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Building a Compassion Fatigue Toolkit

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Walden University

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Stephanie Correa

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2019

Abstract

Development of a Compassion Fatigue Tool Kit

by

Stephanie Correa

MSN, Walden University, 2012

Project Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Nursing Practice

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August 2019

Abstract

Compassion is an important tenet of nursing care delivery. When compassion is compromised, such as with compassion fatigue (CF), not only is patient care compromised, but also caregivers can be physically and psychologically affected, resulting in stress and burnout. The purpose of this project was to create a web-based educational toolkit focused on prevention of CF, establish the content validity of the elements in this toolkit, and make recommendations regarding its implementation and sustainability. Watson's theory of human caring guided this project. Ten experts with at least 10 years of experience and CF knowledge, a bachelor's degree in nursing, and certification or leadership experience validated the toolkit content using a content validity index. Ten toolkit elements were evaluated on a scale of 0 to 1, with a score of 0.79 or greater indicating relevance to content. Items meeting the score included the definition of CF, signs and symptoms, resources to prevent CF, the CF pledge, tools and links, and the goal and mission of the toolkit. A toolkit on CF might impact social change by providing resources for nurses to recognize and prevent CF, thus improving patient care.

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Section 1: Nature of the Project

Introduction

Empathy is a core component in basic caregiving and nursing care; however, nurses may care to the point of self-neglect or neglect of compassion for others. This deficit is known as compassion fatigue (CF). Compassion fatigue has been described as the natural consequent behaviors and emotions resulting from knowing about a traumatizing event experienced by a significant other; stress results from helping, or wanting to help, a traumatized or suffering person (Sabo, 2011). Thus, the cost of providing empathic nursing care can be caregiver compassion fatigue. Often a nurse with compassion fatigue needs help and guidance from a mentor, consultant, supervisor, or professional counselor to assist with a personalized assessment and intervention processes (Lombardo & Eyre, 2011).

Previous studies have addressed compassion fatigue and its causes. Joinson (1992), who was first to coin the phrase “compassion fatigue,” described the phenomenon as a unique form of burnout that affects people in caregiving professions like nurses. Figley (1995) defined it as a secondary traumatic stress reaction resulting from helping or desiring to help a person suffering from traumatic events. Further, Abendroth (2011) posited that its symptomology is nearly identical to that of post-traumatic stress disorder, though compassion fatigue applies to caregivers who were affected by the trauma of others. With these elements, compassion fatigue can be summarized as secondary stress resulting from a caregiver’s desire to ease suffering in others, resulting in a variety of

symptoms for a caregiver including some that are psychological and some that are physiological.

Nursing and Compassion Fatigue

Because caring is one of the foundational tenets of nursing, the literature has linked compassion fatigue to the nursing profession. There have been studies aimed at identifying nurses affected by compassion fatigue as well as the symptoms and underlying causes of compassion fatigue. For example, Yoder (2010) found that some nurses were at high risk for compassion fatigue based on certain beliefs that their actions would not matter, workload overload, and personal issues such as inexperience or inadequate energy. There are many challenges including taking care of patients with chronic conditions and frequent admissions, which leads to nurses developing a caring relationship with these patients. However, compassion fatigue impairs a nurse from care, as it has been associated with depersonalization and suboptimal patient care (El-Bar, Levy, Wald, & Biderman, 2013).

Nursing in Specialty Areas

Specialty care areas in nursing can lead to development of compassion fatigue. Hospice nurses, nurses caring for children with chronic illnesses, and nurses with personal triggers such as over-involvement, unrealistic self-expectations, personal commitments, and personal crises tend to develop compassion fatigue (Edmonds, 2010). Compassion fatigue may occur in situations when an individual cannot be rescued or saved from harm and may result in the nurse feeling guilt or distress.

