background: Due to the nature of their work, psychiatric nurses at Northwest Ohio Psychiatric Hospital (NOPH) encounter traumatic and emotionally exhausting situations almost every day. This exposure increases work-related stress, trauma, and vulnerability to compassion fatigue (CF) and burnout. CF and burnout can result in emotional and physical fatigue that affects one's ability to care for others. One can increase resilience and compassion satisfaction (CS) by identifying CF's early indications and symptoms and mastering efficient self-care techniques.

Aim: This Doctor of Nursing Practice (DNP) project aims to bring awareness to psychiatric nurses at NOPH about CF and burnout and educate them on ways to improve resiliency and compassion satisfaction as professional nurses.

PICOT: How do psychiatric nurses at NOPH (P) who are at increased risk for CF benefit from a webinar-based educational intervention (I) to identify and reduce symptoms of CF and improve compassion satisfaction (O) one month after intervention (T) compared to pre-intervention (C)?

Design: Psychiatric nurses completed Professional Quality of Life surveys (ProQOL 5) (Stamm, 2010) before and one month after an educational intervention designed to teach about CF and self-care strategies. Comparisons of ProQOL scores, which measure compassion satisfaction and CF (burnout and secondary trauma scores), determined if an educational intervention effectively improved CS and reduced CF (significance level at $p<0.05$).

Implementation Plan/Procedure: Psychiatric nurses received a one-hour educational intervention on CF via their work email. The educational intervention's contents included

TED talks, PowerPoint presentations on the extent of the CF problem, common symptoms, and outcomes, and resources to combat CF, such as mindfulness. Nurses were given pre- and post-intervention ProQOL 5 along with a demographic survey. Surveys were administered pre-intervention and one month after intervention. The survey results were analyzed using descriptive and inferential statistics.

Results: A total of 27 psychiatric nurse participants completed all required activities for this project. Most participants were women between the ages of 30-50. Compassion Satisfaction significantly increased ($p<0.001$), but burnout did not post-intervention ($p=0.179$). The results suggest that a well-designed educational intervention may improve CS. However, much work must be done to reduce burnout and CF among psychiatric nurses. With support from organizational leaders, it is necessary to establish regularly scheduled education to help promote nurses' compassion, work satisfaction, and resiliency to combat CF.

Keywords: Compassion fatigue, nursing, burnout, secondary trauma, forensic nursing, psychiatric nursing, compassion satisfaction, DNP

Compassion Fatigue and Satisfaction Among Nurses at a State Psychiatric Hospital: An Opportunity to Educate

II. Introduction

Nurses join the profession to serve others and give patients compassionate care (Lombardo & Eyre, 2011). Nurses are essential for providing care, advancing local and national health care systems, reducing health inequities, and enhancing the country's health (Practice and Policy, American Nurses Association 2017). However, nurses may develop Compassion Fatigue (CF) due to the ongoing stress of attending to the frequently overwhelming needs of patients and their families. CF impacts the nurse's job satisfaction, emotional well-being, physical health, and the workplace environment by lowering productivity and increasing turnover (Boyle, 2011). CF and burnout can also affect the quality of patient care nurses provide.

Nurses in high-intensity environments, such as forensic psychiatric settings, often deal with verbal and physical abuse from patients, burnout, stress, and poor patient-provider relationships (Newman et al., 2020; de Looff et al., 2018). Psychiatric nurses may also be indirectly exposed to patients' highly traumatic experiences, which could have a negative psychological impact in the form of secondary traumatization (Figley, 1995, as cited in Zerach & Shalev, 2015). Additionally, nurses' ability to provide compassionate care to patients is likely impacted by several variables, such as reduced staffing, workplace violence, a stagnant institutional culture, and the accompanying loss of personal and professional identity (Graeme et al., 2019).

In today's healthcare system, all providers, including nurses, have problems balancing the delivery of consistent, compassionate care with a professional quality of life that includes overall wellness and a healthy work environment (Lisle, Speroni, Aroom, Crouch, & Honigsberg, 2020). To build resilience, a nurse experiencing CF requires support and direction from a mentor, consultant, supervisor, or licensed professional counselor (Boyle, 2011). Research suggests that participation in self-care activities by nurses had a transformative effect on their abilities to meet the intense demands of clinical practice and establish a foundation for their delivery of person-centered, compassion-based care (Graeme et al., 2019). Additionally, resiliency training appears promising as a means to enhance nurses' stress tolerance, prevent burnout, and promote compassionate care towards self and others (Grabbe, Higgins, Baird, Craven, & San Fratello, 2020).

In 2014 the Institute for Healthcare Improvement proposed the Quadruple Aim, adding clinician wellbeing as an essential aspect of overall health care productivity (Lown, Shin, & Jones, 2019). CF is a threat to nurse's wellbeing and productivity. Across the United States several nursing and medical organizations stress the importance of clinician wellbeing to improve productivity. The American Nurses Association (ANA) announced several measures to improve nurses' wellbeing and supportive work environments. Ironically, most nurses perceive themselves as giving, caring people but find it hard to nurture themselves (Boyle, 2011). Despite increasing awareness of CF and burnout, many healthcare systems lack a strategic approach to preventing burnout and building resilience among nurses.

The project was conducted at Northwest Ohio Psychiatric Hospital (NOPH), a state-operated psychiatric hospital in Toledo, Ohio. The mission of NOPH is to advance patients' recovery through compassionate care and has the vision to provide a better quality of life for

patients. The nursing staff at this hospital provide compassionate care to the most vulnerable population in society. Patients at NOPH suffer from acute psychiatric illnesses such as schizophrenia, schizoaffective disorder, and bipolar disorder and often exhibit violent behaviors, especially during early hospitalization. Nurses often face verbal and physical abuse from patients in both acute and chronic units. Nurses often express frustration, anger, and anxiety due to a high-stress environment and the inability to help patients due to their mental status. The project aimed to educate nurses about the effects of CF and provide strategies to build resilience and compassion satisfaction.

III. Background

Compassionate care is crucial for better clinical and patient outcomes, yet it can be undermined throughout healthcare delivery for several reasons. Research suggests that CF can impact the nurse's ability to care for patients. Although empathy and compassion are frequently regarded as two attributes required for caregiving, regular exposure to the distress of others puts nurses in danger of developing CF (Boyle, 2011). CF is the progressive and cumulative result of extended stress, and emotional pain, due to prolonged exposure to traumatic experiences of patients resulting in a diminished ability to feel compassion for others (Adimando, 2017; Zhang, Zhang, Han, Li, & Wang, 2018).

The term CF was coined about two decades ago by Joinson (1992) in a study of burnout in nurses. The term was used to describe some nurses' "loss of the ability to nurture" in emergency department settings (Boyle, 2011, p.1). Figley (1995) later introduced the phrase "CF" to define secondary traumatic stress disorder (STSD) more accurately, which is

a result of countertransference, in which compassionate caregivers unintentionally feel the trauma of their patients. As per Figley's observations,

> "There is a cost to caring. Professionals who listen to clients' stories of fear, pain, and suffering may feel similar fear, pain, and suffering because they care. Sometimes we feel we are losing our own sense of self to the clients we serve" (Figley, 1995, p.1 as cited in Boyle, 2011).

In contrast, burnout can stem from prolonged interpersonal and emotional stress due to conflict with supervisors or coworkers, discontent with pay, poor working conditions, and highly demanding patients. Burnout can be manifested as hostility toward the workplace, progressive lack of energy, low professional accomplishment or loss of self-confidence, and demotivation (Adimando, 2017, Membrive-Jiménez et al., 2022, Zhang, Zhang, Han, Li, & Wang). Contrarily, CF results from the relationships nurses develop with their patients or their families. CF results from the intense interpersonal interaction and emotional involvement brought on by exposure to a patient's trauma at work (Boyle, 2011) Typically, burnout develops over time, while onset of compassion fatigue could be more abrupt. The nurse who is experiencing progressively pulls back from patients, but the nurse with CF makes an extra effort to help patients (Boyle, 2011). However, both outcomes are associated with a sense of emotional emptiness among nurses. Investigation into the relationships between these two concepts is needed for an enhanced understanding of how to support nursing staff in the current healthcare field (Boyle, 2011).

High rates of CF are found in psychiatric nurses due to patient-related stress, including repeated exposure to suffering, violence, death and suicide, traumatic illness events and patient expectations (Xie et al., 2020). Compassion and its satisfaction or fatigue has

implications for nursing and the quality of care. A relationship between self-care strategies and reduced CF and burnout with higher levels of compassion satisfaction exist (Xie et al., 2020). Investments in programs capable of reducing CF and burnout can potentially reduce the higher nurse turnover rates and thence can improve quality care (Zhang, Zhang, Han, Li, & Wang, 2018).

Multiple dimensions of a nurse's work and personal life may suffer due to CF. These consequences can potentially have negative impacts on patient care, patient safety, and nurses' physical, emotional, and professional outcomes (Adimando, 2017; Boyle, 2011; Zhang, Zhang, Han, Li, & Wang, 2018). The Quadruple Aim, developed from the well-known Triple Aim, was proposed as a framework to improve the performance of the healthcare system in 2014(Lown, Shin, & Jones, 2019). In addition to cost-cutting, population health improvement, and patient experience, the framework also includes a fourth domain: the healthcare team's well-being. These performance measures can be addressed to broad-reaching, essential healthcare issues like lowering the alarmingly high rates of burnout among healthcare professionals and limiting rising healthcare expenses (Arnetz et al., 2020). Despite increasing awareness of CF and burnout, many healthcare systems lack a strategic approach to preventing burnout and building resilience among nurses.

IV. Organizational Needs Assessment

The study setting for the Doctor of Nursing project is the Northwest Ohio Psychiatric Hospital (NOPH), which is one of locations operated by Ohio Department of Mental Health and Addiction Services (OhioMHAS), located in Toledo, Ohio. NOPH is accredited by The Joint Commission and is also certified by the Centers for Medicare and Medicaid Services.

NOPH specialized facilities provide short-term, intensive treatment to patients in both inpatient and community-supported environments. NOPH also delivers comprehensive care to patients committed by criminal courts. Services provided at NOPH include evaluations, intensive psychiatric care, recovery, psychiatry, psychology, social services, patient education, occupational and recreational therapy, and work evaluation. In addition, community support network programs provide services to clients and their families residing in the community ("Ohio Department of Mental Health and Addiction Services," n.d.)

NOPH's mission to advance patients' recovery through compassionate care, and it has a vision to create a better quality of life for patients. NOPH envisions to provide Trauma Informed Care (TIC). NOPH's vision statement is "to create a better quality of life for patients by providing trauma informed care, which inspires as a community leader and resource of Mental Health and Recovery Services". The leadership of the hospital is committed to provide quality of care to patients which includes pharmacological, psychotherapy, psychosocial, recreational, and complimentary therapies.

NOPH is 114 bed psychiatric hospital. There are 5 units accommodating adult patients ages above 18 years. There are two units exclusively for male patients. Approximately 75% patients are male and 25% are females (Patient Census Logs, NOPH). At NOPH, patients are from forensic backgrounds or jail transfers. They often undergo lengthy hospitalization due to legal requirements (Ohio Department of Mental Health and Addiction Services Annual Report, 2021). The length of stay can vary between a few weeks to several months or years. Patients at NOPH suffer from acute psychiatric illnesses such as schizophrenia, schizoaffective disorder, bipolar disorder, and major depressive disorder, but schizoaffective disorder is the most common diagnosis. The patients receive a variety of

interventions as part of the treatment regime at NOPH, including psychopharmacological, individual psychotherapy, group therapy, medication education, discharge planning, and vocational interventions.

NOPH provides trauma informed care (TIC). The Substance Abuse and Mental Health Services Administration (SAMHSA, 2014) describes a trauma-informed organization as "an appreciation of the impact of trauma, an understanding of potential paths for recovery from trauma, the recognition of signs and symptoms of trauma in clients and staff, a full integration of knowledge about trauma into policies, procedures and practices and a commitment to avoid retraumatization". NOPH encourages all staff to provide Trauma Informed Care. Nurses at NOPH work with highly distressed clients, such as those who have experienced trauma, substance abuse, or are acutely psychotic. Physical and emotional strain due to frequent exposure to violence from patients and hearing of traumatic experiences of patients have consequences for nurses' quality of care and degree of engagement in their workplace (Kobayashi et al., 2020). It is well established that psychoanalytic ideas relating to transference and countertransference can affect the nursing staff (Turgoose & Maddox, 2017). Therefore, nurses are at risk of developing compassion fatigue and burnout because of providing care to patients who are in distress.

