

2022

## Educating Nurse Practitioners on Factors Associated with Compassion Fatigue

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# Walden University

College of Nursing

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Alicia Moonesar

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Walden University  
2022

Abstract

Educating Nurse Practitioners on Factors Associated with Compassion Fatigue

by

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MScN, D'Youville College, 2010

BScN, Ryerson University, 2007

Project Submitted in Partial Fulfillment  
of the Requirements for the Degree of  
Doctor of Nursing Practice

Walden University

June 2022

## Abstract

Nurse Practitioners (NPs) across Canada continue to endure the escalating demands of increasing patient workloads, the deficiency of inadequate resources, and the paucity of leadership support. The ongoing exposure to these and other challenges often contributes to a complex work environment that may result in compassion fatigue (CF). CF can be operationally defined as a state of exhaustion and dysfunction because of prolonged exposure to compassion stress and all that it evokes. The need for education and prevention of CF is critical as the prevalence of CF is on the rise. Guided by Watson's Theory of Human Caring and Benner's Theory of Novice to Expert, this project was conducted to determine if an educational intervention would increase the NPs knowledge and awareness on the signs and symptoms of CF and healthy coping strategies. NPs were recruited from a convenience sample of NPs belonging to a single acute care organization for this doctoral project and 35 NPs volunteered to participate in the educational intervention. Following a pretest survey, participants reviewed a PowerPoint presentation on educating NPs on the factors associated with CF and completed a posttest survey. A paired t-test indicated an increase in knowledge and awareness among NPs who participated in the educational intervention ( $t = -14.71, p < 0.001$ ) indicating an increase in knowledge and ( $t = -50.61, p < 0.001$ ) indicating an increase in awareness in CF. This project contributes to social change as it provides NPs with strategies to reduce and prevent CF clinically. Nurses who are equipped and understand strategies necessary to decrease work-related stress and CF tend to be more successful and can provide safe, competent patient care.

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## Dedication

This project is dedicated to my God and Savior Jesus Christ for His grace and favor, without God none of this would have been possible.

To my husband who has endured me being in school since the day we met, thank you for always being there for me throughout this journey with your love, support and understanding. I love you and thank you.

To my son thank you for challenging and motivating me to work hard and be the best role model I could be. I love you and hope I have inspired you the way you inspire me.

To my deceased dad you have always been my biggest cheerleader and you kept encouraging me even on days when I felt like giving up. Thank you for your love, and encouragement dad. I love you and miss you dearly.

To my mother, thank you for your love, support, and encouragement at every milestone. I love you and appreciate all you do.

To my sisters who gave me the inspiration to complete this doctoral program, you have been great role models in my life, and I appreciate and love you all.

To my deceased brother, your memory will forever live on in my heart. I love and miss you dearly.

To my friends thank you for your unwavering support at every phase of this doctoral program.

Lastly, to the amazing Nurse Practitioners and Nurses who constantly give their heart and soul to patient and family care, thank you.

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To all the wonderful NPs who provide care tirelessly and compassionately, I am grateful for the outstanding work you do. Our communities, healthcare system, and patients would suffer greatly without your help. Thank you for your sacrifice and dedication.

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## Section 1: Nature of the Project

### **Introduction**

Nurse Practitioners (NPs) across Canada continue to endure the escalating demands of increasing patient workloads, the deficiency of inadequate resources, and the paucity of leadership support (Canadian Nurses Association & Registered Nurses Association of Ontario (RNAO), 2018). The ongoing exposure to these and other challenges often contributes to a complex work environment that may result in compassion fatigue (CF) (Ruiz-Fernandez et al., 2020). CF can be defined as a “state of exhaustion and dysfunction- biologically, psychological and socially - as a result of prolonged exposure to compassion stress and all that it evokes” (Figley, 1995, p. 253). CF can result from working with patients experiencing trauma or suffering adversely impacts the NPs mental health and physical well-being (Cocker & Joss, 2016) and can affect patient care outcomes and professional judgment (Dewey, 2019). The need for education and prevention of CF is critical as the prevalence of CF is on the rise (Cross, 2019).

CF affects all health clinicians throughout the continuum of care (Todaro-Franceschi, 2019). The concept of CF has been examined with physicians and nurses extensively, providing significant evidence to address stress, trauma, and burnout (Cocker & Joss, 2016; Dewey, 2019; Glover-Stief et al., 2021; Henson, 2017; Singh et al., 2020). Despite the rigorous evidence, strategies that support NPs was broadly unrepresented in these studies (Singh et al., 2020). As the scope and practice of NPs in Ontario continue to expand to accommodate the disparities and the shortage of acute and

primary care providers (College of Nurses of Ontario, 2021), it is essential to assess and promote a culture of awareness of CF among this important group of providers.

NPs are an important part of healthcare delivery and given the importance of their role, are especially susceptible to developing compassion fatigue. NPs provide care to all specialties and populations across the lifespan and the added stressors of limited resources, increasing patient acuity and complexity, recurrent environmental changes, and leadership changes contribute to high levels of burnout and emotional exhaustion, which are components of compassion fatigue (Best et al., 2020) As a result, NPs can suffer adverse effects in their professional lives which can lead to job frustration, dissatisfaction, feelings of despair, and failure (Hamilton et al., 2016). Moreover, NPs may also demonstrate decreased productivity, leading to increased patient safety concerns and deterioration in one's mental health and well-being (Potter et al., 2013). As a result, CF can impact quality patient care, patient satisfaction, organizational instability, and overall health care costs (Harris & Quinn-Griffin, 2015).

One plausible strategy that many organizations may use to address the concern for CF is an educational intervention to provide NPs with knowledge of CF. Education on CF, identification of the signs and symptoms of CF, and healthy coping strategies can assist in the identification of CF as well as decreasing CF among this important group (Woonhwa & Kiser-Larson, 2016). Thus, the purpose of this DNP project was to determine if an educational intervention focused on the signs and symptoms of CF and healthy coping strategies increases knowledge and awareness among NPs working at an acute care organization.

### **Problem Statement**

NPs at the acute healthcare organization of interest currently grapple with the increasing stress levels, patient workloads, and burnout (Maunder et al., 2021). A recent Canadian study noted that the prevalence of CF was approximately 60% in NPs and other healthcare professionals (Maunder et al., 2021). As a result, this could have devastating and profound effects on patient, staff, and organizational outcomes. After meeting with pertinent stakeholders to review the current available data, the organization had attempted to address the concern of CF among NPs with little success. Hence there was a need for timely education and prevention strategies of compassion fatigue among NPs. Thus, the purpose of this DNP project was to determine if an educational intervention focused on the signs and symptoms of CF and healthy coping strategies increases knowledge and awareness among NPs working at an acute care organization.