Compassion fatigue is seen primarily in oncology and hospice nursing, where death and dying is prevalent, or the intensive care and emergency room setting, where trying to prevent death causes higher stress levels. Higher stress environments are more prone to compassion fatigue with the underlying causes grounded in aspects of the therapeutic relationship, specifically empathy and engagement, which are fundamental components of nursing and play a role in the onset of the stress (Sabo, 2011). In intensive care units and emergency rooms, stress is high, and most nurses in these areas have good coping skills; however, this can sometimes mask symptoms of compassion fatigue, as nurses may feel that they have to not show their stress. This ideal of not letting anyone see the effects of fatigue can lead to burnout.

Compassion Fatigue and the Link to Burnout

Job stress and cumulative exposure to traumatic events experienced by critical care nurses can lead to psychological distress and burnout as well as posttraumatic stress disorder (Mealer, Jones, & Meek, 2017). As compassion fatigue can be a precursor to burnout, it is important to know the signs and symptoms. Burnout can exhibit physical and psychologic symptoms; burnout has consistently been described as involving emotional exhaustion, depersonalization, and reduced personal accomplishment (Sabo, 2011). These factors relate to the therapeutic relationship in nursing in addition to the other factors that research have identified: work–life issues such as lack of resources, leadership, and shared values (Sabo, 2011). Compassion fatigue and burnout also lead to nursing turnover related, which is a growing concern. For instance, several factors are related to young registered nurses' intentions to leave the profession, including an

imbalance of effort and reward, high psychological demands, and higher job strain (Flinkman, Isopahkala-Bouret, Salanterä, 2013). Thus, burnout is a cause for concern among nurses and the nursing profession.

Not only is burnout a threat to the bedside nurse but leaders and managers in the organization as well. Leaders must have knowledge and application of tactics grounded in research to address this issue in their staff. Knowing critical elements and how to support staff in a proactive way to decrease exhaustion, increase in personal and genuine care, and provide positive reinforcement of work can decrease incidence of burnout. Additionally, using tools such as this toolkit can assist leaders in preventing burnout and changing compassion fatigue to compassion satisfaction.

Compassion fatigue can be a concern in multiple areas where care is given. Although the stressors are different in various specialties of nursing, the reaction is similar. Multiple environmental stressors, such as expanding workload and long hours, coupled with the need to respond to complex patient needs can lead to compassion fatigue. Compassion fatigue can occur any nursing environment, though most literature supports compassion fatigue as being more from higher stress areas such as emergency room nurses.

Problem Statement

The problem identified in this Doctor of Nursing (DNP) project is the prevalence of compassion fatigue among nurses, especially those involved in trauma, intensive care, and hospice care. It is important for nurses to become knowledgeable about compassion fatigue symptoms and intervention strategies and to develop a personal plan of care to

and achieve a healthy work–life balance (Lombardo & Eyre, 2011). Many groups of nurses can be under stress causing symptoms of compassion fatigue, but there are certain groups of nurses that are more prone to this fatigue due to higher stress with trauma and intensive care as well as care of patients who are in end of life in hospice care (Sabo, 2011). This toolkit is web-based for easy access and contains educational components such as what compassion fatigue is, who is affected, and signs and symptoms. A schematic of the webpage is outlined in Appendix A.

Purpose Statement

The purpose of this project was to develop a compassion fatigue toolkit and establish validity of the elements of the toolkit by using a panel of experts. The objectives of this scholarly project were to:

- Assess and analyze evidence-based strategies in literature and present in the toolkit to combat CF
- Establish the content validity of the elements through a panel of experts.
- Create recommendations for the implementation of the toolkit into nursing practice.

Nature of the Doctoral Project

The search for evidence was conducted electronically through CINAHL, Medline, Walden University Library, and PubMed. In addition, information was obtained through scholarly works including textbooks. A total of 37 articles were reviewed and utilized. Articles that were over 10 years old were excluded. The terms used for the Internet search included *compassion fatigue*, *compassion fatigue in nursing*, *compassion burnout*,

compassion satisfaction, resources for compassion fatigue, and scholarly articles for compassion fatigue. A total of 27 articles were used that exhibited compassion fatigue signs, symptoms, and treatment strategies.