Considering the strain on nurses, NOPH launched a new staff initiative in 2021 called the Supportive Response Team (SRT) as a support resource for all employees. SRT is a staff supportive program designed to assist in improving morale and retention by addressing emergent issue related to stress, trauma, and burnout. The program provides informal support to mitigate the impact of traumatic events occurring in the workplace and then appropriates proven resources and information, such as the Employee Assistance Program, to those

employees who might benefit from additional services. The DNP student had the chance to talk with the SRT program organizers. She discovered that since its inception, the program had only received a small number of recommendations, primarily from the nursing department. The staff's apprehension to use the resource is out of concern that the information might not be private or may lead to repercussions or conflict with their supervisors. The DNP student also spoke with nursing staff, nursing supervisors and the director of nursing about compassion fatigue, burnout, and traumatization faced by direct nursing staff.

Strengths Weakness Opportunities and Threats (SWOT) Analysis of NOPH

The SWOT analysis is a helpful tool that allows researchers to evaluate the strengths, weaknesses, opportunities, and threats of an intervention. It is often used in planning and implementing interventions in healthcare facilities, hospitals, or other workplaces. A SWOT analysis was performed as part of a needs assessment (Figure 1). Internal strengths identified from the SWOT analysis of CF at NOPH include strong stake holder buy in, evidenced based intervention, and facility/leadership support that is mission and vision driven to promote compassionate, trauma informed care to patients while promoting high quality self-care of nurses. The support from the NOPH nursing leaders for a CF intervention is built upon the mission and vision of the Ohio Department of Mental Health and Addiction Services and NOPH to achieve “recovery though compassionate care” while helping everyone to achieve their full potential. The external opportunities identified include improving nursing self-care, reducing mental health and sick days taken by nurses, increasing positive patient outcomes, and increasing nurse retention. Improving nursing self-care management will enable the nurses at to provide the best care for the patient populations who are most vulnerable in

society. Additionally, NOPH can experience reduced nursing turnover and increased retention with organizational support for self-care activities. Identified threats to the project include lack of nurses' support due to the subjective nature of compassion fatigue, time constraints, and lack of motivation for nurses to complete the educational intervention. The complete SWOT analysis is presented in Table 1.

V. Problem Statement

Today's health care is facing a crisis due to nursing burnout and compassion fatigue. Working in mental health settings puts nurses at risk of experiencing psychological distress. The detrimental consequences of working in an emotionally challenging atmosphere range from higher turnover rates, decreased nurse productivity, negative changes in work performance, poor patient satisfaction, poor judgment, and increased nursing errors (Kobayashi et al., 2020). Additionally, CF can have damaging effects on nurses' physical and emotional health, which contributes to poor patient care quality (Adimando 2017, Boyle 2011) Nurses at NOPH, due to the nature of work, are at risk for compassion fatigue. Observation, firsthand experiences as a psychiatric nurse practitioner, and informal discussions with nursing staff, nursing supervisors, and the nursing director at NOPH have confirmed that CF is causing strain on nursing. The DNP student spoke to the Nursing Director, Laura Burkin, who indicated that compassion fatigue is a pressing problem in nursing staff at NOPH (L. Burkin, personal communication, October 22, 2022). She explained that nurses have been experiencing fatigue due to the intensity of care required of them. She elaborated that patient at NOPH are a specialized population who are intensely affected by mental illness, substance abuse, trauma, and legal issues. The patients at NOPH

undergo lengthy hospitalization due to their legal status. Therefore, nurses at NOPH face astounding challenges caring for patients who demand emotionally challenging care. Without intervention, CF, and burnout among nurses at NOPH will negatively impact personal, professional, and organizational outcomes.

VI. Purpose

The purpose of this quality improvement project is to educate psychiatric nurses at NOPH about CF so that they can recognize the symptoms, learn ways to battle CF, and build resiliency and improve compassion satisfaction. CF can have harmful effects on nurses, thereby affecting the quality of care provided to patients. Consequences of CF may include substance use or abuse, frequent absences due to illness, and eating disorders, as well as mental and physical symptoms including chronic fatigue, exhaustion, insomnia, and hypertension (Sorenson et al., 2017). By strengthening psychiatric nurses' understanding of CF and how to recognize it in themselves and their peers, stakeholders, such as leaders in healthcare organizations, can create positive change for nursing staff (Jarden et al. 2018).

VII. Congruence with Organizational Strategic Plan

The vision of NOPH is to create a better quality of life for patients by providing Trauma Informed Care and being a leader in mental health and recovery services. The NOPH can become a leader in mental health and recovery services if all staff provide care with compassion, respect, and integrity. NOPH is one of the six psychiatric hospitals operated by Ohio Mental Health and Addiction Services (OhioMHAS). The strategic plan of OhioMHAS states “OhioMHAS, in partnership with RecoveryOhio, has initiated extensive

workforce development activities that includes needs assessment, developing a career path for the behavioral health field, continued work on implementing behavioral health parity, developing services to support workers experiencing secondary trauma, tuition reimbursement programs, training to support workforce excellence and retention, and more. NOPH, under OhioMHAS leadership, believes that Ohio's behavioral health system's largest asset is its workforce and is dedicated to improving the recruitment and retention of this vital resource" (Ohio Department of Mental Health and Addiction Services, 2021). The DNP project is in congruence with strategic plan of OhioMHAS which states "developing services to support workers experiencing secondary trauma" (Ohio Department of Mental Health and Addiction Services, 2021). Retaining psychiatric nurses will sustain compassionate care by having adequate staff not to just maintain, but to improve and expand the permanence of positive patient experiences.

This project aligns with the mission of NOPH "Advancing recovery through compassionate care" (Northwest Ohio Psychiatric Hospital, 2022) and will inherently strengthen the mission for both leadership and nurses. CF can be a threat to the NOPH vision as it impacts staff morale. Providing an educational intervention for nursing staff regarding CF will reinvigorate their compassion and enhance resiliency. The proposed doctoral project is aligned with the strategic plan of the organization by providing intervention to educate nurses about compassion fatigue and burnout as well as providing resources to build resilience. Furthermore, developing resiliency to CF in psychiatric nurses parallels the organizational values of "providing superior patient centered care" (Ohio Department of Mental Health and Addiction Services, 2021). An expansion of the organizational culture to employ self-care in order to maintain awareness of CF is an instrumental aspect of this

project and aligns with the organizational strategic plan at NOPH. Developing nurses' resiliency to CF will aid in nursing retention and decreased turnover in this area of specialized nursing.

VIII. Review of the Literature

a. Search Strategy

Several academic resources were utilized in the search strategy for this project. The article databases searched were Google Scholar, CINAHL plus, PubMed and Psych Info. Search criteria included scholarly articles from 2011-2022, full text only, published in English. Search phrases included: compassion fatigue, psychiatric nursing, compassion satisfaction, burnout, secondary traumatic stress syndrome, and nursing resiliency. Very few articles were yielded if "psychiatric nursing" was included in the search which is pertinent to the topic of compassion fatigue. Therefore, the search was expanded to "nursing". The search yielded several hundred articles. After eliminating based on language, type of population, timeline, type of evidence, and quality of evidence most relevant to psychiatric nursing, 24 articles were selected for this literature review.

Nursing is the nation's largest healthcare profession, with nearly 4.2 million registered nurses (RNs) nationwide, of which 89% are females, and 11% are males (American Nurses Foundation Comprehensive Survey, 2021). Of all licensed RNs, 84.1% are employed in direct patient nursing care (American Nurses Foundation Comprehensive Survey, 2021). Registered Nurses comprise one of the most significant segments of the U.S. workforce and are among the highest-paying large occupations (AACN fact sheet, September 2022). The

American Nurses Association (ANA) recent survey on the state of the profession found that over 34% of nurses rated their emotional health as "not at all healthy." Additionally, 75% of nurses stated they are stressed out, 69% are frustrated, and 62% said they are overwhelmed working as a nurse ("American Nurses Foundation Comprehensive Survey About Nurses," 2021). Shah et al. (2021) reported that in a secondary analysis of a cross-sectional survey of a large sample of nurses across the United States, 31.5 % said they were leaving the profession due to burnout. Additionally, nurses reported a higher burnout rate when they worked more than 40 hours per week compared to nurses who worked more than 20 hours per week. Nurses who worked in the West reported less burnout (16.6%) than in the Southeast (30%) geographical regions in the United States (Shah et al., 2021). Forty billion dollars are lost annually due to the nurse turnover rate among the more than 6000 hospitals in the United States alone (Jun et al., 2021). It is appraised that the cost for each nurse leaving the profession is between $37,700 and $58,400, amounting to a potential loss of $5 to $8 million per hospital annually (Jun et al., 2021).

What is *CF and Burnout?*

The American Nurses Association (ANA) defines nursing as "the protection, promotion, and optimization of health and abilities; prevention of illness and injury; facilitation of healing; alleviation of suffering through the diagnosis and treatment of human response; and advocacy in the care of individuals, families, groups, communities, and populations" (ANA, 2004). Nurses work in acute, chronic, and community health institutions to care for ill, wounded, traumatized, and vulnerable patients (Boyle, 2011). Nurses deal with emotionally charged situations related to illness and suffering, which call for empathy, in addition to the high workload and lack of resources. Even though compassion

is one of the fundamental nursing principles, if it is not appropriately balanced, it can also lead to adverse effects like compassion fatigue (Duarte, Pinto-Gouveia, & Cruz, 2016).

Nurses are among the most susceptible to burnout and CF due to the close relationships between nurses and patients, the intense emotional commitment, chronic work stress, and the struggle to balance between work and family life (Membrive-Jiménez et al., 2022, Peters, 2018). There is increasing research addressing how CF affects nurses, especially those who work in oncology, emergency, critical care, and hospice; however, only a few studies were done on psychiatric nurses with specific intervention strategies for dealing with CF (Turgoose & Maddox, 2017)

The concept of compassion fatigue was first introduced by Joinson (1992) to describe a state of reduced capacity for compassion as a consequence of being exhausted from dealing with the suffering of others (Figley, 2002, 2012). The term compassion fatigue has been used interchangeably with secondary traumatic stress (Duarte, Pinto-Gouveia, & Cruz, 2016). Burnout is a term used to describe workers' negative behaviors and attitudes toward work in response to job strain with feelings of frustration, powerlessness, and inability to meet work goals. (Zhang, Zhang, Han, Li, & Wang, 2018). Burnout can be presented in ways that are like those of CF, but it is related to the workplace or stressors at work and lacks an empathic connection. Burnout can be considered a side effect or result of CF. In the end, compassion must exist before CF, even though it need not before burnout. (Peters, 2018)

What is *Compassion Satisfaction?*

In contrast to CF and burnout is compassion satisfaction (CS). CS is defined as the amount of joy a person in the helping profession derives from helping others (Stamm, 2010). CS has been found to be positively correlated with resilience, or the ability to cope, learn or

grow from difficult experiences (Stamm, 2010). Compassion satisfaction is a relatively new concept and few studies have addressed the phenomenon. One scoping review examined the concept among palliative care nurses and discovered factors associated with, and most common measurements of the concept available in the current literature (Baqeas, Davis & Copnell, 2021). In terms of professional quality of life, CS is the opposite of CF and burnout, and is often measured by the ProQOL (Baqeas, Davis & Copnell, 2021).

Risk Factors

Numerous risk factors have been identified as contributing to CF and burnout in research studies conducted worldwide. It is significant to recognize that the nature of psychiatric nursing and its unique work environment is primarily responsible for CF and burnout. Turgoose and Maddox (2017) found that factors such as trauma history, highly empathetic attitude, and high patient caseload are considered risk factors for mental health professionals. A meta-analysis on burnout in mental healthcare nurses showed that factors like job overload, workplace hostility, stress from work, professional seniority, male gender, and single status are the causes of burnout among nurses in psychiatric facilities (Kobayashi et al., 2020). Burnout is thought to be one of the important effects of violence in the workplace. There have been described relationships between violence in the workplace and burnout and intention to leave the profession (Kobayashi et al., 2020). In systematic review and metanalysis by O'Connor et al. (2018) found that increased patient case load is a major factor in burnout among psychiatric nurses. Psychiatric nurses in forensic settings are especially at risk of developing CF and burnout due to the very nature of their work environment and patient population.

Symptoms

CF and burnout among nurses can be manifested as physical, psychological, and emotional symptoms. The symptoms of CF can be embodied as emotional exhaustion, depersonalization, and lack of perceived organizational support (Lown, Shin, & Jones, 2019). Fear or anxiety, anger, insecurity, depression, emotional exhaustion, suicidal thoughts, post-traumatic stress symptoms, guilt, self-blame, and shame are seen among nurses exposed to workplace violence in psychiatric settings, ultimately leading to burnout among clinicians (Kobayashi,2020). Fatigue, headache, sleep disturbances, muscle tension, stress, sadness, mood lability, and the associated decrease in morale and work performance, are all influenced by psychosocial factors that result from CF and burnout, which are being ignored in current healthcare systems (Adimando, 2017; Boyle, 2011).