### **Purpose**

The purpose of this DNP project was to determine if an educational intervention focused on the signs and symptoms of CF and healthy coping strategies increases knowledge and awareness among NPs working at an acute care organization. It was hoped that by increasing the NPs' knowledge and awareness of CF and healthy coping strategies, the increased knowledge would be translated into practice and will ultimately improve NP practice and result in positive patient, provider, and organizational outcomes.

### **Nature of the Doctoral Project**

To achieve the purpose of this staff education project, a thorough review of the current academic literature using the Walden University Library was conducted to inform the understanding of the present state of CF, staff education, identification of CF, the impact, evidence-based interventions, and evidence-based approaches to evaluate the proposed project. Databases included the Cumulative Index to Nursing and Allied Health Literature, Cochrane Library, ProQuest, PubMed, Elton Steven Company (EBSCO), and Google Scholar. Additionally, these databases were accessed for relevant evidence-based strategies on decreasing CF for NPs.

Following IRB approval, a group of stakeholders from the organization was identified to guide and support the project. First, an educational intervention based on the current literature was identified and/or created to meet the organization's needs. Along with the educational program, a pre-test and post-test was created to measure the knowledge attained by the content of the educational intervention. Once completed, the stakeholders reviewed and established the content validity of the educational program, pre-test, and post-test using the Item-Content Validity Index (I-CVI) and Scale-Content Validity Index (S-CVI) (Polit and Beck, 2006).

Once content validity was determined, flyers were advertised the educational intervention for the NPs working in the organization. The educational intervention was scheduled at two different times across the various shifts to maximize participation among the NPs. Participation was voluntary, and participants did not receive any incentive to attend. A total of 36 NPs attended the educational intervention. Based on

input from the stakeholders, it is estimated that 30 (80%) of the 38 NPs will attend the educational intervention. The educational intervention lasted a maximum of 30 to 45 minutes.

The participants were asked to complete a pre-test before the educational intervention. The pre-test included five demographic questions to describe the sample, 10 true/false questions to measure the knowledge of the participants, and one Likert scale question (range of 1 to 7 with 1 = “no awareness of compassion fatigue” and 7 = “great awareness of compassion fatigue”) to assess for awareness. Following the educational intervention, the post-test was given. The post-test contained the same ten true/false questions to assess for knowledge and the one Likert scale question to assess self-awareness. The participants used a unique identifier to match the pre-test to the post-test to determine if there was a difference in scores between the pre-and post-test, which served as a proxy for increased knowledge. No identifying information was collected, and all data was reported in the aggregate. Descriptive statistics was used to describe the sample, and inferential statistics used to determine if there is a statistical difference in pre-test and post-test scores regarding knowledge and awareness.

### **Significance**

Educating NPs on the signs and symptoms of CF and healthy coping strategies, will increase knowledge and awareness that will translate into practice and ultimately improve patient, provider, and organizational outcomes. The stakeholders impacted by addressing the concern of CF among NPs include the NPs, other providers, medical directors, physicians, allied health staff, patients, families, and the community.



Organizational stakeholders guided the project to address the organizational issue of CF that has the potential to achieve systematic organizational change. Providing education on the resources needed to support NPs in assessing early identification of signs and symptoms of CF will improve their health and well-being, improve patient outcomes, and decrease hospital costs (Henson, 2017).

Patients and families are also stakeholders in this project. NPs play a vitally important role in developing therapeutic relationships and managing patient care that translates into positive patient outcomes (Carlisle et al., 2020). If the concern of CF is not addressed, this phenomenon can result in poor patient outcomes, decreased patient satisfaction, patient mortality, increasing attrition rates, and costly consequences for healthcare organizations (Potter et al., 2010). Hence, the need for education and prevention of CF is critical (Cross, 2019).

This project has the potential to affect positive social change for NPs as it provides NPs with the assessment, knowledge, and tools needed to recognize early signs and symptoms and utilize appropriate coping strategies to reduce and prevent CF clinically. Nurses who are equipped and understand strategies necessary to decrease work-related stress and CF tend to be more successful and can provide safe, competent patient care (Wilkie, 2020). Additionally, improving awareness and educating healthcare leadership and organizations on CF and strategies to decrease CF of NPs can increase NP retention rates, improve patient care outcomes, implement organizational health and well-being policies, and decrease healthcare costs, all strategies that work towards enhancing positive social change.

## Summary

CF is a worrisome concern affecting NPs in various practice settings in Ontario (RNAO, 2018). NPs are often considered the backbone of the healthcare system and have significant responsibilities in managing patient care and leadership positions. An educational interventional approach has been identified to support NPs in understanding and identifying the early signs and symptoms of CF to increase their knowledge on healthy coping strategies geared towards decreasing CF. In Section 2 of this project, a conceptual model will be presented to guide education on identifying early signs and symptoms and coping strategies for preventing CF. The background information, context, and theoretical framework will provide further information on compassion fatigue and the educational intervention. The project's relevance to nursing practice and its application to the clinical setting is discussed.

## Section 2: Background and Context

### **Introduction**

The purpose of this DNP project was to determine if an educational intervention focused on the signs and symptoms of CF and healthy coping strategies increases knowledge and awareness among NPs working at an acute care organization. The practice-focused question that guided this project was: Will an educational intervention focused on the signs and symptoms of CF and healthy coping strategies increase NPs knowledge and awareness of CF? The question recognizes the importance of addressing NP knowledge on CF and promoting a healthy culture of awareness of CF among NPs to continue to be productive, provide quality patient care, and experience positive job satisfaction. This section will address the theories related to this project, the local background and context to the problem, and the roles of the DNP and DNP stakeholder teams.

### **Concepts, Models, and Theories**

The theoretical frameworks identified to support this DNP project included Watson's Theory of Human Caring and Benner's Novice to Expert Theory. The selected theories provided a foundation for developing increased knowledge and awareness on healthy coping strategies for managing CF among NPs. Watson's theory of human caring is utilized to create a support system for NPs, thus supporting them to identify CF by using healthy coping strategies and care for themselves while managing patient care and other leadership initiatives. Benner's theory offered a methodical approach of how NPs understand throughout the immediate phases from novice to expert. Educating NPs on CF

will allow NPs to go through the phases from novice to expert, identifying early signs and symptoms of CF and increasing their knowledge on healthy coping strategies resulting in positive outcomes. These conceptual models were critical to the success of this project.