Significance of Educational Toolkit on Compassion Fatigue

In developing programs that deal with human feelings and emotions, especially in the nursing population, it is important to assess the motivations, feelings, and responses of the population. For example, pro-health behavior change may be motivated by the needs that drive social interaction (Garrin, 2014). With successful social change, there must be a buy-in of stakeholders as to the importance of the program and objectives. They must not only understand it but feel its importance and benefit to them as individuals and the broader scope of caregivers along the continuum of care. To formulate goals and objectives to combat compassion fatigue, it is important to establish caring as a core belief in the caregiver profession and identify what leads to fatigue. Ideally, these goals will encourage social change with recognition and treatment of this fatigue in caregivers.

Support for engagement in health promotion behaviors may contribute to nurses' well-being in counteracting compassion fatigue and burnout and enhancing compassion satisfaction. (Neville & Cole, 2013). Education specific to nursing specialties are needed as well as discussion and awareness regarding compassion fatigue. Nurses should have opportunities to talk about their stress and to plan how to cope with it (Yoder, 2010). To provide holistic elements or education, and a way to network and discuss this important topic, an educational toolkit is warranted. Development and implementation of the

toolkit is about disseminating best available evidence about projects and lessons that could be drawn from them (Chirewa, 2011). To prevent compassion fatigue and burnout from occurring, the approach to this problem was to recruit a panel of experts with certain evidence-based criteria to measure the importance of the elements of the toolkit. With the information garnered from these experts, the toolkit was formulated and built into a web-based toolkit. Though inequality has made it difficult to motivate people that change is possible (Kennedy, 2014), devising an educational toolkit to educate on compassion fatigue that is web-based can affect nurses on a global scale, as it can reach anyone who has a computer.

Summary

Compassion fatigue is a combination of physical, emotional, and spiritual depletion associated with caring for patients in significant emotional pain and physical distress (Lombardo & Eyre, 2011). There has been research to study this phenomenon, but little research has been conducted on adoption of an evidence-based toolkit to prevent or treat compassion fatigue. Formulating a toolkit and establishing content validity of this toolkit to address this gap related to compassion fatigue may provide nurses with evidence-based education items to increase awareness and convert symptoms of compassion fatigue to compassion satisfaction. I involved necessary stakeholders for the success of the toolkit, and the cultural significance of the program was assessed for potential limitations and barriers. The toolkit has been explained in this section, and the evidence has been presented to establish that the toolkit was needed. Section 2 will include the background, context, and theories related to the topic of this project.

Section 2: Background and Context

Introduction

The problem identified in this DNP project was the prevalence of compassion fatigue among nurses, especially those involved in trauma, intensive care, and hospice care. The purpose of this project was to develop a web-based compassion fatigue toolkit to educate nurses on strategies to prevent compassion fatigue in the workplace.

Concepts, Models, and Theories

The conceptual model of this project is encompassed by Watson's Caritas factors. Based on this model, caring can be viewed as a science, which means that scientific development and metrics can be quantified to convince the caregiver of the importance of altruistic values, practicing loving kindness, being sensitive to self and others, and instilling faith and hope in others (Watson, 2008). Without viewing caring as the essence of nursing (Watson, 2008), there is risk for compassion fatigue among nurses, especially in situations that are intensive, emergent, or concern prolonged death and dying.

Watson's theory of human caring (Neil, 2002; Watson, 2010) is also grounded in the basic empathic relationship between the nurse and the patient; this theory advocates for relationship-based nursing (Lombardo & Eyre, 2011). In the conceptual model of care, the patient is the center, with 10 Caritas factors surrounding the core. Caritas factors are a holistic manifestation of caring as a science, which encompasses helping trusting relationships, altruistic behaviors, positive and negative feelings, and existential well-being. The factors pertinent to this study are formation of humanistic–altruistic system of values, instillation of faith and hope, development of a helping-trusting human

caring relationship and provision for a supportive, protective, and or corrective mental, physical, spiritual and societal physical environment (Watson, 2008). Application of the 10 Caritas processes offers nurses and patients the opportunity to increase satisfaction in meaningful ways (Clark, 2016). Watson's theory not only has application for care of the patient but care of an individual's self and allowance for existential and phenomenal forces to cultivate and promote caring as a science. Whether introspective or altruistic to others, nurses must identify their core value, beliefs, and know themselves to reach a level of compassion for others.