Protective Factors

Several protective factors have been associated with decreased CF and burnout among nurses. In a cross-sectional study by Duarte et al. (2016) correlations and regression analyses showed that self-compassion is predicted as the protective factor for CF, whereas high levels of empathy may be a risk factor. While not thoroughly studied, some interventions, like mindfulness, were linked to lessening compassion fatigue, suggesting they may operate as protective factors (Turgoose & Maddox, 2017). Higgins et al. (2020) found that the female gender, being married, having a supportive family, and getting adequate sleep are protective factors against CF and burnout among trauma nurses.

Effect on Quality Patient Care

The National Academy of Medicine asserts that safe, effective patient treatment depends on the health of the clinician. However, there are alarmingly high rates of burnout among healthcare professionals across all specializations and care settings. High levels of

emotional exhaustion, depersonalization, and a low sense of personal accomplishment at work are the hallmarks of the burnout phenomenon. Clinician burnout can negatively impact patient care, individual clinicians and learners, healthcare organizations, and other areas of healthcare (National Academy of Medicine, 2022).

Conversely, clinician well-being promotes better patient-clinician interactions, a highly effective care team, and a motivated and productive staff. The promotion of evidence-based solutions necessitates persistent attention and action at the organizational, state, and national levels, as well as investment in research and information-sharing (National Academy of Medicine, 2022).

CF and burnout may have a detrimental impact on the quality and safety of patient care, as well as the physical and mental health of a caregiver, costing the employer in terms of job satisfaction and level of employee-employer engagement (Adimando 2017, Boyle, 2011). If ignored, CF and burnout can significantly impact nurses, patient care quality, organizations, and the employee-employer relationship (Adimando, 2017). As Watson (2009) pointed out, dissatisfaction with the care received, where the person feels like an object, is a significant threat to healthcare quality; hence, caring in practice, research, and education needs to be addressed. Fatigue, stress, sadness, and the associated decrease in morale and work performance are influenced by psychosocial factors that have traditionally been ignored in nursing. These conditions not only impact the retention of staff but also may influence patient satisfaction and patient safety (Boyle, 2011) Due to the negative effects of burnout and CF, sleep disorders in nurses are prevalent, which has been correlated to decreasing quality of care and patient satisfaction, as well as increasing nursing errors in healthcare (Membrive-Jiménez et al., 2022). Therefore, investments in programs that reduce

compassion fatigue and burnout have the potential to prevent excessive nurse turnover rates and, as a result, improve nurses' health and subsequent patient care. (Zhang, Zhang, Han, Li, & Wang, 2018).

Evidence based interventions.

The literature supports education, awareness, and self-care interventions to mitigate the effects of CF and burnout. Education on CF will enhance nursing awareness of symptoms and preventative measures of setting professional boundaries, how to avoid countertransference, focusing on what was accomplished, and reflecting on what was not possible, methods of building resilience, and work-life balance (Peters, 2018). The American Nurses Association, with its "Healthy Nurse, Healthy Nation" challenge, are calling on nurses to take control of their well-being to be educators, advocates, and role models of health, safety, and wellness for the general population (American Nurses Association, 2019). In recent years, healthcare organizations have emphasized the Triple Aim of increasing patients' experiences of care, focusing on population health, and lowering per capita costs, however, in response to significant professional burnout and CF, the Quadruple Aim includes the goal of promoting the well-being of the healthcare clinicians such as nurses (Lown, Shin, & Jones, 2019). Several studies have shown empirical evidence that self-care and education to nurses are helpful to decrease or manage CF and burnout. A Randomized Control Trial (RCT) at a sizable healthcare system in Georgia, USA, measured the impact of a brief educational intervention called the "Community Resiliency Model" (a technique using sensory awareness and mindfulness) compared to a nutrition/healthy eating training among randomly assigned participants. The study found improved well-being and stress resistance sustained over one year in the community resiliency group compared to the nutrition group

(Grabbe, Higgins, Baird, Craven, & San Fratello, 2020). In a cross-sectional design, 280 registered nurses from public hospitals in Portugal found that interventions to prevent burnout and compassion fatigue include instruction on practicing self-compassion and self-care (Duarte, Pinto-Gouveia, & Cruz, 2016). An eight-week Mindful Self-Compassion (MSC) training intervention was offered to nurses as part of a pilot study in the United Kingdom that looked at the impact of the training on participants' lived experiences, resilience, and compassion fatigue. The results offer some early empirical proof in favor of the anticipated advantages of self-compassion education for nurses. (Delaney, 2018).

Nurses who practice self-care to combat compassion fatigue not only help themselves as caregivers but also the organizations in which they serve. These institutional gains include better employee morale and productivity, involvement in facility projects, decreased sick days, lower turnover rates, and increased patient and family relations (Boyle, 2011). Research has demonstrated a direct correlation between a healthy work environment and patient safety; hence healthcare companies are looking for strategies to improve the work environment. Ensuring that leaders are knowledgeable about challenging situations and acknowledging staff contributions can go a long way toward addressing burnout (Fitzpatrick, Bloore, & Blake, 2019).

Combating CF and burnout should not solely on rest on nurses alone (Peters, 2018). It is also imperative to study the relationship between CF, burnout, and work environment to establish possible interventions to improve and achieve better health for nurses. Burnout can be greatly reduced by making sure leaders are aware of challenging situations and by recognizing employee contributions (Fitzpatrick, Bloore, & Blake, 2019). In one cross-sectional descriptive study with 318 nurses from a large healthcare system, results indicate

that nurses who worked 36 or more hours per week displayed substantial levels of burnout compared to their coworkers who worked fewer than full-time hours CITE this study. Additionally, nurses who worked less than 36 hours per week reported higher levels of compassion satisfaction than nurses who worked more than 36 hours per week. It is an important finding because working overtime in the hospital nursing culture is very common, both to fill schedule gaps and to boost pay (Crabtree-Nelson, DeYoung, Vincent, Myers, & Czerwinskyj, 2022).

Employee Assistance Programs (EAP) can be made available to offer employees counseling for personal or occupational concerns. The caregiver can find comfort and hope by discussing their worries and emotions with the right person, who can help them create an action plan to deal with compassion fatigue. An EAP often offers formal lessons on pertinent life-learning subjects, including time management, budgeting, caring for elderly parents, effective communication, and stress reduction. These programs aim to improve work-life balance, lessen stress, and support staff dealing with disorders like compassion fatigue. (Lombardo & Eyre, 2011).

In 2017, the National Academy of Medicine established the Action Collaborative on Clinician Wellbeing and Resilience. In October 2022, the Clinician Wellbeing Collaborative released a National Plan for Health Workforce Wellbeing, which contributed to the effort to combat burnout. The Professional Wellbeing Collaborative promotes evidence-based strategies, such as convening, publishing, and influencing the national dialogue to promote professional wellbeing at both the individual and system levels (National Academy of Medicine, 2022).

b. Synthesis of Evidence:

The literature review found that CF has been studied in various contexts and is prevalent in several nursing specialties, including psychiatry. Although there is consensus on the causes, symptoms, and protective factors of CF and burnout, few research studies have examined treatment methods to combat compassion fatigue. The literature review examines several qualitative, cross-sectional, RCT design studies supporting interventions for CF and burnout, however the research supports education and self-care as crucial to the prevention of compassion fatigue. Few studies have proposed preventive actions at personal and organizational levels, such as increased self-compassion, better work–life balance, healthy living, family support, and practicing mindfulness. Furthermore, organizational actions such as increased awareness and knowledge of compassion fatigue, tools to reduce stress during work, informal and formal peer support programs such as EAP, and inclusive leadership can help diminish the effects of CF and burnout.

c. Strengths and Weaknesses of Review

The findings of the literature review indicate overwhelming evidence that CF and burnout threaten healthcare quality. Several studies explored the causes, symptoms, protective factors, and interventions to combat CF. There is ample proof that CF education and intervention are necessary to maintain quality care apart from other organizational measures. Literature suggests that leaders of healthcare organizations who support nurses personally and professionally to combat CF and burnout have better retention rates, employee engagement, and improved quality of care. In recent years, several studies have

focused on the effects of CF across various nursing disciplines, the majority being done in Critical Care, Palliative care, and Oncology, with very few studies done in psychiatry. At a time when health care is undergoing rapid change due to the COVID-19 pandemic, attention to CF and burnout should be given to nurses in psychiatry to improve the quality of patient care and build resilience.

IX. Theoretical Framework/Evidence Based Practice Model

A theoretical framework is crucial in nursing practice because it guides us in determining where we are in our clinical skills and what we need to know to offer the best possible care for our patients. The nursing theory aims to characterize, predict, and explain how nursing works. It should lay the groundwork for nursing practice, aid in the generation of new knowledge, and point the way for nursing to go in the future (Smith & Parker, 2014) Selecting a nursing philosophy aligned with the DNP Project implementation site's vision would be a wise choice because it allows for the implementation of the project with integrity and without restrictions. The DNP project is being implemented at Northwest Ohio Psychiatric Hospital to provide quality mental health treatment to patients. Motivated by the vision of the proposed project site, Jean Watson's Theory of Human Caring is the theoretical framework for the proposed DNP project.

a. Key Concepts of Jean Watson's Theory of Human Caring

The fundamental empathic link between the nurse and the patient is the foundation of Watson's Theory of Human Caring (Neil, 2002; Watson, 2010), which promotes relationship-based nursing (RBN). Empathy and communicating it to the patient and their family are at

the heart of RBN. Empathy is the ability to understand a patient's feelings, understand the situation from the patient's perspective, and communicate this understanding to the patient. Watson's Theory of Human Caring aims to achieve balance and harmony between a person's health and illness experiences. Watson's theory provides a holistic approach to caring for a human, with mind-body-spirit sub-dimensions.

According to theorist Jean Watson, the relationship between love and care entails interior healing for oneself and others and extending to nature and the greater universe (Smith & Parker, 2014). It is critical to comprehend how caring and lack of caring interact. A caring nurse-patient relationship can be seen as either life-giving or life-receiving for both the nurse and the patient (as compassionate, concerned, benevolent, and responsive). A non-carer, on the other hand, has no regard for another person as a unique individual. As a result, a nurse-patient interaction might be life-neutral, life-restraining, or life-destroying. In such situations, a nurse appears detached from patients, and patient care is perceived as just doing their job, which might lead to despair and lower well-being for both nurse and patient. Watson contends in her argument that when nurses include compassion in their work, they come to see that nursing is more than just a profession. At this point, nurses may internalize and take ownership of every feeling and experience the patient has, regardless of whether they are pleasant or negative. When a nurse takes on too much duty, it creates a problem because they get emotionally and physically worn out.

b. Relevance of the Theoretical Framework to the Study

To provide excellent patient-centered care, and successful patient outcomes, psychiatric nurses who are displaying, feeling, or observing compassion fatigue must be able

to identify it, intervene, and overcome it through self-care. Jean Watson's Theory of Human Caring emphasizes incorporating empathy, spirituality, authenticity, and humanistic-altruistic values in the Nurse-Patient relationship. The concepts related to psychiatric nursing care have the exact dimensions of care specified in Jean Watson's theory, such as existential-phenomenological-spiritual forces, altruism, and regard for human beings. Applying Jean Watson's theory will enable the proposed project to use the principles of kindness, equanimity, authenticity, and willingness to learn from caring experiences. This means that a caregiver is engaged in his/her own caring without closing to new emotional experiences while caring for the clinical /physical needs of the patient. Jean Watson's Theory of Human Caring aligns with the concept that the well-being of nurses is vital to the caring environment at NOPH.

X. PICOT Question

The following PICOT question will serve as the basis for the proposed DNP project: How do psychiatric nurses at NOPH (P) who are at increased risk for CF benefit from a webinar-based educational intervention (I) to identify and reduce symptoms of CF and improve compassion satisfaction (O) one month after intervention (T) compared to pre-intervention (C)?

XI. Goals, Objectives, and Expected Outcomes

The first goal of this quality improvement project is to bring awareness to psychiatric nurses at NOPH about symptoms of CF and burnout. The second goal of this project is to

educate psychiatric nurses on ways to overcome compassion fatigue, improve resiliency, and help foster compassion satisfaction.

Measurable outcomes for proposed project are:

1. ProQOL5 scores for Compassion Fatigue (combined scores for Burnout and Secondary Traumatic Stress scales) will decrease one month following the educational intervention as measured by pre and post scores using paired T-tests.
2. ProQOL5 scores for Compassion satisfaction (CS) will increase one month following the educational intervention as measured by pre and post scores using paired T-tests.
3. Identify correlations among demographic data and ProQOL5 scores using Chi-Square analyses.