### **Watson's Theory of Human Caring**

Watson's Theory of Human Caring nurtures human well-being and the nursing paradigm (Gazarian et al., 2020). Watson's theory provides important notions to promote compassion among nurses during arduous tasks and accountabilities (Lukose, 2011). This theory augments patient healing and promotes the nurse's well-being. Watson deemed the concept of caring as invaluable and affirmed that diseases perhaps could be healed, but ailments would persist because, without caring, health and well-being are not fully achieved (Tektaş & Çam, 2017). The notion of human caring affirms that individuals cannot be restored as objects. This notion supports that an individual is part of their self-environment. The environment is defined as relaxed, peaceful, and caring for mind-body-soul engagement with each other (Tektaş & Çam, 2017).

This theory highlights the significance of the nurse's self-actualization and well-being as an element of their self-care to ensure balance and harmony between health and illness of an individual (Watson, 2005). Watson acknowledged a holistic approach to caring for individuals; therefore, applying Watson's theory of human caring to the nursing practice will allow NPs to reassess their relationship with self as a core concept in identifying the signs and symptoms of CF. It will allow NPs to be assertive, express personal needs, and view work-life balance as achievable. This relationship with self is

essential for optimizing one's health and being a productive team member. Watson's theory is an appropriate approach.

### **Benner's Theory of Novice to Expert**

The Novice to Expert Model Benner generated from the Dreyfus Model (1980) of Skill Acquisition discusses how an individual develops new skills and knowledge from the novice to the expert stage (Davis & Maisano, 2016). Benner employed and expanded the Dreyfus' model to understand how nurses developed the expert ability, nursing knowledge, skill, clinical competence, and knowledge of patient care through complete academic training and experiential learning from novice to expert stage (Benner, 2001; Dreyfus, & Dreyfus, 1980). The Theory describes a nurse's development from novice (no practical experience); advanced beginner (adhering to instructions and emerging early understanding); competent (gaining mastery of productivity and capable clinical skills); proficient (demonstrate new abilities for changing situations); and expert (widespread knowledge and critical thinking skills and clinical experience), (Benner, 2001).

Benner's Theory provides a solid foundation for this project given that the theory aligns with the benefits of educating NPs in identifying the signs and symptoms of CF. This project hopes that once the NPs are presented with the educational intervention, they will understand the information and as a result, will translate the information into practice. Additionally, it is hoped that the NPs will cultivate prevention strategies for CF to preserve their health and well-being, which in turn, will assist in promoting patient, nurse, and organizational outcomes.

### **Relevance to Nursing Practice**

There are substantial empirical evidence that clinicians are at risk of developing CF following frequent and life-threatening secondary exposure to the trauma experiences of patients (Sprang et al., 2021; Wilkie, 2020). NPs caring for patients with acute and chronic diseases in any clinical setting can provoke a significant amount of occupational stress, burnout, fatigue, and mental exhaustion (Sorenson et al., 2016). CF needs to be addressed and prevented in NPs. Failing to examine the practitioners' emotions generated by their work can trigger clinicians to be vulnerable to emotional distress, detachment, burnout, and poor judgment (Sprang et al., 2021). Moreover, CF has negatively impacted practitioners causing increased sick days, decreased productivity and higher turnover (Sorenson et al., 2016).

Additionally, the concept of CF has been examined extensively with physicians and nurses and despite the rigorous evidence, the chasm to support NPs was broadly unrepresented in these studies (Singh et al., 2020). Previous strategies utilized to address CF historically focused on health promotion, inserting the obligation exclusively on the individual, without considering the role of workplace factors in the development, exacerbation of and maintenance of CF due to indirect trauma exposure (Sprang et al., 2019). It is crucial that healthcare leaders work toward fostering a clearer understanding of the vulnerability to CF (Sorenson et al., 2016).

This project addressed CF in NPs as it is critical and relevant to providing safe competent care, optimizing patient outcomes, and enhancing nurse practitioners' health and well-being. Little available research evidence clarifies the levels of CF, in NPs in

Canada. Further research is necessary to reduce the risk of developing CF. It will also address the organizational problem to effectively achieve systemic changes in identifying early signs and symptoms of CF and increasing their knowledge on healthy coping strategies resulting in positive outcomes. Furthermore, the results from this project will make a substantial contribution to nursing practice by providing evidence-based information to support NPs.

### **Local Background and Context**

A recent health and well-being assessment survey from the Registered Nurses of Ontario captured the responses of over 2100 nurses and NPs in Ontario, indicating that 95.7% of NPs reported high or very high emotional exhaustion and stress level in their organizations (RNAO, 2021). Moreover, the RNAO survey confirmed that 13.3% of the NPs reported contemplating leaving the nursing profession and 4% plan on retiring in Ontario (RNAO, 2021). Recently, the organizational leadership identified that within the acute care setting, several NPs had left the organization due to emotional exhaustion and secondary traumatic stress as indicated by their exit interviews. This has the potential to contribute to the national NP shortage and as well as affect patient, staff, and organizational outcomes on the local level. To address this concern and in collaboration with key organization stakeholders, it was determined that an educational program within the clinical setting on the early identification of signs and symptoms of CF and healthy coping strategies geared towards decreasing CF and improving health and well-being strategies would be beneficial for the NP provider group.

This educational program was needed to address the statistics and justify the practice problem. Moreover, if the issue of CE is not address it could result in devastating and profound effects would further impact nursing practice, patient care, the organization itself and the NP workforce (RNAO, 2021). Hence the need for timely education and prevention strategies of CF among NPs. Awareness of the challenges encountered by NPs could assist with the implementation of support systems and policy development within the organization to enhance the health and well-being of NPs (RNAO, 2021). The educational intervention will also benefit the organization by decreasing CF, improving nursing practice, patient, and organizational outcomes. Furthermore, it will inform interventions to decrease stigmatization and dangerous occurrence of CF, among clinicians (Sheppard, 2015). Progressively changing the social environment of nursing practice could eventually enhance the quality and safety of nursing care provided to patients.

Educating NPs on the signs and symptoms of CF and healthy coping strategies, will increase knowledge and awareness and will translate into practice and ultimately improve patient, provider, and organizational outcomes. Furthermore, education on CF will provide a foundation to enhance the NP's knowledge, awareness of signs and symptoms, preventative coping strategies, managing professional boundaries, avoiding countertransference, building resilience, and work-life balance (Nolte et al., 2017).

### **Search Strategy**

A comprehensive literature review was performed, exploring scholarly, full-text articles available online between 2010 and 2022. The databases utilized included the



Cumulative Index to Nursing and Allied Health Literature (CINAHL), Nursing and Health data bases, Medline, Ovid, Pub Med, and Google Scholar among other databases were accessed for relevant evidence-based strategies to, help identify CF in NPs. The following search terms were used: *compassion fatigue, burnout, evidence-based approaches to compassion fatigue, patient outcomes, healthcare leadership and secondary traumatic stress*. Articles depicting CF on NPs were selected for inclusion. After reviewing the articles, the following themes were identified across the articles: CF, burnout, secondary traumatic stress, workload, organizational considerations, leadership, strategies for CF and education. The following section will review each of these themes.