As compassion is a core belief in caring, Watson's conceptual theory and theoretical framework that encompass the caritas factors was used as an underpinning of science to support the panel of experts who provided content validity of the toolkit in understanding compassionate caregiving. Watson's theory is a nursing framework that is in line with nursing, health promotion, and caring and compassion.

Relevance to Nursing Practice

Compassion fatigue affected the overall well-being of nurses, who are significant to care delivery in health care. There are 3.1 million registered nurses in the United States; they comprise the largest group of healthcare workers in the country (Lombardo & Eyre, 2011). Compassion fatigue in this group is often triggered by patient care situations in which nurses believe that their actions will not make a difference. Along with these feelings, many nurses have reported experiencing problems with the system including high patient census, heavy patient assignments, high acuity, overtime, and extra

workdays in addition to personal issues like inexperience or inadequate energy (Edmunds, 2010).

Trauma Nurses

Certain areas of nursing are more sensitive to development of compassion fatigue. Although the exposure to traumatic events increases with years of nursing experience, older emergency room nurses have fewer symptoms of stress (Hinderer et al., 2014). However, exposure to traumatic events, nurses' reaction to stressors, coping strategies, and personal and environmental characteristics affect stress reactions and compassion fatigue. It is not just one item or feeling but could be a synergy of situations and feeling that drive a caregiver to compassion fatigue. Some suggest that it is level of experience that encourages caring, from an "old school" way of thinking when technology was not so prevalent.

Oncology Nursing

A lack of evidence-based interventions has been shown to be effective for either the prevention or the treatment of compassion fatigue or burnout in health care providers caring for persons with cancer. Often oncology nurses are more involved with their patients, providing ongoing support in long term and sometimes chronic situations. To provide preventative resources for these oncology nurses, preliminary investigations and anecdotal and empirical reports offer suggestions such as communication skills training, stress management workshops, self-care behavior coaching, individual counseling, mentoring programs, staff retreats, and sabbaticals (Emanuel, Ferris, von Gunten & Von Roenn, 2011). These strategies can create good coping mechanisms.

Intensive Care Nursing

In intensive care nursing, there is a variety of stress on the patients as well as families. Intensive care unit nursing is demanding both physically and mentally and can be overwhelming even to the most senior nurse. In one study, findings revealed that 57.9% of intensive care unit nurses are at the high level of risk for CF and 56.1% are at the high level of risk for burnout, whereas 61.5% of participants reported low potential for compassion satisfaction (Mangoulia, Fildissis, Koukia, Alevizopoulos, & Katostaras, 2011). Due to this high stress environment, extra caution should be taken for identification of triggers that lead nurses to CF. A focus on what could be done to decrease and handle stressors in this environment, including the education that would be in a toolkit of information, can make a difference in the development of CF. Seeking out a mentor, supervisor, experienced nurse, or a charge nurse who understands the norms and expectations of the unit may assist in identifying strategies that will help cope with the current work situation (Lombardo & Eyre, 2011).

General Nursing

Compassion levels are inversely correlated with burnout and compassion fatigue, although some groups may be at higher risk than others (Gillies et al, 2014). There have been many nursing accounts in various situations about the feelings surrounding care, irritability at situations, and emotional toll on giving of care with difficult situations, complex patient family problems, and ethical dilemmas. To develop adequate preventive strategies for emotional distress, it is essential to know the individual's incentive to choose a caring profession (vanMol, Companje, Benoit, Bakker, & Nijkamp, 2015).