XII. Project Plan

a. Project Design

This quality improvement (QI) project includes the development of an educational intervention that will provide an educational initiative for CF, burnout, resilience strategies, and compassion satisfaction in nurses at NOPH. The educational intervention included information on recognizing CF's emotional and physical signs and symptoms, particularly related to nursing care for patientss in the forensic psychiatric hospital environment. The intervention presents information on developing self-care activities that can aid resiliency against CF.

The DNP project proposes to identify whether implementing an educational intervention can impact CF, resiliency, and compassion satisfaction of nurses. The ProQOL 5

(Stamm, 2009) (Appendix B), a tool used to measure CF, was distributed before and one month following the educational intervention. CF scores for nurses prior to the intervention and after the intervention, along with demographic characteristics of participants were compared to identify potential correlations between demographics and CF scores. The goal was to improve nurses' recognition of the signs and symptoms of CF, identify resiliency strategies to combat CF, and improve compassion satisfaction.

b. Project site and Population

The DNP project was implemented at NOPH, an Ohio state-operated psychiatric inpatient hospital with 114 beds. There are five units to accommodate patients, two of which are for only male patients. There are two Registered nurses and two Therapeutic Program Workers (TPW) in each unit per shift. The work routine includes milieu management, medication administration, charting patient progress, managing patients in the milieu, providing therapeutic dialogue when patients are in distress, managing codes, particularly code violets (violent patient), routine management of the nursing station, charts, crash cart, etc. The patient population at NOPH is forensic with psychiatric conditions. They are often connected to the legal system and hospitalized for competency restoration and evaluation. NOPH also provides the least restrictive placement for the patient whose legal status is Not Guilty for Reasons of Insanity (NGRI), Incompetent to Stand Trial Unrestorable -Criminal Jurisdiction (ISTU-CJ). The age range of the patients is 18 years old and beyond, including the geriatric population. Common diagnoses include schizophrenia, schizoaffective disorder, bipolar disorder, major depressive disorder, and unspecified psychotic disorder with

comorbid symptoms of anxiety and depression. The patient is typically treated with a variety of antipsychotics, mood stabilizers, anxiolytics, and sleep medications as needed.

Stakeholders:

Stakeholders included in this QI improvement project are psychiatric nurses, nurse mangers, the director of nursing, administration personnel including the chief clinical officer and chief executive officer, administrative assistants, and nurse educator. The DNP student was responsible for the design, administration, and implementation of the project with the guidance of an institutional mentor, Lilian Haastrup, DNP. The DNP student collaborated with the nursing department to obtain information on nursing staff suitable for the study and their shift schedules and contact emails for recruiting. The director of nursing and nurse managers advertised the study and participation opportunities during monthly staff meetings. The DNP student used an internal email system to launch the webinar and disseminate demographic, pre and post intervention surveys.

Stakeholder Buy-In

Stakeholders who participate in organizational change in healthcare must support and encourage quality improvement projects. The DNP student met individually with the Chief Executive Officer (CEO) and Director of Nursing (DON) to explain the project's purpose, goals, and execution. The CEO and DON expressed their full support and cooperation for the proposed QI project. The DNP student spoke informally with staff nurses in units 100 and 200 to gauge staff support of the project. The nursing staff expressed their willingness to participate and offered their full support. The nurse educator was fully supportive of the DNP project in terms of launching the webinar and explaining how to track the progress on completion of the webinar.

c. Inclusion Criteria

Establishing inclusion and exclusion criteria for the quality improvement project is essential for participant selection. The inclusion criteria for the quality improvement project consisted of nursing staff with licensure, such as a Registered Nurse (RN) or Licensed Practical Nurse (LPN), and those involved in direct patient care. Exclusion criteria included those staff who are not licensed, such as therapeutic program workers, and RN and LPN's working in administrative duties without direct involvement in patient care.

d. Sampling

Convenience sampling was used to recruit the nurses for the DNP quality improvement project. This allowed the DNP student to recruit the most widely available and easily located participants. The target population for this scholarly project consisted of Registered Nurses (RNs) and Licensed Practical Nurses (LPNs) who provide direct patient care. The DNP student obtained the list of RNs and LPNs from human resources. Sixty-six nurses are working at NOPH. Out of the 66 nurses, 11 are part-time, and 55 are full-time. The DNP student aimed for an approximate sample size of 35 to 40 by considering typical response rates and participants' time constraints.

e. Implementation Plan/Procedures

The first step of this DNP project was to develop a one-hour educational webinar for psychiatric nurses as the target audience. The educational intervention included video clips, TED talks, PowerPoint presentations, quizzes, and interactive resources for nurses. This presentation also included relaxation techniques to combat CF. Next, approval from the

Institutional Review Boards (IRB) of NOPH and Kent State University to implement this DNP QI project was obtained before project implementation. After approval, this project was advertised via email to all nursing staff at NOPH, describing the project, goals, and participation guidelines (Appendix E). The webinar was sent to the participants through email. The contents of the educational intervention include TED talks, PowerPoint presentations on the extent of the CF problem, symptoms of CF and how it affects nurses, and resources to combat CF, such as mindfulness. The educational offering was chosen due to the ease of participant access via internal email accessible to all employees at NOPH. An email was used to send the cover letter, consent, pre-ProQOL 5, and demographic survey to nurses who enrolled in the study. After dissemination, the nurses were given a deadline to have the pre-study ProQOL 5 and demographic surveys completed and submitted. Once received by the DNP student, an email was sent to participants when the educational session launched. All participant nurses could access the educational offering for one month via File Box Service, which was sent directly to their emails. During this period, nurses could access the information as often as possible. The post-ProQOL 5 survey was emailed to nurses one month after the educational offering, and participants had two weeks to complete the survey. The DNP student sent follow-up and reminder emails to participants to encourage study completion. The DNP student was the only individual with access to the data. The data was not shared except for project submission purposes as an aggregate data set. The timeline of this DNP project is presented in Appendix C. The measure of success of this DNP project is increased compassion satisfaction and a decrease in the components of CF, as indicated by an improvement score from the post-ProQOL 5 survey. Demographic data was used to evaluate whether different demographic characteristics were reflected in CF scores.

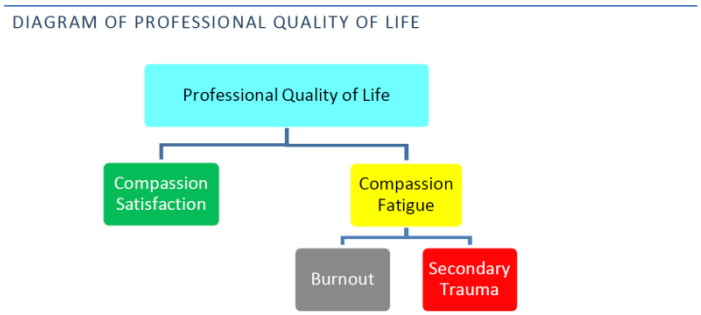
Sustainability

The sustainability plan aims to keep nurses aware of CF by continuing to deliver yearly educational offerings after the project period. There needs to be more than a single offering of the CF QI educational package to combat CF, and it is wise to repeatedly deliver the educational offering to help nurses retain their learned strategies to sustain the process of CF awareness and resiliency. The healthcare institution will build trust with its nurses and promote CF awareness and resiliency by providing psychiatric nurses with annual education on CF intervention.

f. Measurement Instruments

The data for this quality Improvement project comes from the ProQOL 5 survey (Stamm, 2009; Stamm, 2010) (Appendix B). Researchers can use ProQOL version 5 for free if the developer is acknowledged, no changes are made to the tool, and no financial benefit is derived from using it (www.ProQOL.org). Nothing can be changed other than translating it or changing "[helper]" to something more precise like "nurse." (ProQOL Permission, 2022).

According to the ProQOL Version 5 Professional Quality of Life Scale, helping those suffering and traumatized has both bad and good benefits. This measure has undergone several changes, with ProQOL 5 being the most recent. There are three subscales of the ProQOL measure: compassion satisfaction, caregiver burnout, and secondary traumatic stress.



(Stamm, 2010, p. 8)

Stamm (2010) defines the professional quality of life as "the quality one feels in relation to their work as a helper" In helping professions such as Nursing, the positive and negative aspects of caring for patients influence nurse's professional quality of life. The two components of professional quality of life are the positive (compassion satisfaction) and the negative (Compassion Fatigue). Two distinct phases of compassion exhaustion exist. The first section addresses burnout symptoms like fatigue, irritability, hostility, and sadness. Secondary traumatic stress is an unpleasant emotion fueled by fear and trauma from the workplace. Direct (primary) trauma can occur at work in some cases. In some instances, trauma at work may combine both primary and secondary trauma (Stamm, 2010, p.8)

A short demographic survey was given to participants along with the pre-study ProQOL 5 survey. The demographic questions included age, gender, years of experience, education, and awareness about NOPHs supportive response team. The demographic characteristics of CF in psychiatric nurses were submitted by replying through the internal email system used by NOPH employees or a ballot box provided in each unit.

g. Data Collection Procedures

Data collection was done through an internal email system (Microsoft Outlook) provided by the State of Ohio Department of Mental Health and Addiction Services which

are available for employees at the NOPH. Internal Email was used to deliver the survey and educational program to the participants. Communication through email was convenient for sending large files to the recipients securely. Nurses can return the completed survey to the secure box in each unit or by emailing the survey directly to the DNP student. This ensures the respondents' confidentiality.

After two weeks of emailing the survey, the DNP student collected all the documents from the secure boxes. Each participant printed their email address on the survey for identification purposes. The DNP student paired the pre and post-surveys based on email address.

h. Cost-Benefit Analysis/Budget

This project is financially feasible. The financial responsibility of this quality improvement project is solely on DNP student. The ProQOL 5 survey tool (The Center for Victims of Torture, 2019) is free to use (Appendix B) and distribute. The email can be utilized free of cost as it is part of the organizational resource. In addition to office supply costs for paper and printing, each nurse who participates will receive a complimentary gift bag once they complete the demographic survey. The DNP student will track this via email. Details of costs associated with the project are presented in Table 2.

i. Timeline for implementation

The time frame for the project implementation period was planned to be four to eight weeks. During this period, DNP student collected data through surveys, ProQOL using email. A detailed timeline is presented in Appendix C.

j. Data Analysis

The DNP student intended to use the paired *t*-test approach in analyzing data gathered from pre and post-intervention ProQOL 5 surveys. Paired t-test was appropriate in this QI project because the data involves repeated measurement with the same participants, such as comparing pre- and post-intervention or pre- and follow-up longitudinal data. Microsoft Excel was used to present and analyze the data. Descriptive statistics were used to analyze demographic data and correlations among demographics and ProQOL 5 results.

XIII. Ethical Considerations/Protection of Human Subjects

Ethical considerations of the QI project include obtaining participants' informed consent and maintaining the privacy and confidentiality of the participants. IRB approval from Kent State University and NOPH will be obtained. Project participants will receive verbal and written information related to the project's purpose, duration, intervention, benefits, data collection procedures, and anticipated timing of the QI project. The participants will receive information about the project via email and brochures. They will inform their intention to participate in the QI project via direct email to DNP student.

The identification information of the participants is only visible to the DNP student protecting the privacy and confidentiality of the participants. The participants can withdraw from the QI project anytime for any reason. The email letter and consent form are presented in Appendix E.

XIV. Results

Analysis of the Implementation Process:

Before implementation of this DNP project, the DNP student completed an Institutional Review Board (IRB) determination from Kent State University (Appendix G). A legal clearance was also obtained from the Ohio Department of Mental Health and Addiction Services, as NOPH is part of an Ohio state-operated psychiatric hospital. With guidance from stakeholders and a project mentor, the DNP student generated an educational intervention for the psychiatric nurses at NOPH incorporating the topics of CF, burnout signs, and symptoms. The project team verbalized their approval of the educational intervention. While the educational intervention was being developed, the DNP sent the invitation to participate to 49 psychiatric nurses at the NOPH. The study was advertised through flyers in all units and during the morning meetings for one week by the Director of Nursing to encourage nursing participation. Several nurses responded to the email invitation by replying that they would like to participate in the study. Once the consent was received, the pre-intervention ProQOL survey was emailed to the nurses on July 24, 2023. For convenience, several survey packets were made available in the units for nurses to readily obtain from folders, complete, and drop in the survey collection folder also available in the unit. The DNP student collected the completed surveys daily from each unit until July 31. Several nurses personally handed the completed surveys in sealed envelopes provided in the survey packet. A total of twenty-nine nurses completed the preintervention survey indicating a response rate of 59%.