### **Compassion Fatigue (CF)**

CF is defined as a state of exhaustion - biologically, psychological, and socially because of prolonged exposure to stress and all that it induces and is described as the hardship that results from ongoing work-related stressors and lack of appropriate support (Figley, 2002). CF has been described as extreme stress and concerns with physical and emotional suffering experienced by the clinicians in relation to patient care and work-related pressure (Cocker & Joss, 2016). CF could alter an individual's capacity to contribute to a professional caring relationship due to a state of fatigue impacting the care provider's performance (Nolte et al., 2017). CF symptoms include anxiety, inability to cope, anger, boredom, desensitization, despair, and may display excessive compulsive behavior (Boyle, 2011). CF can be detected as a reaction that is cumulative however it can also become apparent from one extreme event (Mason et al., 2014).

**Burnout (BO)**

Burnout is described as incredulity, reification, and loss of motivation attributed to a staffing shortage, overtime hours, increasing patient needs, and demanding work environments (Portnoy, 2011). Burnout is a concept that is strongly associated with CF and secondary traumatic stress (Figley, 2002). While compassion fatigue and burnout can cause similar symptoms, it is vital to note that burnout is characterized as a reaction that progressively develops gradually, while CF can occur suddenly, both can negatively impact practitioners, patients, and the healthcare system (Woonhwa & Kiser-Larson, 2016). In contrast, burnout results from incremental stress from the pressures of daily life, caused by a diminution of one's ability to cope with the work environment while CF is attributed to vicarious trauma (Figley, 2002). Burnout emerges gradually overtime from workplace stressors, coworkers, leadership, and poor work culture and has a longer recovery time while CF has a rapid onset after experience of traumatic experience and has a quicker recovery time (Medland et al., 2004).

**Secondary Traumatic Stress**

Secondary traumatic stress is a concept that is strongly associated with CF that occurs as practitioners are exposed to individuals suffering from traumatic events (Dailey et al., 2015; Figley, 2002). Practitioners who suffer secondary traumatic stress develop adverse physical and psychological alterations because of remembering others' and their suffering or traumatic experiences (Rossi et al., 2012; Figley, 2002). Secondary traumatic stress is considered either a synonym for CF or a concept distinct from CF (Figley, 2002; Rossi et al., 2012).

**Workload**

Workload here refers to the NPs workload. Concerns with staffing shortages, complicated workloads and lack of support and resources associated to the environment were viewed by nurses and NPs as the cause of CF (Nolte et al., 2017). These work demands can be categorized in terms of physical workload and emotional exhaustion (Nolte et al., 2017). Observing endless suffering, grief, or despair of patients and families made nurses and NPs feel helpless, with a loss of hope and were identified as triggers for CF (Sheppard, 2015). Additionally, the evidence supports those vast workloads can activate CF affecting emotional health, making it difficult for organizations to retain staff (Nolte et al., 2017).

**Organizational Considerations in Compassion Fatigue**

There is a direct correlation between individuals and organizational environments. The literature suggest that efficient organizations support an environment that is conducive to the health and well-being of its employees (Tilcsik, 2014). Clinicians working in healthcare environments can be highly challenging but rewarding professionally. The challenges of working with patients and different teams can overwhelm even the most highly dedicated professional, leading to CF (Ruotsalainen et al., 2015). Other organizational aspects affecting CF comprises of role expectations and demands, job uncertainty, lack of job autonomy, increasing patient workloads, conflict, inadequate remuneration, lack organizational supports, lack of leadership support, staff shortage and inflexible policies (Ahanchian, et al., 2015; Kulkarni, et al., 2013;

Ruotsalainen, et al., 2015). Education on prevention strategies and supporting staff in understanding the effects of CF may help improve job retention (Meyer et al., 2015).

### **The Role of Organizational Leadership and Compassion Fatigue**

Lack of leadership support has been identified by numerous sources as a possible element that contributes to CF (Kulkarni, et al., 2013; Nolte et al., 2017; Ruotsalainen, et al., 2015). Organizational healthcare administrators and leaders ought to be well-informed and knowledgeable about the signs, symptoms, and strategies to manage CF. These include a blend of emotional, cognitive, spiritual, physical, or interpersonal reactions or actions (Dempsey & Reilly, 2016). Additionally, leaders can alleviate complications associated with CF with several interventions including patient care reassignments, mentoring programs, employee education on health and well-being, and creating a compassionate organizational culture (Crocker & Joss, 2016). Healthcare leaders should be aware that their presence with teams is welcomed and that leader's ought to value, support, and address concerns of staff to maintain a positive work environment as this will improve staff trust and satisfaction which contributes to reducing incidence of CF (Dempsey & Reilly, 2016). Recognizing CF, being proactive and implementing early interventions is crucial to averting CF in staff and organizations (Crocker & Joss, 2016).

### **Strategies that Reduce Compassion Fatigue**

There were several strategies that have been successful in managing CF. Several studies identified interventions that included supportive organizational environments, resiliency programs, mentor-mentee relationships, community meetings, debriefing

sessions mindfulness-based stress reduction, and self-care strategies for coping, boundary setting and work life balance (Ames et al., 2017; Crocker & Joss, 2016; Dempsey & Reilly, 2016; Nolte et al., 2017; Ruotsalainen, et al., 2015). Additional coping strategies consist of speaking with colleagues, reflection, self-evaluation, developing supportive personal relationships, spirituality and seeking counselling as needed (Nolte et al., 2017). Leaders and NPs play a vital role in managing CF. NPs should be supported in developing a planned approach for managing CF. Having increased knowledge and self-awareness will help to reduce CF (Nolte et al., 2017).

### **Educational Benefits**

In these unprecedented pandemic times along with other competing tasks, there have been challenges with the implementation of evidence-based practice within healthcare sectors limiting staff education (Maunder, et al., 2021). Because of the lack of inadequate knowledge and the inability to translate knowledge quickly and effectively in demanding practice environments clinicians are limited to effective evidence-based tools and can experience CF which negatively impact patients, and the healthcare system (Woonhwa & Kiser-Larson, 2016). As such, it is the hope that educating NPs on the signs and symptoms of CF and healthy coping strategies will increase knowledge and awareness of CF with the hope that the knowledge and awareness is translated into practice to ultimately promote positive patient, staff, and organizational outcomes.