Empathy

Compassion fatigue is caused by empathy. It is the natural consequence of stress resulting from caring for and helping traumatized or suffering people (Portnoy, 2011). In compassion fatigue, this line between the empathetic relationships between patient and nurse is blurred causing symptomatology of CF in the caregiver. In acute or chronic situations where patients are emotionally and physically compromised, empathy molds into sympathy and the caregiver takes on the emotions and sorrow of the patient. Professional nursing practice thrives within the context of a caring, empathetic relationship between nurse and patient. However, this necessary empathetic relationship can also contribute to compassion fatigue if conscious steps are not taken to avoid and/or lessen this condition (Lombardo & Eyre, 2011). In different areas of nursing, there are different levels of attachment and longer relationships that could be prone to compassion fatigue should education not be available to address this topic. Compassion fatigue is not the only issue in caring situations that is concerning.

Burnout

Particularly, in the past 35 years, the prevalence of stress-related illnesses such as burnout has increased significantly, affecting 19–30% of employees in the general working population globally (Portoghese, Galletta, Coppola, Finco, & Campagna, 2014). Burnout is a related situation to compassion fatigue where the symptoms are more pronounced. One study identified three dimensions of burnout: emotional exhaustion, depersonalization (or cynicism), and a feeling of a lack of personal accomplishment. Portnoy (2011) describes burnout symptoms in the early stages as frequent colds, reduced

sense of accomplishment, headaches, fatigue, lowered resiliency and moodiness, and increased interpersonal conflicts. The Maslach Burnout Inventory is the gold-standard instrument used to assess burnout, and its reliability and validity have been well documented. Dr. Maslach emphasizes that burnout isn't just related to an individual; rather, it's a social problem derived by the interactions of individuals in a mismatched work environment (Dunn, 2012). Professional nursing practice thrives within the context of a caring, empathetic relationship between nurse and patient. However, this necessary empathetic relationship can also contribute to compassion fatigue if steps are not taken to understand the separation between patient and nurse.

Devising a toolkit for nurses to explore and use as resource will assist them in combating compassion fatigue and help achieve compassion satisfaction. It is important for nurses to become knowledgeable about compassion fatigue symptoms and intervention strategies and to develop a personal plan of care to achieve a healthy work-life balance (Schroeter, 2014). An example can be seen in a study that focused on a literature review regarding the prevalence and risk for compassion fatigue. Forty of the 1623 identified publications, which included 14,770 respondents, met the selection criteria. Two studies reported the prevalence of compassion fatigue as 7.3% and 40%; five studies described the prevalence of secondary traumatic stress ranging from 0% to 38.5% (vanMol et al., 2015). This study makes a case for toolkit development for nurses to understand the signs and symptoms of compassion fatigue in themselves and others, and what steps they can take to decrease their risk of developing compassion fatigue.

Local Background and Context

The local potentiation of compassion fatigue is evident from anecdotal data, nursing turnover percentage, and results of a biannual associate engagement survey in this rural southeastern setting. Anecdotally, nursing staff throughout the hospital complained of staffing ratios and the inability to give care that they envision to the patients they serve. Turnover rates in the Emergency Room and telemetry floor were as high as 10%. Resiliency was cited in an associate engagement survey as low in all inpatient areas. With this background evidence, it was very important to establish a way to educate nurses in this setting.

Need for a Toolkit

Devising a toolkit for health care providers and caregivers to explore and use as resource will assist them in combating compassion fatigue and help achieve satisfaction. It is important for nurses to become knowledgeable about compassion fatigue symptoms and intervention strategies and to develop a personal plan of care to achieve a healthy work-life balance (Schroeter, 2014). This makes a case for toolkit development for nurses to understand the signs and symptoms of compassion fatigue in themselves, and what steps they can take to decrease their risk of developing compassion fatigue.

Role of the DNP Student

In the DNP, the curriculum differs in goals and competencies from the research-based PhD, preparing experts in the utilization of nursing research and in specialized advanced nursing practice (American Association of Colleges of Nursing, 2006). The role then of the DNP student is to evaluate and research the evidence and translate it into

practice. In regard to this DNP project, research on compassion fatigue is available, but there is currently not a translation of the evidence into practice. The form of a web-based educational toolkit is wide reaching and can be utilized in a variety of ways to inform and educate the nurse that is susceptible to compassion fatigue.