On August 1, 2023, the DNP student sent the educational intervention to participant nurses via internal email, encouraging them to view the presentation. The educational intervention was designed as a PowerPoint presentation, which included signs and symptoms

of compassion fatigue, burnout, differences and similarities between compassion fatigue and burnout, risk factors, protective factors, resources available for nurses, coping strategies, and TedX videos on the prevalence of compassion fatigue among nurses. Several nurses commented positively about the presentation after watching it by responding via email and speaking personally with DNP the student. During August, the DNP student encouraged the nurses to watch the presentation whenever possible. Several reminder emails were also sent to the nurses to watch the educational presentation. On September 1, the DNP student emailed the participating nurses to complete the post-intervention ProQOL survey. The participating nurses received a post-intervention survey to complete. The DNP student encouraged the participant nurses to complete the post-intervention survey in person and via internal emails for the next two weeks. Twenty-seven nurses completed the post-intervention survey (55% overall response rate; 93% completion rate between pre and post-intervention). Two nurses declined to complete the post-intervention survey.

The data collected from the surveys was transcribed and reviewed for accuracy. The DNP student transcribed all survey results categorically by a) pre-ProQOL5 survey, b) demographic survey, and c) post-ProQOL 5 survey. There were no errors found in the transcription of the survey results after they had been triple-checked by the DNP student. The DNP student postulates that the error-less encoding was due to the small number of participations, and thus, the data transcription was accurately performed and with deliberateness.

Analysis of Project Outcome Data:

The DNP project achieved three outcomes. The first outcome was based on the objective of developing an educational intervention on CF for psychiatric nurses at NOPH.

The second outcome was reporting nurse participants' demographic characteristics and identifying any correlations to CS and CF. The third outcome was to increase nurse participants' perceived CS and decrease CF after an educational intervention.

Developing an Educational Intervention

In 2017 the National Academy of Medicine established the Action Collaborative on Clinician Wellbeing and Resilience. The Wellbeing Collaborative's objective is to increase awareness of clinical stress, burnout, depression, anxiety, and suicide and promote multidisciplinary, evidence-based approaches to better patient care while taking care of the caregiver. This project used recommended resources by the collaboration in developing the educational intervention. Furthermore, educational topics suggested by the literature evidence were included in the intervention. The educational intervention was reported as adequate through comments received via email and face-to-face. Participants noted that the PowerPoint presentation was effective and appropriate for the topic. Participants also indicated that they liked the presentation because it enabled them to access the information whenever they wanted. However, some nurses stated that they would have preferred a dedicated time and classroom setting to complete the educational session and an opportunity to share their thoughts and feelings on how they should mitigate the CF.

Analysis of Demographic Outcome

The demographic data was derived from the demographic survey (Appendix C). Overall, the sample of 29 nurse participants included nurses who were 30 to 69 years old. Most nurses reported ages between 30 to 50 years (n=18, 62%). Most worked full-time (n=26, 86.6%) and had a bachelor's and/or higher degree (n=12, 41.4%). Nursing experience varied from <5 years (n=9, 31%), 5 to 10 years (n=11, 38%) or > 11 years (n=9, 31%). These

demographic characteristics were further analyzed based on participants' pre-intervention CS and CF (BO and STS) scores, which were classified as low (score <22), medium (score 23-41), or high (>42) (Total possible score 10 to 50/ category) (Stamm, 2010)

Table 1 Frequency of Demographic Variables

Variable	*n*	*%*
Age		
60-69	5	17.24
30-39	9	31.03
40-49	9	31.03
50-59	6	20.69
Gender		
Female	24	82.76
Male	5	17.24
Education		
Master's degree	5	17.24
Bachelor's Degree	12	41.38
Diploma	4	13.79
Associate degree	8	27.59
Service Years		
0 to 5	9	31.03
6 to 10	11	37.93
16 to 20	2	6.90
11 to 15	7	24.14
Employment Status		
Per diem	1	3.45
Part time	2	6.90
Full time	26	89.66

Most of the participants reported moderate CS (n=17, 58.6%) and moderate BO (n=19, 65.5%), while sixteen (55%) participants and thirteen (45%) reported low and moderate STS scores, respectively. Specifically, high CS was reported by nine (31%) participants who were age >36 years old, full time, >10 years experiences and had a bachelor's degree. High

CS was reported by eight (33%) participants who were female and one male participant. Similar demographic characteristics were shared by seventeen (58.6%) participants who reported moderate CS scores, who were female, working full time, had a bachelor's degree and > 10 service years. Low CS was reported by three participants (10.3%) who are female, work full-time, have an associate degree and worked >10 years.

Likewise, moderate BO was observed in the majority of nurses (n=19, 65.5%) who work full time (n=17, 65.3%), and had a bachelor's degree or higher (n=12, 41%). One participant was female, worked full-time with < 10 service years and scored high on the BO scale. Conversely, most female nurses who worked full time with an education level of bachelor's degree and service years > 10 are report moderate BO.

Thirteen nurses scored moderately, and Sixteen scored low on the STS scale. No participants scored high in STS scale. For the participants who scored moderate, fourteen were female (62%), and two were male (40%). Sixteen nurses scored low on the STS scale; most had bachelor's degrees (n=9, 31%).

Table 2. Frequency of CS, BO, STS

Variable	*n*	*%*
CS_Pre		
High	9	31.03
Moderate	17	58.62
Low	3	10.34
BO_Pre		
Moderate	19	65.52
Low	9	31.03
High	1	3.45
STS_Pre		
Moderate	13	44.83

Low	16	55.17

CS_Pre = preintervention scores for compassion satisfaction subscale of ProQOL5

BO_Pre= preintervention scores for Burnout subscale of ProQOL5

STS_Pre= preintervention scores for compassion Secondary Traumatic Stress subscale of ProQOL5

(High= 42 or more, Moderate =23-41, Low =22 or less)

Correlation among Demographic Data and ProQOL 5 scores

A Chi-square Test of Independence was conducted to examine whether any correlation exists between demographic variables such as age, sex, education and service years and Compassion Satisfaction among nurses. Considering the small sample size (n=29), adequate cell size was assessed for the reliability of Chi-square analysis, which requires all cells to have expected values greater than zero and 80% of cells to have expected values of at least five (McHugh, 2013). These two conditions were not fulfilled during the analysis; hence, the Chi-square test results were not significant, suggesting that any of the demographic variables and Compassion Satisfaction scores could be independent of one another. Consequently, a pivot table was created in Excel to see if any correlation exists between the demographic data and pre-intervention ProQOL scores. The table below shows that the highest Compassion Satisfaction (CS_Pre) scores are associated with higher education, female gender, and service years of less than 10.

Table 3: Correlation between Demographic variables and CS_Pre

CS_Pre	High	Moderate	Low
Education			
Masters	3	2	0
Bachelors	2	9	1
Associate	2	4	2
Diploma	2	2	0
Gender			
Male	1	3	1
Female	8	14	2
Service Years			
> or = 10 years	7	11	2
< or = 10 years	2	6	1

CS_Pre = preintervention scores for compassion satisfaction subscale of ProQOL5

(High= 42 or more, Moderate =23-41, Low =22 or less)

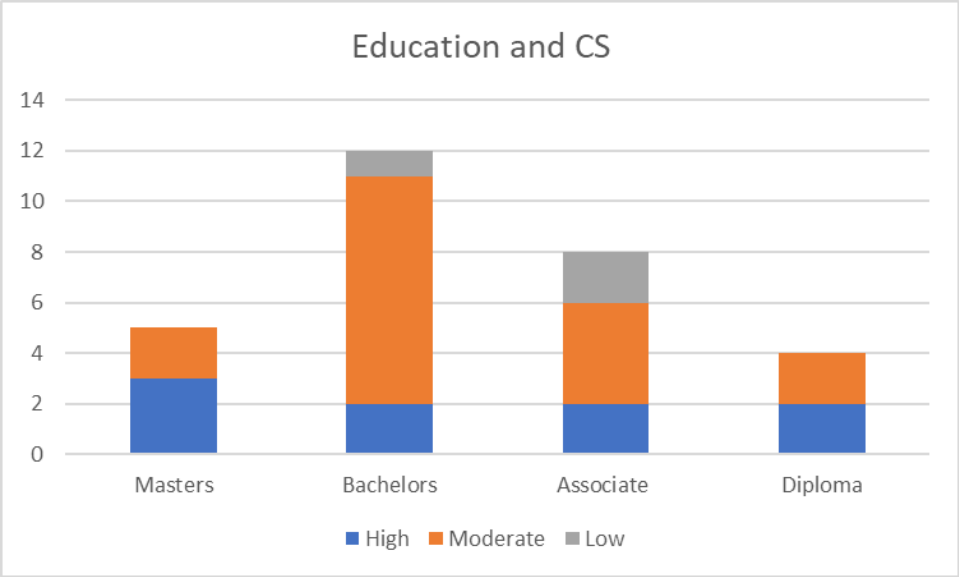


Figure 1: Compassion Satisfaction Scores correlated with Education.

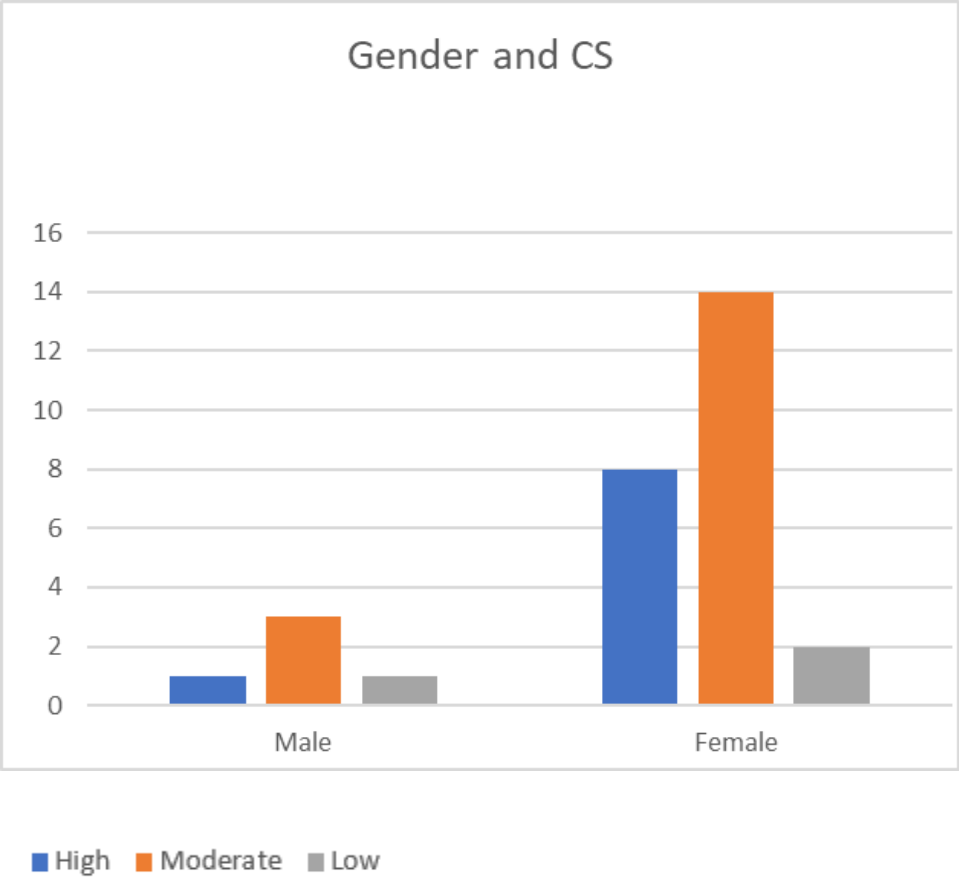


Figure 2: Compassion Satisfaction Scores correlated with Participant Gender

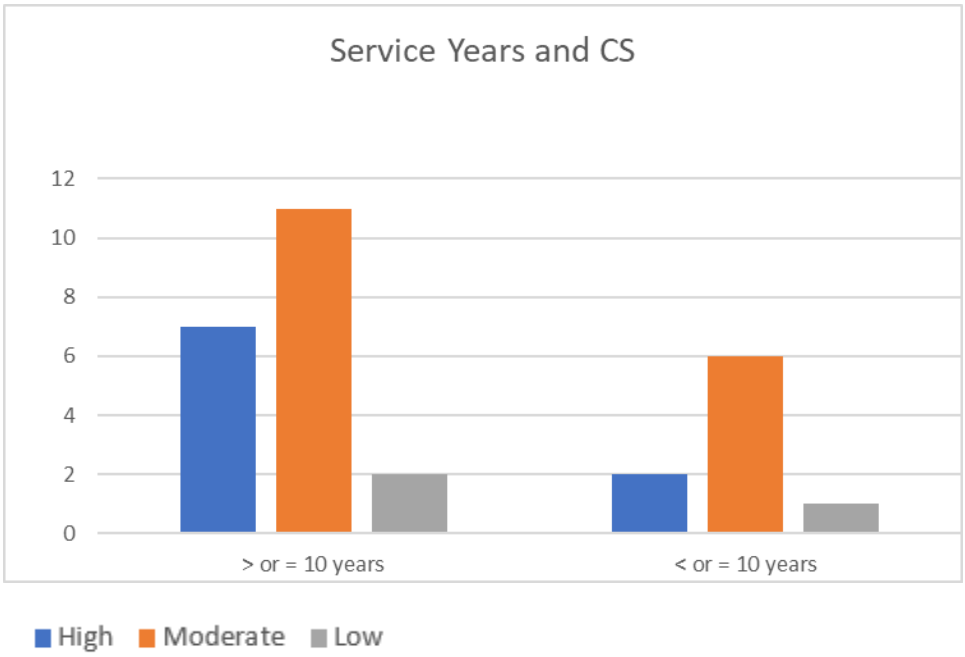


Figure 3: Compassion Satisfaction Scores correlated with Service Years of Participants.