### **Role of the DNP Student**

The role of the DNP graduate was to address the current and future practice concerns using robust scientific foundation to support practice. There is limited recent

evidence to support NPs who experience CF while providing care, as such education and awareness is paramount. Effective strategies needed to be employed and the DNP graduate is in an ideal position to accomplish this goal. They are known to be innovators that create viable practice models to meet organizational and patient needs (AACN, 2006). As a NP, I utilized my current organization to determine if an educational intervention on the signs and symptoms of CF and healthy coping strategies increases knowledge and awareness among NPs. Given that DNP graduates can translate the knowledge gained into practice, my goal was to create an educational intervention to change the current practice and bridge the educational gap by providing knowledge of evidence-based practice guidelines to help NPs identify CF and hope to see to changes the current practice environment. Following the completion of the project and evaluation of the data, the results and future recommendations will be presented to the stakeholders of the organization.

### **Role of the Project Team**

Once IRB approval was obtained, a team consisting of nurse leaders and other identified members were created to advise and guide the DNP throughout the project. The DNP team was critical to the success of this project and consist of the organization's professional practice leader, NP leader, current preceptor, and NP group. The team consisted of the organization's experts and given their skill, their primary responsible is to guide the student through the DNP process. For example, the DNP team members were contacted via email and asked to establish the content validity of the educational program, the pretest, and the posttest (Polit & Beck, 2006). By embracing a team

approach, the DNP team assisted in the development, implementation, and evaluation of myself and the DNP project.

### **Summary**

NPs have advanced knowledge and skills for nursing practice. The theoretical frameworks identified helped to develop and support the desired outcome of the DNP project. To alleviate CF experienced by NPs, this project educated NPs on the signs and symptoms of CF and healthy coping strategies. Section 3 will focus on collection and analysis of evidence.

### Section 3: Collection and Analysis of Evidence

#### **Introduction**

NPs across Canada continue to endure the escalating demands of increasing patient workloads, the deficiency of inadequate resources, and the paucity of leadership support (Canadian Nurses Association & Registered Nurses Association of Ontario (RNAO), 2018). The ongoing exposure to these and other challenges often contributes to a complex work environment that may result in CF (Ruiz-Fernandez et al., 2020). Additionally, CF can result from working with patients experiencing trauma or suffering adversely impacts the NP's mental health and physical well-being (Cocker & Joss, 2016) and can affect patient care outcomes and professional judgment (Dewey, 2019). The need for education and prevention of CF is critical as the prevalence of CF is on the rise (Cross, 2019). The purpose of this DNP project was to determine if an educational intervention focused on the signs and symptoms of CF and healthy coping strategies increases knowledge and awareness among NPs working at an acute care organization. It is hoped that by increasing the NPs' knowledge and awareness of CF and healthy coping strategies, the increased knowledge will be translated into practice and will ultimately improve NP practice and result in positive patient, provider, and organizational outcomes.

#### **Practice-Focused Question**

The practice focus question guiding this study was to determine if an educational intervention focused on the signs and symptoms of CF and healthy coping strategies increases knowledge and awareness among NPs working at an acute care organization.



This project has the potential to increase NPs knowledge on how to identify signs and symptoms of CF with the hope that the knowledge will then be translated into practice and ultimately, improve patient and organizational outcomes. Thus, the purpose of this DNP project was to determine if an educational intervention focused on the signs and symptoms of CF and healthy coping strategies increases knowledge and awareness among NPs working at an acute care organization. It is hoped that by increasing the NPs' knowledge and awareness of CF and healthy coping strategies, the increased knowledge will be translated into practice and will ultimately improve NP practice and result in positive patient, provider, and organizational outcomes.

### **Sources of Evidence**

The practice-focused question addressed the gap identified in nursing practice with the implementation of a staff education on CF in NPs, which has the potential to improve patient, staff, and organizational outcomes. A comprehensive literature review was performed, exploring scholarly, full-text articles available online between 2010 and 2022. The databases utilized included the Cumulative Index to Nursing and Allied Health Literature (CINAHL), Nursing and Health data bases, Medline, Ovid, Pub Med, and Google Scholar among other databases were accessed for relevant evidence-based strategies to, help identify CF in NPs. The following search terms were used: CF, burnout, evidence-based approaches to CF, patient outcomes, healthcare leadership and secondary traumatic stress. Articles depicting CF on NPs and healthcare clinicians were selected for inclusion.

### **Evidence Generated for the Doctoral Project**

A comprehensive review of current scholarly literature provided a solid understanding of the current state of the science, the significance of the problem, evidence-based interventions utilized to address the problem, and evidence-based approaches to evaluate the proposed project.

#### **Participants**

As identified by the organizational stakeholders, CF is an area of concern for the NP provider group working at the organization. Following Walden IRB approval and approval from the stakeholder team, a convenience sample of 60 NPs working at the organization was invited to participate in the educational intervention. The stakeholder team had estimated that 80% (46 of the 60 NPs) will attend the educational intervention. Flyers were posted in convenient locations to advertise the dates and times of the educational intervention for the NPs working in the organization. The educational intervention was scheduled times across the various shifts to maximize participation among the NPs. Participation in the intervention was voluntary and the participants did not receive any type of compensation to attend. Any attending participant had the option of leaving the intervention at any time if he or she was not comfortable in attending the intervention.

#### **Procedures**

Following IRB approval, a group of stakeholders were identified from the project site to guide and provide support for the project. First, I developed an educational intervention geared towards CF in NPs to meet the needs of NPs and the organization.

Along with the educational program, a pre-test and post-test was created to match the content of the educational intervention. Once completed, the stakeholders reviewed and established the content validity of the educational program, pre-test, and post-test using the Item-Content Validity Index (I-CVI) and Scale-Content Validity Index (S-CVI) (Polit and Beck, 2006). If content validity is not achieved, comments from the stakeholders will be collected and the materials will be edited until content validity is achieved.

Once content validity has been determined, NPs within the organization were invited to participate. The educational intervention was scheduled two different times across the various shifts to maximize participation among the NPs. It was estimated that 80% of the 60 available NPs will attend the educational intervention for a total of 46 NPs. Participation was voluntary, and participants did not receive any type of incentive to attend. The educational intervention lasted a maximum of 30 to 45 minutes. Prior to the educational intervention, the participants were asked to complete a pre-test. The pre-test included 5 demographic questions to describe the sample, 10 true/false questions to measure the knowledge of the participants, and one Likert scale question (range of 1 to 7 with 1 = no awareness of compassion fatigue and 7 = great awareness of compassion fatigue) to assess for awareness. Following the educational intervention, the post-test was given. The post-test contained the same 10 true/false questions to assess for knowledge and the one Likert scale question to assess for self-awareness.