Role of the Project Team

The panel of experts consisted of nurses who were hand-selected from a hospital in rural eastern United States to establish the content validity of the toolkit. The inclusion criteria for these nurses were: (a) Ten or more years of experience; (b) a minimum of a BS/BSN in nursing; (c) certification or current leadership role; (d) working knowledge of compassion fatigue. An original list of 12 nurses was made and invitations to the first ten nurses were extended. All 10 responded positively to the invitation. Included in this ten who met the criteria outlined were a chief nursing officer, an infection preventionist, a risk management specialist, a quality director, a clinical educator, and five clinical department directors, two from the emergency department, one from the telemetry unit, one from medical surgical unit and one from mother and baby. The timeline was set utilizing a Gantt chart. Responsibilities of the team were to attend an informational session and fill out the survey to choose the elements that were placed in the toolkit.

Summary

Literature review of evidence reveals several key points. In different nursing settings with high stress, such as intensive care and emergency departments, there may be a higher prevalence of compassion fatigue. However, it is acknowledged that this fatigue can be developed in any nursing unit. The relationship of compassion fatigue to

development of burnout and the issues of nurse turnover and nurses leaving the profession is a concern, as hospital systems need nurses to care for patients in the future. The underpinning of conceptual models on compassion can be seen in Watson's caring theory and caring as a science. Not only do nurses need to understand how compassion fatigue is manifested, but also the underlying theoretical models that support further development of education to nurses on this important topic.

In this section, the background and conceptual theorem have been explained. The procurement of evidence to this project has been explained. Section 3 includes the approach utilized, practice focused questions and the phases of development of the project.

Section 3: Collection and Analysis of Evidence

Introduction

The purpose of this project was to develop a toolkit on compassion fatigue for nursing staff and establish content validity on its elements. I took information from the sources of evidence and translated it into practice. As this was a nonexperimental design, I focused a pragmatic approach on the validity of the content. The focus was on the elements of compassion fatigue and how targeted education through a toolkit can educate nurses. The objective was to establish the content validity of the compassion fatigue toolkit by a panel of experts through a content validity index (CVI) so that the best possible educational components could be executed. Through this toolkit, this project addressed the issue of compassion fatigue, which affects patient care.

Practice-Focused Questions

Project questions identify the concerns addressed with the project. These questions also are asked to validate the essential components of the project, such as items that will provide the underpinning of the project including assessment, plan, implementation and evaluation of the relevant components. In this project, the content of the information as well as the strategies of how information was approached and disseminated were important. The following questions were associated with the project.

- What will be used to validate the information?
- What are the criteria and recommendations for the toolkit?
- What elements of the toolkit will CVI validate?

There is a gap in practice relating to compassion fatigue, as research has indicated that it is not discussed or included in education of the nurse. In addition, the signs and symptoms of compassion fatigue are not discussed in nursing to help recognize them. Not recognizing these symptoms can affect relationships with patients and processes that require engagement on the nursing unit. Nurses who considered themselves as having compassion fatigue felt a difference in the way they performed their work; for example, they felt as though they were distancing themselves from their patients, which also resulted in pessimistic views toward positive change (Ray, Wong, White, & Heaslip, 2013). This feeling of distance can break the trust relationship with the patient and affect patient care. Thus, compassion fatigue should be discussed openly with team members and leaders to address it (Dobbs, 2014).

Another gap in practice is that most of the literature is relevant to certain high-risk groups but not the broad nursing field. However, there are overall challenges from a lack of education on CF to the application of evidence-based practice and the development of innovative approaches to translating this evidence (White & Dudley-Brown, 2012). Nurse managers and leaders should also be mentioned, as they ensure that staff are knowledgeable about policy, procedure, and new evidence-based literature. A psychosocial building intervention, such as education about compassion fatigue, can reduce a nurse's risk of fatigue and enhance retention (Hegney et al, 2014). Managerial support and knowledge of compassion fatigue and its triggers are significant, so the toolkit information in this project can heighten awareness for nursing leaders as well as employees.