Analysis of Pre and Post-Intervention Outcomes

A two-tailed paired samples *t*-test was conducted to examine whether the mean difference between the Compassion Satisfaction scale post-intervention (CS_Post) and the Compassion Satisfaction scale pre-intervention (CS_Pre) significantly differed from zero. The result of the two-tailed paired samples t-test was significant based on an alpha value of .05, $t(26) = -4.61$, $p < .001$, indicating the difference in the mean of CS_Pre and the mean of CS_Post was significantly different from zero. The mean of CS_Pre was significantly lower than the mean of CS_Post. This suggests an improvement in subjective compassion satisfaction (CS) among nurses after the educational intervention. The results specifically showed an overall improvement in mean compassion satisfaction scores of 11.7% from pre-intervention to post-intervention.

A two-tailed paired samples *t*-test was conducted to examine whether the mean difference between the Burnout scale Post-intervention (BO_Post) and the burnout scale Pre-intervention (BO_Pre) was significantly different from zero. The result of the two-tailed paired samples *t*-test for the burnout scale (BO_Post and BO_Pre) was not significant based on an alpha value of .05, $t(26) = -1.40$, $p = .174$, indicating the difference in the mean of BO_Post and the mean of BO_Pre was not significantly different from zero (Table 4). This suggests that educational intervention did not affect nurses' perceived burnout. Subsequently, the result of the two-tailed paired samples *t*-test of the Secondary Traumatic Stress scale post-intervention (STS_Post) and the Secondary Traumatic Stress scale pre-intervention (STS_Pre) was not significant based on an alpha value of .05, $t(26) = 0.11$, $p = .912$, indicating that the mean of STS_Pre and the mean of STS_Post was not significantly different from zero. This suggests that educational intervention did not make any difference in nurses' perceived symptoms of Secondary Traumatic Stress.

Table 4: Two-Tailed Paired Samples t-Test for the Difference Between CS_Post, BO_Post, STS_Post and CS_Pre, BO_Pre and STS_Pre

CS_Post		CS_Pre				
M	*SD*	*M*	*SD*	*t*	*p*	*d*
39.41	7.18	35.26	9.10	4.61	< .001	0.89
BO_Post		BO_Pre				
M	*SD*	*M*	*SD*	*t*	*p*	*d*
26.22	8.52	27.19	7.88	-1.40	.174	0.27
STS_Post		STS_Pre				
M	*SD*	*M*	*SD*	*t*	*p*	*d*
23.44	6.44	23.37	7.14	0.11	.912	0.02

Note. N = 27. Degrees of Freedom for the *t*-statistic = 26. *d* represents Cohen's *d*.

CS_Pre = preintervention scores for compassion satisfaction subscale of ProQOL5
BO_Pre= preintervention scores for Burnout subscale of ProQOL5
STS_Pre= preintervention scores for compassion Secondary Traumatic Stress subscale of ProQOL5

CS_Post= post-intervention scores for compassion satisfaction subscale of ProQOL5
BO_Pre= post-intervention scores for Burnout subscale of ProQOL5
STS_Pre= post-intervention scores for compassion Secondary Traumatic Stress subscale of ProQOL5

XV. Discussion

Results Linked to Project Goals

This Quality Improvement (QI) DNP scholarly project intended to meet two overarching goals: to bring awareness to psychiatric nurses at NOPH about symptoms of CF and burnout and to educate psychiatric nurses on ways to overcome compassion fatigue, improve resiliency, and help foster compassion satisfaction. Through an evidence-based educational intervention, participating psychiatric nurses were encouraged to employ the lessons learned, such as recognizing signs and symptoms of CF, practicing ways to reduce CF in their practice, and ultimately, building resiliency to CF. Participants in this QI project experienced increased compassion satisfaction following the educational intervention, although no statistically significant reduction in CF (BO and STS scores) was found. The findings show that the measurable outcomes of this QI DNP project were partially achieved. The results showed an overall improvement in mean compassion satisfaction scores from pre-intervention to post-intervention.

Existing literature indicates burnout and compassion fatigue are severe threats to nurses' well-being and affect the quality of patient care (Adimando, 2017; Boyle, 2011). According to Kobayashi (2020), the major risk factor for CF and BO among psychiatric nurses is workplace violence. The nurses at NOPH frequently encounter workplace violence more than in other clinical settings due to the characteristics of the psychiatric patient population. Kobayashi et al. (2020) pointed out that BO is one of the important effects of workplace violence, and it contributes to nurses' intention to leave the profession. The results of the QI project allude that nurses at NOPH continue to experience workplace violence, high patient caseload, and stress. This finding is consistent with existing literature

on the topic. Further, the results did not show a statistically significant change in BO and STS scores. This could be related to the very nature of the burnout phenomenon that is manifested due to long-term exposure to work stress and trauma. Results indicate that although the educational intervention facilitated symptom recognition, it may not be enough to curb the subjective feelings of compassion fatigue among psychiatric nurses. Additionally, female gender is one of the protective factors for CF identified in the literature. Higgins et al. (2020) indicated that female gender and increased experience may protect against CF. The results of QI project find that a higher percentage of female participants (33%) reported high CS compared to male (20%) participants, reiterating the finding in the literature review. However, this finding must be tentatively interpreted due to the low sample size and disproportional gender groups.

Recognizing that the educational program successfully improved CS among this sample of psychiatric nurses is essential. The educational intervention was appropriate, pertinent to compassion fatigue and resilience, and took less than 60 minutes to complete. The psychiatric nurses were encouraged to actively integrate coping strategies and resources into their daily work in overcoming CF. Grabble et al. (2020) and Delany (2018) found that educating nurses on CF and self-care improved well-being, and impacted resilience in nurse participants. The results of this DNP project support existing literature findings of ongoing education on CF, which can help improve CS and minimize CF in nurses.

This quality improvement project reinforces the assertion made in Watson's Theory of Human Caring model, strengthening the pressing need to lower work-related stress since it can harm employee engagement, patient outcomes, and behaviors in home and work settings. The study's findings suggest that nurses were open to implementing interventions to reduce

the incidence and danger of compassion fatigue. Conducting further research is crucial to creating evidence-based guidance for healthcare providers who experience compassion fatigue. Reducing the incidence of CF and addressing its occurrences will strengthen the healthcare system and enable it to offer our communities compassionate, high-quality treatment.

Limitations

Several limitations may limit the interpretation of the results of this DNP QI project. The survey sample was small, primarily female participants (n=25), with only four male nurses, which may consequently limit a proper understanding of the differences between the experiences of male and female nurses.

Additionally, implementing the project posed significant challenges to motivating the nurses to participate. Several reminders and personal encouragement were needed to obtain consent for participation and to complete pre- and post-intervention ProQOL. If the educational intervention had been implemented in person and allowed the participants to ask questions in real-time, that may have culminated in an enhanced educational experience, influencing results. Even if the intervention's ultimate delivery strategy offered greater flexibility, a less organized approach that relied on everyone's motivation may have the unexpected consequence of lowering participation. This further illustrates the present state of burnout and the difficulty in practicing self-care, which may be a factor that accounts for the limited sample size. Moreover, deploying the educational module posed significant challenges in ensuring that participants viewed the module promptly, given the project’s short time frame (four to eight weeks) for implementation and evaluation. While helpful as a DNP student, this shorter time frame may have impacted participation and project results.

Overall, the project's outcomes will be used as a guide to move forward and make changes as needed for future projects. These promising QI DNP project results suggest that an educational intervention may improve CS. These results are a stepping stone, and there remains a considerable amount of work to be done to understand all the dimensions of CF in psychiatric nurses at NOPH.

Implications for Practice

Burnout and Compassion Fatigue (CF) can negatively affect a caregiver's physical and mental well-being and the quality and safety of patient care. They can also negatively impact the employee's job engagement and satisfaction (Adimando 2017; Boyle, 2011). The literature review revealed that educating nurses about compassion fatigue helped to build resilience (Grabbe, Higgins, Baird, Craven, & San Fratello, 2020).

More investigation is needed to fully understand CF's financial impact on psychiatric nurses. Investments in programs that reduce compassion fatigue and burnout have the potential to prevent excessive nurse turnover rates and improve nurses' compassion satisfaction and subsequent patient care. Emerging research establishes how educational interventions can successfully reduce the incidence of CF and promote compassion satisfaction, and this project echoes these results (Adimando 2017; Boyle, 2011). Understanding how best to deliver an educational intervention (face-to-face or webinar, synchronous or not) and at what intervals (monthly, quarterly, or annually) are potential next steps to extend this work.

Moreover, combatting CF and burnout does not fall solely on bedside nurses. Researching the connection between CF, burnout, and work environment is also essential to develop alternatives that could promote joy at work for nurses. By ensuring that leaders are

aware of difficult circumstances and by appreciating the accomplishments of their staff, burnout can be significantly decreased. This QI DNP project may catalyze further research and/or QI initiatives on the importance of education and CF in nurses, thus influencing nursing practice. Psychiatric nurses can benefit from practical and helpful education on CF and resilience, which could help the healthcare organization with reduced turnover and better retention among nurses.

In 2017, the National Academy of Medicine established the Action Collaborative on Clinician Wellbeing and Resilience. The Wellbeing Collaborative's objective is to increase awareness of clinical stress, burnout, depression, anxiety, and suicide and promote multidisciplinary, evidence-based approaches to better patient care while taking care of the caregiver. This project used recommended resources by the collaboration established by the National Academy of Medicine in developing the educational intervention. Further utilizing the resources by collaborating and sharing them with caregivers, organizational leaders can help psychiatric nurses at NOPH combat compassion fatigue and burnout.

XVI. Conclusion

The DNP quality improvement project aimed to investigate the impact of an educational intervention on CF and CS among NOPH psychiatric nurses. For psychiatric nurses who took part in the educational intervention, this CF intervention offers additional insight into best practices and their capacity to apply those abilities to the bedside and in the context of forensic psychiatric care. This project aimed to raise compassion satisfaction by educating nurses on compassion fatigue, helping them to identify symptoms and use strategies to avoid burnout.

The DNP student explored psychiatric nurse perceptions of CF within the framework of a pre-educational intervention ProQOL 5 (Stamm, 2010) survey followed by the online educational intervention. One month later, a second ProQOL 5 (Stamm, 2010) survey was provided to determine if the educational intervention affected self-reported CF perceptions. An analysis of the data revealed that the educational intervention successfully increased the level of CS (measure of the ProQOL 5 survey) (Stamm, 2010). Based on these promising results in improving CS, regular CF education is recommended for all psychiatric nurses annually at NOPH.

XVII. References

Adimando, A. (2017). Preventing and Alleviating Compassion Fatigue Through Self-Care: An Educational Workshop for Nurses. *Journal of Holistic Nursing*, *36*(4), 304–317. https://doi.org/10.1177/0898010117721581

Arnetz, B. B., Goetz, C. M., Arnetz, J. E., Sudan, S., vanSchagen, J., Piersma, K., & Reyelts, F. (2020). . *BMC Research Notes* Enhancing healthcare efficiency to achieve the Quadruple Aim: an exploratory study, 13(1). https://doi.org/10.1186/s13104-020-05199-8

Baqeas, M., Davis, J., & Copnell, B. (2021). Compassion fatigue and compassion satisfaction among palliative care health providers: a scoping review. *BMC Palliat Care, Jun 20(1):*88. doi: 10.1186/s12904-021-00784-5. PMID: 34162388; PMCID: PMC8220432.