### **IRB Protection**

It is vital to preserve the integrity of the participant's results. This DNP project was of minimal risk to the participants and human rights and ethical considerations was

protected for the subjects involved and for the duration of the study. A potential risk of participating in this survey could cause discomfort if pre-test and post-test scores are shared with leaders that may influence job performance or opportunities and in order to address these concerns. Walden IRB approval was obtained before the project's inception. Participation was voluntary, no identifying information were asked or collected, and all data was reported in the aggregate. Participants were informed of the purpose of the study and their right to withdraw without penalty at any time. All electronic questionnaires (pretest and posttest) will be identified by a unique identifier known only to the participant and after completion, files were stored on the student's password-protected computer and backed up on a password-protected cloud drive and will be kept for 5 years as per Walden University IRB regulations.

### **Analysis and Synthesis**

The participants used a unique identifier to match the pre-test to the post-test to determine if there is a difference in scores between the pre- and post-test which serves as a proxy for increased knowledge. Descriptive statistics (frequencies, means, and SDs) was used to describe the sample and inferential statistics was used to determine if there is a statistical difference in pre-test and post-test scores regarding knowledge and awareness. Appropriate statistical tests will be applied based on the variable's level and measure as well as the overall sample size.

### **Summary**

This section addressed the overall approach and rational of the project. The aim of the project was for NPs to be able to identify signs and symptoms and strategies to

prevent CF. Preliminary steps were taken to ensure that the proposed research topic and data collection method complied with all applicable ethical guidelines. The privacy and confidentiality of participants in the project was protected. The next step will include evaluating the effectiveness of the program through findings from the pre and post questionnaires. The final step involves result interpretation and application in the local clinical setting.

## Section 4: Findings and Recommendations

### **Introduction**

This doctoral project focused on educating NPs on factors associated with CF. In the current climate and these unprecedented pandemic times, NPs continue to respond and meet the demands of the longstanding healthcare deficiencies in Ontario (RNAO, 2021). Recent evidence demonstrated that NPs in Ontario are currently experiencing a substantial amount of emotional distress from COVID 19 mortality rates and burnout with workloads that are unsustainable (McGilton et al., 2021). As result of the current pandemic and increasing stress levels related to patient related trauma and burnout, the mental health and well-being of NPs are affected, increasing the prevalence of CF (RNAO, 2021).

It was crucial to inform NPs about the signs and symptoms of CF and healthy coping strategies to decrease the prolonged effects because of the frequent exposure to trauma. The evidence suggests that individuals working in helping professions such as healthcare workers are impacted by CF should be educated and supported (McGilton et al., 2021). As a result of CF and burnout a significant number of NPs has contemplated leaving the nursing profession in Ontario. This could cost hospitals up to \$110,000.00 for every NP resignation which adds to current nursing shortage, increasing healthcare costs and decreasing patient outcomes (Best et al., 2020; RNAO, 2021). Recently, at the project organization, several NPs left the organization due to emotional exhaustion and secondary traumatic stress as indicated by their exit interviews. This has the potential to contribute to the national NP shortage and as well as affect patient, staff, and

organizational outcomes on the local level. Awareness of the challenges encountered by NPs could assist with implementation of support systems to enhance the health and well-being of NPs. Hence the need for timely education and prevention strategies of CF among NPs was paramount.

This doctoral project addressed the gap in practice of the lack of awareness to provide NPs with CF education. The purpose of this DNP project was to determine if an educational intervention focused on the signs and symptoms of CF and healthy coping strategies increases knowledge and awareness among NPs working at an acute care organization. The practice focus question guiding this study was to determine if an educational intervention focused on the signs and symptoms of CF and healthy coping strategies increases knowledge and awareness among NPs working at an acute care organization? The project aimed to increase NPs' knowledge and awareness of CF and healthy coping strategies. This enhanced education is fundamental and translated into practice and to ultimately improve NP practice and result in positive patient, provider, and organizational outcomes.

Sources of evidence for this doctoral project were obtained through a comprehensive review of the literature that provided awareness of CF in NPs. Scholarly, full-text articles available online between 2010 and 2022 were explored and various databases were accessed for relevant evidence-based strategies to, help identify CF in NPs. Articles that depicted CF in NPs and healthcare clinicians were selected for inclusion. The results of the project-developed pretest and posttest knowledge and awareness questionnaire were designed on google forms. The purpose was to measure the

educational intervention's ability to increase NPs knowledge and awareness on the signs and symptoms of CF and healthy coping strategies. Descriptive statistics were used to describe the sample, and inferential statistics were used to determine if there was a difference in pretest and posttest scores regarding knowledge and awareness.

### **Findings and Implications**

Prior to the implementation of the educational intervention, the DNP project team stakeholders reviewed and established I-CVI and S-CVI the educational intervention, pre-test, and post-test content validity. Using a 4-point scale with a score of 1 identified as content not relevant, a score of 2 identified as content slightly relevant, a score of 3 identified as content relevant, and a score of 4 identified as content highly relevant, all stakeholders identified every item as either a 3 or a 4. Utilizing the S-CVI/Universal 33 Agreement (UA) approach proposed by Polit and Beck (2006), all DNP project team stakeholders rated every item as relevant (either a 3 or a 4 on the 4-point scale). The Scale – Content Validity Index (S-CVI) (Polit & Beck, 2006) for the educational intervention was 1.0; for the pretest, 1.0, and 1.0 for the posttest meeting an acceptable content validity rating for both item level and scale level content validity (Polit & Beck, 2006).

Flyers and an email invitation email was sent to the NP group and asked to attend the educational intervention on Educating Nurse Practitioners on Factors Associated with Compassion Fatigue. The NPs were asked to complete both pretest and posttest questionnaires via google link. The educational intervention was conducted via webinar, rather than in person, due to the COVID-19 pandemic. Two educational



sessions were provided to allow multiple opportunities to accommodate the NPs schedules. Once a participant attended the educational intervention, prior to the intervention they were asked to complete a pretest and post intervention they were asked to complete a post test. Using a unique identifier, known only to the participant, for each section of information (pretest and posttest), provided continued anonymity throughout the process.

### **Findings**

A total of thirty-five ( $n = 35$ ) nurse practitioners were recruited and voluntarily agreed to participate in the educational intervention geared towards CF and healthy strategies to address CF. Eighty-six percent ( $n = 30$ ) of the participants were female; almost nine percent (8.6%,  $n = 3$ ) were male; and two (5.7%) identified themselves as non-binary. The average age of the participants was 42.43 ( $SD = 9.55$ ) with a range of 27 to 61 years of age. The majority (94.3%,  $n = 33$ ) of the participants were master's prepared with two of the participants (5.7%) having a doctoral degree. The average years in nursing practice was 15.83 ( $SD = 6.78$ ) years with a range of 5 to 30 years; and the average time in the participant's current position was 5.09 ( $SD = 3.17$ ) years with a range of 1 to 10 years.