Sources of Evidence

Compassion fatigue is exhaustion associated with caring for patients in significant emotional and physical pain (Lombardo & Eyre, 2011). Joinson was the first to describe this concept of compassion fatigue in her work in 1992 with emergency room personnel. She identified compassion fatigue as a unique form of burnout that affects individuals in caregiving roles (Lombardo & Eyre, 2011).

Challenges of Compassion Fatigue

The continuing demands on nurses in the acute care or long-term care setting correlates with fatigue. From oncology to intensive care, compassion fatigue can be manifested as physical or psychological symptoms, often with impacts both at home and at work—where lowered productivity, increased work absenteeism, or leaving the work setting altogether have been reported (Jones, 2013). Many facilities are relying on voluntary and mandatory overtime to solve staffing problems, leading to nurses' exhaustion and dissatisfaction with their jobs (Dunn, 2012). In looking for ways to decrease compassion fatigue and the associated symptoms, nurses need a way of obtaining information on this subject for awareness of symptoms in themselves and others. This could offer coping mechanisms to decrease attrition and increase retention among nurses. From society and healthcare's points of view, professional turnover is a more significant form of work transitions than organizational turnover (Flinkman, Isopahkala-Bouret, & Salanterä, 2013).

Analysis and Synthesis

Implementation of the project was developed in phases to organize and guide me and panel of experts. There were three phases to the development of the toolkit.

Phase 1

Phase 1 was the validation of the content outline. A panel of experts were tasked with establishing the content validity of the elements in the toolkit. Directions and information were given to assist the experts in understanding their role. The panel of experts were chosen due to certain criteria: (a) 10 or more years of experience; (b) a minimum of a bachelor of science or bachelor of science in nursing; (c) certification or current leadership role; and (d) working knowledge of compassion fatigue.

Phase 2

Phase 2 involved the validation of the toolkit. The panel of experts were tasked with filling out a modified Likert questionnaire regarding compassion fatigue elements on a scale of 1 to 4. The CVI and scale validity were then calculated by me. The elements closest to 1 but greater than .79 were applied to the toolkit.

Phase 3

In Phase 3, recommendations for implementation were collated from the expert panel. I then constructed the web-based toolkit, which is now available to nursing staff.

Project Design and Methods

A review of the literature was performed and completed to capture the latest evidence regarding compassion fatigue. Following the literature review, the evidence was categorized into topics, which then assisted in the creation of the toolkit outline.

Once the outline was completed, an expert panel was selected who reviewed the outline and established the content validity based on the assigned parameters. There were no participants who were selected that withdrew or cited any ethical dilemma in participation.

As this is a project concerned with content validity of the toolkit, assessing the items meant determining whether the instrument and its items were representative of the content that I intended to measure (see Terry, 2012). The content was modified based on the CVI that was established by the expert panel. The panel reviewed pertinent topics from the toolkit and rated the CVI. The importance of content validity in the instrument psychometric and its relevance with reliability have made it an essential step in the instrument development (Zamanzadeh et al., 2015). Once the panel of experts chose the content based on a modified Likert scale, and the content validity was established, the next step was to build the web-based toolkit and input the validated the information.

Toolkit Outline

This project involved reviewing research of evidence-based practice and translating the evidence into practice. This toolkit is web-based, with its own webpage domain. Included in this toolkit is what the experts validated as significant to the information nurses need to understand regarding compassion fatigue and mitigate it from occurring. In addition, there are printed resources in the nursing supervisors' office that mirror the online toolkit, broken down into tabs for easy access. A skills fair station for customer service and self-care was presented to outline compassion and compassion fatigue as well as the compassion fatigue pledge that included the webpage address.

Over 600 employees attended this fair and learned about the toolkit. This education about the toolkit continues at every nurse orientation.

Recommendations for Implementation

The essentials in the toolkit were identified and institutional review board (IRB) approved the proposal # 06-13-16-0175257. The result is a web-based compassion fatigue toolkit. This is a toolkit that has all the essential information needed, including links to other media, such as social media, for discussion and comment. These anecdotal evaluations will be assessed, while empirical, to trend perception of usefulness to the user.