Boyle, D. (2011). Countering Compassion Fatigue: A Requisite Nursing Agenda. *OJIN: The Online Journal of Issues in Nursing.* https://doi.org/10.3912/ojin.vol16no01man02

Bride, B. E., Radey, M., & Figley, C. R. (2007). Measuring Compassion Fatigue. *Clinical Social Work Journal*, 35(3), 155–163. https://doi.org/10.1007/s10615-007-0091-7

Crabtree-Nelson, S., DeYoung, P. M., Vincent, N. J., Myers, T. P., & Czerwinskyj, J. (2022). Compassion fatigue, compassion satisfaction, and burnout: A study of nurses in a large Texas health-care system. *Journal of Nursing Scholarship*, 54(6), 720–727. https://doi.org/10.1111/jnu.12780

Delaney, M. C. (2018). Caring for the caregivers: Evaluation of the effect of an eight-week pilot mindful self-compassion (MSC) training program on nurses' compassion fatigue and resilience. PLOS ONE, 13(11), e0207261. https://doi.org/10.1371/journal.pone.0207261

Duarte, J., Pinto-Gouveia, J., & Cruz, B. (2016). Relationships between nurses' empathy, self-compassion and dimensions of professional quality of life: A cross-sectional study. *International Journal of Nursing Studies*, 60, 1–11. https://doi.org/10.1016/j.ijnurstu.2016.02.015

Fitzpatrick, B., Bloore, K., & Blake, N. (2019). Joy in Work and Reducing Nurse Burnout: From Triple Aim to Quadruple Aim. AACN Advanced Critical Care, 30(2), 185–188. https://doi.org/10.4037/aacnacc2019833

Grabbe, L., Higgins, M. K., Baird, M., Craven, P. A., & San Fratello, S. (2020). The Community Resiliency Model® to promote nurse well-being. *Nursing Outlook*, 68(3), 324–336. https://doi.org/10.1016/j.outlook.2019.11.002

Graeme, D., Wilson, I., McCarthy, J., Hall, I., Crossley, B., Adshead, P., . . . Dwyer, T. (2019). Experiences of nurses and other health workers participating in a reflective course on compassion-based care. *British Journal of Nursing, 28(15).*

Gustafsson, T., & Hemberg, J. (2021). Compassion fatigue as bruises in the soul: A qualitative study on nurses. Nursing Ethics, 29(1), 157–170. https://doi.org/10.1177/09697330211003215

Higgins, J. T., Okoli, C., Otachi, J., Lawrence, J., Bryant, E. D., Lykins, A., & Seng, S. (2020). Factors Associated With Burnout in Trauma Nurses. *Journal of Trauma Nursing*, 27(6), 319–326. https://doi.org/10.1097/jtn.0000000000000538

Jun, J. W., Ojemeni, M. T., Kalamani, R., Tong, J., & Crecelius, M. L. (2021). Relationship between nurse burnout, patient and organizational outcomes: Systematic review. *International Journal of Nursing Studies*, *119*, 103933. https://doi.org/10.1016/j.ijnurstu.2021.103933

Kent State University. (n.d.). Office of Research Compliance. Retrieved December 2, 2019, from https://www.kent.edu/research/office-research-compliance/irb-help

Kobayashi, Y., Oe, M., Ishida, T., Matsuoka, M., Chiba, H., & Uchimura, N. (2020). Workplace Violence and Its Effects on Burnout and Secondary Traumatic Stress among Mental Healthcare Nurses in Japan. *International Journal of Environmental Research and Public Health*, 17(8), 2747. https://doi.org/10.3390/ijerph17082747

Lisle, L., Speroni, K., Aroom, W., Crouch, L., & Honigsberg, H. (2020). Differences in Compassion Satisfaction, Compassion Fatigue, and Work Environment Factors by Hospital Registered Nurse Type. OJIN: *The Online Journal of Issues in Nursing*, 25(3). https://doi.org/10.3912/ojin.vol25no03ppt44

Lombardo, B., & Eyre, C. (2011). Compassion Fatigue: A Nurse's Primer. OJIN: *The Online Journal of Issues in Nursing.* https://doi.org/10.3912/ojin.vol16no01man03

Lown, B. A., Shin, A., & Jones, R. N. (2019). Can Organizational Leaders Sustain Compassionate, Patient-Centered Care and Mitigate Burnout? Journal of Healthcare Management, 64(6), 398–412. https://doi.org/10.1097/jhm-d-18-00023

National Academy of Medicine. (2022). *Action Collaborative on Clinician Well-Being and Resilience*. nam.edu. Retrieved September 20, 2023, from https://nam.edu/initiatives/clinician-resilience-and-well-being/

Membrive-Jiménez, M. J., Gómez-Urquiza, J. L., Suleiman-Martos, N., Velando-Soriano, A., Ariza, T., De la Fuente-Solana, E. I., & Cañadas-De la Fuente, G. A. (2022). Relation between Burnout and Sleep Problems in Nurses: A Systematic Review with Meta-Analysis. *Healthcare*, 10(5), 954. https://doi.org/10.3390/healthcare10050954

O'Connor, K., Muller Neff, D., & Pitman, S. (2018). Burnout in mental health professionals: A systematic review and meta-analysis of prevalence and determinants. *European Psychiatry*, 53, 74–99. https://doi.org/10.1016/j.eurpsy.2018.06.003

Ohio Department of Mental Health and Addiction Services. (n.d.). Retrieved October 25, 2022, from https://mha.ohio.gov/about-us/mission-vision-and-values/mission-vision-and-values

Pajnkihar, M., McKenna, H. P., Štiglic, G., & Vrbnjak, D. (2017). Fit for Practice: Analysis and Evaluation of Watson's Theory of Human Caring. *Nursing Science Quarterly*, 30(3), 243–252. https://doi.org/10.1177/0894318417708409

Peters, E. (2018). Compassion fatigue in nursing: A concept analysis. *Nursing Forum*, 53(4), 466–480. https://doi.org/10.1111/nuf.12274

Palacio, C., Krikorian, A., Gómez-Romero, M. J., & Limonero, J. T. (2019). Resilience in Caregivers: A Systematic review. *American Journal of Hospice and Palliative Medicine*, 37(8), 648–658. https://doi.org/10.1177/1049909119893977

Polat, H., Turan, G. B., & Tan, M. (2020). Determination of the relationship of the spiritual orientation of nurses with compassion fatigue, burnout, and compassion satisfaction. *Perspectives in Psychiatric Care*, 56(4), 920–925. https://doi.org/10.1111/ppc.12513

Practice and Policy | American Nurses Association (ANA). (2017, October 14). Retrieved September 11, 2022, from https://www.nursingworld.org/practice-policy

Smith, M. C., & Parker, M. E. (2014). *Nursing Theories & Nursing Practice*. PHILADELPHIA , pa: F.A. Davis Company.

Shah, M. K., Gandrakota, N., Cimiotti, J. P., Ghose, N., Moore, M. A., & Ali, M. K. (2021). Prevalence of and Factors Associated With Nurse Burnout in the US. *JAMA Network Open*, *4*(2), e2036469. https://doi.org/10.1001/jamanetworkopen.2020.36469

Teoli D, Sanvictores T, An J. SWOT Analysis. [Updated 2022 Sep 5]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2022 Jan-. Available from: https://www.ncbi.nlm.nih.gov/books/NBK537302/

Turgoose, D., & Maddox, L. (2017). Predictors of compassion fatigue in mental health professionals: A narrative review. *Traumatology*, 23(2), 172–185. https://doi.org/10.1037/trm0000116

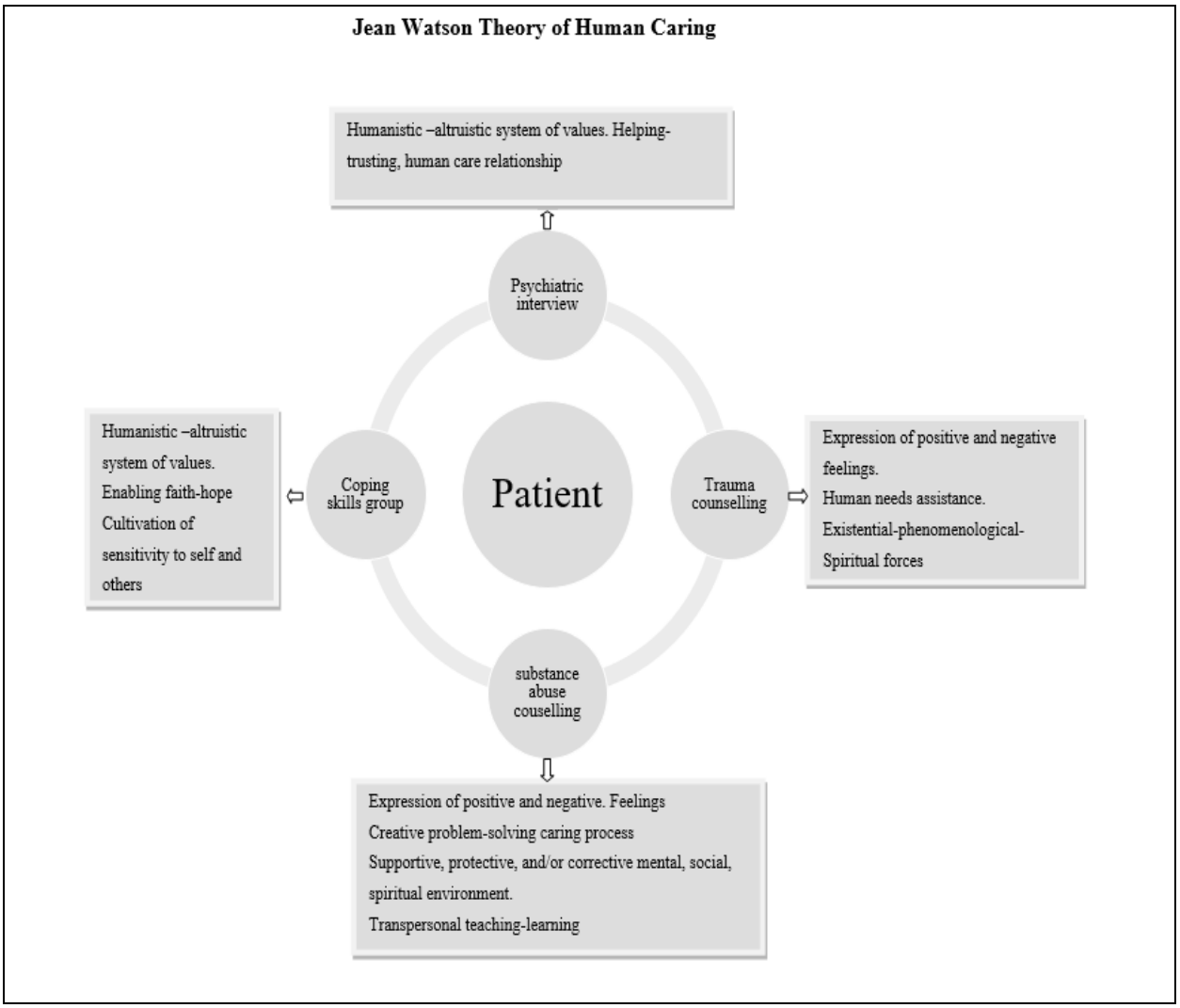
Xie, W., Wang, J., Okoli, C. T. C., He, H., Feng, F., Zhuang, L., . . . Jin, M. (2020). Prevalence and factors of compassion fatigue among Chinese psychiatric nurses. *Medicine*, 99(29), e21083. https://doi.org/10.1097/md.0000000000021083

Zerach, G., & Shalev, T. B. I. (2015). The Relations between Violence Exposure, Posttraumatic Stress Symptoms, Secondary Traumatization, Vicarious Post Traumatic Growth and Illness Attribution among Psychiatric Nurses. *Archives of Psychiatric Nursing*, 29(3), 135–142. https://doi.org/10.1016/j.apnu.2015.01.002

Zhang, Y. Y., Zhang, C., Han, X. R., Li, W., & Wang, Y. L. (2018). Determinants of compassion satisfaction, compassion fatigue and burn out in nursing. *Medicine*, 97(26), e11086. https://doi.org/10.1097/md.0000000000011086

XVIII. Appendices, Tables and Figures

Appendix A: Jean Watson Theory of Human Caring



Appendix B: Professional Quality of Life Scale (ProQOL) & Demographic Survey

PROFESSIONAL QUALITY OF LIFE SCALE (PROQOL)

Compassion Satisfaction and Fatigue (ProQOL) Version 5 (2009)

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

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

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

YOUR SCORES ON THE PROQOL: PROFESSIONAL QUALITY OF LIFE SCREENING

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

Compassion Satisfaction _____

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

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

Burnout_____

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

The average score on the burnout scale is 50 (SD 10; alpha scale reliability .75). About 25% of people score above 57 and about 25% of people score below 43. If your score is below 18, this probably reflects positive feelings about your ability to be effective in your work. If you score above 57 you may wish to think about what at work makes you feel like you are not effective in your position. Your score may reflect your mood; perhaps you were having a "bad day" or are in need of some time off. If the high score persists or if it is reflective of other worries, it may be a cause for concern.