Upon completion of the educational intervention, the pretest and posttest were reviewed and scored for number of correct answers. The average pretest score was 5.77 ( $SD = 1.37$ ) with a range of 4 to 9 and the average posttest score was 9.54 ( $SD = 0.65$ ) with a range of 8 to 10. Using a paired t-test to estimate the data, there was a statistically significant difference in pretest and posttest scores ( $t = -14.71$ ,  $p < 0.001$ ) indicating an

increase in knowledge. Additionally, prior to the educational intervention, the participants were asked to rate their awareness of CF factors, signs and symptoms of CF, and healthy strategies to address CF on a scale of 1 to 7 with 1 = no awareness and 7 = full awareness. The average pretest score of awareness of CF factors was 1.80 (SD = 0.63) and the average posttest score of awareness of CF factors was 6.94 (SD = 0.23). Using a paired t-test to estimate the data, there was a statistically significant difference in pretest awareness and posttest awareness of CF factors ( $t = -50.61, p < 0.001$ ) indicating an increase in awareness in CF factors. The average pretest score of awareness of signs and symptoms of CF was 1.94 (SD = 0.59) and the average posttest score of awareness of signs and symptoms of CF was 6.89 (SD = 0.32). Using a paired t-test to estimate the data, there was a statistically significant difference in pretest awareness and posttest awareness of signs and symptoms of CF ( $t = -54.23, p < 0.001$ ) indicating an increase in awareness of signs and symptoms of CF. The average pretest score of awareness of healthy strategies to address CF was 1.97 (SD = 0.62) and the average posttest score of awareness of CF factors was 6.89 (SD = 0.32). Using a paired t-test to estimate the data, there was a statistically significant difference in pretest awareness and posttest awareness of healthy strategies to address CF ( $t = -51.72, p < 0.001$ ) indicating an increase in awareness of healthy strategies to address CF. (Table 1)

**Table 1***Descriptive and Inferential Statistics (N = 35)*

	Frequency	(%)	Mean (SD)	Range
<b>Gender</b>				
Male	3	8.6		
Female	30	85.7		
Non-Binary	2	5.7		
<b>Education</b>				
Masters	33	94.3		
Doctoral	2	5.7		
<b>Age</b>			42.43 (9.55)	27 – 61
<b>Years in Nursing</b>			15.83 (6.78)	5 – 30
<b>Years in Current Position</b>			5.09 (1.37)	1 – 10
<b>Test Scores*</b>				
Pretest			5.77 (1.37)	4 – 9
Posttest			9.54 (0.66)	8 – 10
<b>Factors of CF*</b>				
Pretest			1.80 (0.63)	1 – 3
Posttest			6.94 (0.24)	6 – 7
<b>Signs and Symptoms of CF*</b>				
Pretest			1.94 (0.59)	1 – 3
Posttest			6.89 (0.32)	6 – 7
<b>Healthy Strategies of CF*</b>				
Pretest			1.97 (0.62)	1 – 3
Posttest			6.89 (0.32)	6 – 7

\*Statistically significant at  $p < 0.001$ .

## **Implications**

CF is often described as the stress resulting from helping others (Meyer et al., 2015). Based on the project findings, there are several implications for nurses. First, with an increase in knowledge and awareness, it is hoped that the knowledge and awareness is translated into practice which may result in improved nurse satisfaction and outcomes. Identification of the signs and symptoms of CF and healthy coping strategies has demonstrated success in promoting NPs awareness and knowledge which may then prevent or alleviate the negative effects of the CF on the providers' physical and emotional health (Cross, 2019). The results of this doctoral project align well with the literature, supporting the positive outcomes of knowledge acquisition, increased understanding of the signs and symptoms of CF, and coping strategies to mitigate the effects of CF on nurses.

The second implication from this project is with that the increased knowledge and awareness may result in a healthy working environment. The evidence implies that efficient organizations support an environment that is conducive to the health and well-being of its employees (Tilcsik, 2014). The challenges of working with patients can overwhelm clinicians, leading to CF (Ruotsalainen et al., 2015). Organizational healthcare administrators and leaders ought to be well-informed and knowledgeable about the signs, symptoms, and strategies to manage CF. Therefore, education on prevention strategies and supporting staff in understanding the effects of CF may help improve job retention, healthcare, and overall organizational outcomes (Meyer et al., 2015).

Additionally, the evidence supports that an educational intervention resulting in an increase in knowledge and awareness demonstrates the importance of educational workshops on CF, resiliency programs, mentor-mentee relationships, community meetings, debriefing sessions mindfulness-based stress reduction, and self-care strategies for coping, boundary setting and work life balance (Ames et al., 2017; Crocker & Joss, 2016; Dempsey & Reilly, 2016; Nolte et al., 2017; Ruotsalainen, et al., 2015). Given this, these findings generated from this doctoral project are consistent and contribute to the existing scientific foundation for NPs education as an ideal intervention to increase knowledge and awareness of the signs and symptoms of CF and healthy coping strategies. These findings are directly aligned with the DNP Essential VIII - the advanced nursing practice because it builds new knowledge within the nursing discipline.

Similarly, this doctoral project has implications for NP education. In these unprecedented times, there have been challenges with the implementation staff education (Maunder, et al., 2021). The lack of inadequate knowledge and the inability to translate knowledge quickly and effectively in demanding practice environments can lead to CF which negatively impact providers, patients, and the healthcare system (Woonhwa & Kiser-Larson, 2016). The findings from my doctoral project have shown that the educational intervention increased the NPs knowledge and awareness of the signs and symptoms of CF and healthy coping strategies. Education on CF is an effective tool to improving the health and well-being of NPs, fostering and empowering positive patient outcomes (Woonhwa & Kiser-Larson, 2016).

Finally, this doctoral project supports Walden University's vision for affecting positive social change. This project provided NPs with the assessment, knowledge, and tools needed to recognize early signs and symptoms and utilize appropriate coping strategies to reduce and prevent CF clinically. Nurses who are equipped and understand strategies necessary to decrease work-related stress and CF tend to be more successful and can provide safe, competent patient care (Wilkie, 2020). Additionally, improving awareness and educating NPs and organizations on CF and strategies to decrease CF of NPs can increase NP retention rates, improve patient care outcomes, implement organizational health and well-being policies, and decrease healthcare costs. These are all strategies that supports positive social change.