Secondary Traumatic Stress_____

The second component of Compassion Fatigue (CF) is secondary traumatic stress (STS). It is about your work-related, secondary exposure to extremely or traumatically stressful events. Developing problems due to exposure to other's trauma is somewhat rare but does happen to many people who care for those who have experienced extremely or traumatically stressful events. For example, you may repeatedly hear stories about the traumatic things that happen to other people, commonly called Vicarious Traumatization. You may see or provide treatment to people who have experienced horrific events. If your work puts you directly in the path of danger, due to your work as a soldier or civilian working in military medicine personnel, this is not secondary exposure; your exposure is primary. However, if you are exposed to others' traumatic events as a result of your work, such as providing care to casualties or for those in a military medical rehabilitation facility, this is secondary exposure. The symptoms of STS are usually rapid in onset and associated with a particular event. They may include being afraid, having difficulty sleeping, having images of the upsetting event pop into your mind, or avoiding things that remind you of the event.

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

What is my score and what does it mean?

In this section, you will score your test and then you can compare your score to the interpretation below.

Scoring

1. Be certain you respond to all items.
2. Go to items 1, 4, 15, 17 and 29 and reverse your score. For example, if you scored the item 1, write a 5 beside it. We ask you to reverse these scores because we have learned that the test works better if you reverse these scores.

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

To find your score on **Compassion Satisfaction**, add your scores on questions 3, 6, 12, 16, 18, 20, 22, 24, 27, 30.

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

To find your score on **Burnout**, add your scores questions 1, 4, 8, 10, 15, 17, 19, 21, 26 and 29. Find your score on the table below.

The sum of my Burnout questions	So My Score Equals	My Level of Burnout
22 or less	43 or less	Low
Between 23 and 41	Around 50	Average
42 or more	57 or more	High

To find your score on **Secondary Traumatic Stress**, add your scores on questions 2, 5, 7, 9, 11, 13, 14, 23, 25, 28. Find your score on the table below.

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

Demographic Survey

Please fill out this survey for Compassion Fatigue Project

1. Age
    - 20-29
    - 30-39
    - 40-49
    - 50-59
    - 60-69
2. What is your gender?
    - Male
    - Female
    - Do not want to disclose
3. How long have you been a nurse at NOPH ?
    - 0-5 years
    - 6-10 years
    - 11-15 years
    - 16-20 years
    - Greater than 20 years
4. What is your highest level of education ?
    - Diploma
    - Associate Degree
    - Bachelor's Degree
    - Master's Degree
5. What is your employment status ?
    - Full time Employee
    - Part time Employee
    - Per diem Employee
6. Please provide two-digit code given in the email

_____

Appendix C: Permission to Use ProQOL

Thank you for your interest in using the Professional Quality of Life Measure (ProQOL). Please share the following information with us to obtain permission to use the measure:

Please provide your contact information:

Email Address

santhi.avula@mha.ohio.gov

Name

Santhi Avula

Organization Name, if applicable

Country

United States

Please tell us briefly about your project:

I am an advanced practice nurse working at Northwest Ohio Psychiatric Hospital , Toledo Ohio. I conducting a quality improvement project to measure compassion fatigue in nurses at our hospital. This is pre post intervention study. I would like to use ProQOL
to use in my study. The ProQOL will be given pre intervention and post intervention. I will be comparing the results to see the educational intervention was effective.

What is the population you will be using the ProQOL with?

Registered nurses who are working in forensic psychiatric hospital

In what language/s do you plan to use the ProQOL?

Listed here are the languages in which the ProQOL is currently available (see https://proqol.org/ProQol_Test.html). If you wish to use a language not listed here, please select "Other" and specify which language/s.

English

The ProQOL measure may be freely copied and used, without individualized permission from the ProQOL office, as long as:

- **You credit The Center for Victims of Torture and provide a link towww.ProQOL.org;**
- **It is not sold; and**
- **No changes are made, other than creating or using a translation, and/or replacing "[helper]" with a more specific term such as "nurse."**

Note that the following situations are acceptable:

- **You can reformat the ProQOL, including putting it in a virtual format**
- **You can use the ProQOL as part of work you are paid to do, such as at a training: you just cannot sell the measure itself**

Does your use of the ProQOL abide by the three criteria listed above? (If yes, you are free to use the ProQOL immediately upon submitting this form. If not, the ProQOL office will be in contact in order to establish your permission to use the measure.)

Yes

Thank you for your interest in the ProQOL! We hope that you find it useful. You will receive an email from the ProQOL office that records your answers to these questions and provides your permission to use the ProQOL.

We invite any comments from you about the ProQOL and the experience of using it at proqol@cvt.org. Please also contact us if you have any questions about using the ProQOL, even if you noted them on this form. Note that unfortunately, our capacity is quite limited so we may not be able to respond to your note: however, we greatly appreciate your engagement.

Appendix D: Timeline for the Proposed Project

	08/22	10/22	01/23	02/23	03/23	04/23	05/23	06/23	07/23	08/23	09/23	10/23	11/23	12/23 to 05/24
Literature Review	X													
Formulate Objectives with outcomes				X										
Meet with Key Stakeholders	X	X		X	X	X	X	X	X	X	X	X		
Identify Committee Members														
Proposal Defense with paper completion to chair (up to implementation)						X								
IRB Approval							X							
Pre-survey ProQOL								X						

Implementation Webinar launch									X					
Post-survey ProQOL											X			
Analyze data with statistical consultation											X	X		
Write /Analyze results												X	X	X
Consult with Project Chair/ members for project Guidance until defense				X	X	X	X	X	X	X	X	X	X	X
Defend your project														X

Appendix E: Copy of Email Notification to Nurses

Email/Consent Letter

Hello, my fellow Psychiatric Nurses !

My name is Santhi Avula, and I am presently a doctoral student at Kent State University, Kent, Ohio. I have been working as a Psychiatric and Mental Health Nurse Practitioner for the past four years. I am cordially inviting you all to participate in this Doctor of Nursing Practice quality improvement project to understand how compassion fatigue affects psychiatric nurses and how a compassion fatigue educational program will affect your capacity to identify, fend off, and overcome compassion fatigue. Your participation is greatly welcomed and is essential to the effective collection of valuable data. The following information is supplied to help you decide whether or not to participate in this Quality Improvement (QI) project. Your involvement in this QI project entails three steps. First, you will be asked to complete two surveys. The first survey is a demographic survey. The second survey is ProQOL 5, which measures compassion satisfaction and components of compassion fatigue. Both surveys should take at most 15 minutes to complete. The second part is participation in a one-hour educational webinar to learn about/ awareness of compassion fatigue signs and symptoms, how to combat compassion fatigue, and how to develop resiliency to compassion fatigue. You will have access to this webinar via *Dropbox* Utility. The third part is completing the ProQOL 5 survey one month following your educational offering.

Your participation in this project is voluntary. DNP student (Santhi Avula) will collect copies of all original data forms directly from the participants, and no other person can access the data. Your responses will be considered only in amalgamation with those from other participants. The information obtained in this project may be published in academic journals or presented at academic conferences, but confidentiality and privacy will be maintained. Each participant will receive a $ 25 gift card at the end of the study.

Yours Truly,

Santhi Avula
DNP Student
Kent State University

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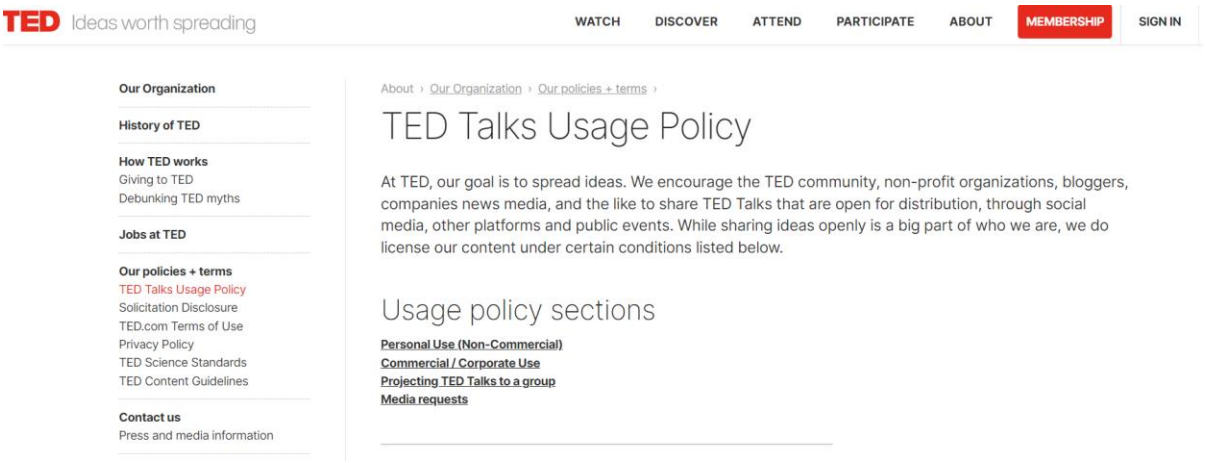

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From: TED <mediarequest@ted.com>
Date: February 7, 2023 at 12:11:27 PM EST
To: Savula <savula@kent.edu>
Subject: Re: Re: EXT: Kent State University : Your TED Media Request II
Reply-To: TED <mediarequest@ted.com>

Alex (TED)

Feb 7, 2023, 12:11 EST

Hi Santhi,

Thank you for this information! Because these talks will be used for your doctoral research, we can approve that you send the URLs from the official TEDx YouTube account to your participants. Please let us know if you have any other question!

Best,

The Media Request Team

Appendix G: IRB Approval Letter

To: Avula, Santhi <savula@kent.edu>
Subject: EXT: IRB Determination Form

KENT STATE UNIVERSITY

Your project title: Compassion Fatigue and Burnout among Nurses at St
Your unique project ID: R_27OK2h6ordT2TU5

Based on your responses to the online IRB review determination modu
does not apply and you do not need to take further IRB action.

Please be aware that you are responsible for ensuring your research is
KSU policies and local laws and/or regulations may apply that are not u
learn more.

If you make changes to the project that may affect this determination,

This email includes a unique identifying number. Please keep this emai
necessary) using this identifying number.

If you feel this determination is not correct or if you have any question

Table 1: SWOT Analysis

Objective: To educate psychiatric nurses at NOPH about signs and symptoms of Compassion Fatigue, ways to self-care and build resiliency.	
Internal Factors	
Strengths(+)	**Weaknesses (-)**
Strong stakeholders buy-in Planned educational intervention is evidence based Facility/Leadership support that is mission/vision driven to promote Trauma Informed care while promoting high quality self-care of nurses	Poor buy-in from nurses who do not see compassion fatigue as an issue
External Factors	
Opportunities (+)	**Threats (-)**
Improved nursing self-care management Reduced sick days taken by nurses Increased patient satisfaction Increased positive patient outcomes Increased nurse retention	Funding for staff education hours Inefficient follow-up with nurses and leadership Subjective nature of Compassion Fatigue
Evaluation of Objective: Strong stakeholder support, evidence-based research to support self -care interventions, and health care organization that places equal emphasis on empowering employees and achieving great patient outcomes.	

Table 2: Proposed Budget for the Project

Resources	Cost	Additional Info
Paper and supplies	~ $ 50	Used for printing surveys
DNP student Time	$ 5,680	For data collection and Analysis
Statistical Software Subscription for Data Analysis	$ 60	One Month Subscription to statistical software Intellectus Statistics™ For data-analysis
Proposed Budget	**$ 5,790**	

Table 3: Important Terms and Definitions

Term	Definition
Compassion Fatigue	The physical and mental exhaustion and emotional withdrawal experienced by those that care for sick or traumatized people over an extended period of time (Stamm 2010)in
Compassion Satisfaction	Compassion satisfaction is about the pleasure you derive from being able to do your work well. You may feel positively about your colleagues or your ability to contribute to the work setting or even the greater good of society (Stamm 2010)
Burnout	A syndrome characterized by a high degree of emotional exhaustion and depersonalization.(National Academy of Medicine) Burnout is associated with feelings of hopelessness and difficulties in dealing with work or in doing your job effectively (Stamm 2010)
Secondary Traumatic Stress	Secondary Traumatic Stress (STS) is an element of Compassion fatigue (CF). STS is about work-related, secondary exposure to people who have experienced extremely or traumatically stressful events. (Stamm 2010)
Vicarious Trauma	Vicarious trauma is a state of tension and preoccupation of the stories/trauma experiences described by clients. (Stamm 2010)
Caregiver Resilience	Caregiver resilience is adopting, coping and visualizing the positive aspects of caring, there by developing resistance to stress causing situations. Resilience is thus defined as an individual's capacity to rise above adversity, heal, and develop newfound strength in the face of adversity (Palacio et al., 2019)