### **Recommendations**

The doctoral project findings demonstrated that an educational intervention increased knowledge and awareness on the signs and symptoms of CF and healthy coping strategies among NPs. This addresses the gap in practice related to knowledge and awareness of CF education and assisted with closing this gap in practice. Thus, it is recommended to include educational intervention strategies on identifying and managing CF at healthcare organizations where NPs are employed. Additionally, the educational program ought to be updated periodically with current evidence-based information on CF. Moreover, the educational interventions should add the NPs professional development, skillset, and knowledge of CF. From these recommendations, it is hoped that organization will benefit from these strategies in terms of positive patient, provider, and organizational outcomes.

### **Contribution of the Doctoral Project Team**

The doctoral project team consisted of members with diverse backgrounds that included the Director of Operations and NP lead, the Education Specialist, the Well-being Specialist, and the organizational REB team who provided executive support guidance and approval to ensure the successful development and implementation of the educational project. The stakeholders were provided with an overview of the relevant information and evidence on the project. Together, they established the educational programs content validity, pretest, and posttest and actively contributed to all phases of the project. Each team member-maintained respect and open communication as we engaged in meaningful discussions to facilitate the success of the program and ensure the educational intervention was aligned with the organization's vision and policy. The project team was committed to achieving the goal of the project.

### **Strengths and Limitations of the Project**

The key strength of the project was found in the passion and enthusiasm of the NPs who participated in the educational intervention. Moreover, the solid support from organizational stakeholders and the leadership team to create and execute the doctoral project added additional strength. Lastly, the improvement in knowledge and awareness is invaluable to develop the NPs growth and healthy work environments to improve patient care.

Despite these strengths, there were some limitations to the project. First, the NPs that were targeted for the project were recruited from a convenience sample of NPs belonging to a single organization, thus the results may not be generalizable to other

professional organizations. Furthermore, due to a surge in pandemic cases and staff shortage, this educational intervention was moved from an in-person group approach to an online workshop via zoom. This may have impacted the attentiveness of some participants. Finally, the sample size of 35 participants may not adequately represent the general NP population of the project hospital. It is recommended that this project be replicated with a larger sample, perhaps across multiple hospital organizations, to validate results of the project findings.

### **Summary**

The findings of this doctoral project were validated as the project findings suggested an increase in the NPs knowledge and awareness on the signs and symptoms of CF and healthy coping strategies. This DNP project reflects the need to improve the knowledge and awareness of CF. Educational intervention for the NPs to improve knowledge and awareness on the signs and symptoms of CF and healthy coping strategies has the potential to improve health outcomes, thus promoting and improving social change. This section has reviewed the findings, implications, strengths, limitations, and recommendations for the DNP project. Further, recommendations for project replication and additional interventions have been identified. Section 5 will address the dissemination plan as well as practitioner self-assessment.



## Section 5: Dissemination Plan

In Section 4, I demonstrated the effectiveness of educating NPs on the signs and symptoms of CF and healthy coping strategies. This section will provide an update on the plans for dissemination, a self-assessment as a scholar, a practitioner, a project manager, and my professional goals.

### **Dissemination**

The process and findings of this educational intervention will be disseminated through presentations at the project organization and at various other organizations. Moreover, the goal is to disseminate my project after graduation through journal publications in nursing leadership and present at professional conferences and webinars. The dissemination of the findings is expected to increase NPs knowledge on the signs and symptoms of CF and healthy coping strategies.

### **Analysis of Self**

#### **As a Practitioner**

The Doctor of Nursing Practice (DNP) journey involved comprehensive processes and time commitment. As a nurse practitioner, I was able to utilize my clinical experience, expertise, skillset, and knowledge to translate research into evidence while completing my project. My goal was to educate NPs on the signs and symptoms of CF and healthy coping strategies with the hope that the knowledge and awareness is translated into practice to ultimately improve NPs well-being and promote positive patient, staff, and organizational outcomes. The project demonstrated that there was an increase in knowledge and awareness in recognizing signs and symptoms of CF and

healthy coping strategies. Additionally, I collaborated and communicated with organizational stakeholders and the project team throughout this development and was able to acquire the necessary skills and knowledge needed to be successful in this process. My long-term goal is to continue to identify opportunities to ensure the health and well-being of NPs, staff, patients, and organizations.

### **As a Scholar**

Reflecting on the DNP process and as a scholar, I agree that the role of the DNP is the translation of current evidence into practice. My progression in the nursing scholar role was significantly improved throughout the DNP program. I was able to demonstrate how the evidence (an increase in knowledge and awareness) can transform practice and improve health outcomes and well-being. This scholarly aptitude has been critical to my success and is essential as I continue to facilitate leadership developments, strategic planning, extensive research of concepts and theories and engage stakeholders on improving staff and patients' health and well-being outcomes. Throughout this process of development and implementation of the project I exhibited effective leadership skills to strengthen practice and health care delivery as I engaged with my DNP committee and stakeholders. These skills have expanded my participatory perspective and shaped a pathway for future leadership opportunities where I can continue my professional development as nurse leader.

### **As a Project Manager**

As the project manager, developing and designing the project required commitment and at times were challenging. I was able to enhance my leadership skills as

I learned to balance time commitments, guide processes, and offer directions, organize tasks, become adaptable with the planning implementation of the project. I appreciated the importance of effective communication and multitasking abilities. I also learned that adjustments throughout this project requires, flexibility, determination, and perseverance to achieving the goals I set out to accomplish. This project has instilled in me a great sense of pride and fulfillment knowing that the findings will serve as a contribution to improving NPs knowledge and awareness on the signs and symptoms of CF and healthy coping strategies with the goal to ultimately improve NPs well-being and promote positive patient, staff, and organizational outcomes.

### **Completion of Project**

Completing this doctoral project has allowed me to utilize evidence-based research to enhance my knowledge to improve nursing practice and patient outcomes from a scholarly perspective. The scope of the project and its results demonstrated the value of educating nurse practitioners on factors associated with CF. This project provided the foundation for further study concerning CF and its impact on NPs patients and the organization.

### **Summary**

CF is a dangerous condition that affects NPs in various specialties. NPs across Canada, currently struggle with the increasing prevalence of CF, stress levels, patient workloads, and burnout (Maunder, et al., 2021). NPs are an important part of healthcare delivery and given the importance of their role, are especially susceptible to developing CF. Moreover, the nature of their patient population, that includes caring for ill patients

makes them vulnerable to CF. This project was developed and implemented to increase knowledge and awareness on the signs and symptoms of CF and healthy coping strategies among NPs. Pretest and post-test questions determined that the educational interventions were effective. The test results

demonstrated an increase in knowledge and awareness on the signs and symptoms of CF and healthy coping strategies among NPs. This new knowledge can be employed by other organizations with similar problems to improve practice and nursing knowledge.

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