Population and Sampling

Cultural components of institutions as well as cultural diversity plays a part in compassion fatigue. Cultural changes can influence nursing care to a degree. It is important for nurses and the panel of experts to understand the different cultures, and how their feelings and rituals play a part in compassion fatigue risk development. The experts were chosen based on criteria of education, experience, certification, and articulating a knowledge of compassion fatigue. There were 12 invitations and 10 total experts that replied positively and were included in the sample. Walden IRB approval was obtained and there were no conflicts of interest with the panel.

Data Collection

The outline of the toolkit was guided by four main components; parallelism, coordination, subordination, and division (OWL, 2013). This is an effective way of implementation the outline of the toolkit in a scholarly approach. Experts asked to

participate included the chief nursing officer, an infection preventionist, a risk management specialist, quality director, clinical educator, and five clinical department directors, two from the emergency department, one from the telemetry unit, one from medical surgical unit and one from mother and baby. Once the experts were identified two meetings were held to explain the data collection tool. From there, the collection tool was filled out by the expert and sent back for analysis. Appendix B illustrates the data collection tool.

Data Analysis

Content validity can be defined as the ability of the selected items to reflect the variables of the construct in the measure (Zamanzadeh et al, 2015). Analysis of data retrieved from pen and paper CVI validation focused on validity of the toolkit and updated data incorporated into the educational components. Using the CVI formula $CVI = [(E - (N/2)) / (N/2)]$, the results were interpreted. The closer to 1.0, the more essential that element became. Each element of the educational material was given a CVI by the panel of experts.

Content Validity

The CVI of the toolkit with expert evaluation was assessed. A group of nursing experts were assembled and rated each area or element of the toolkit. The experts categorized their answers 1 = not relevant, 2 = somewhat relevant, 3 = quite relevant, 4 = highly relevant. The elements were documented using a paper format. For each item, the item level CVI was computed as the number of experts giving a rating of either 3 or 4 divided by the total number of experts. For calculating them, first, the scale is

dichotomized by combining values 3 and 4 together and 2 and 1 together and two dichotomous categories of responses including *relevant* and *not relevant* are formed for each item. (Zamanzadeh et al, 2015). After an item level CVI was completed, then the scaled CVI was performed to assess the relevance of the entire set of items as to their relevance to the construct (Polit & Beck, 2008). Items that are most important and relevant were then considered validated for the toolkit. All the elements that were deemed the most essential by the experts were placed in the toolkit. The prime importance is placed on evidence- based educational literature being available and optimally utilized. The elements that were placed in the web-based toolkit were what is compassion fatigue, who is affected by compassion fatigue, signs and symptoms, compassion satisfaction, resources for prevention, links, references, and the compassion fatigue pledge.

Project Evaluation Plan

A program evaluation can be defined as social science techniques applied to determining the workings and effectiveness of social programs (Kettner, Moroney, & Martin, 2013). Evaluation research is of essence and focuses on developing useful information about a program, process, procedure, or policy- information that is needed by the decision makers about whether to adopt, modify, or abandon a practice or program (Polit & Beck, 2008). A timeline in the form of a Gantt chart was created and presented to the core group of experts to make all aware of the targets. Strategic communication is needed, as the stakeholders need to revive up to dates on completion of work and attainment of project aims (White & Dudley-Brown, 2012). After validating that the

toolkit had correct up to date information from the expert representatives, education of the toolkit and concepts was then presented to all hospital staff via mandatory skills fair. Educational materials were distributed to nurses at that time. The website was given out, with materials available in paper form to account for any computer glitch or downtime. Post roll out of the toolkit will be assessed by data collection by the search engine about utilization, and any anecdotal feedback of the individuals utilizing the tool.

Summary

Compassion fatigue is an important concept for nurses and healthcare due to its professional and financial costs related to work days lost and the loss of nurses to the profession (Harris & Griffin, 2015). Compassion fatigue has been defined as a combination of physical, emotional, and spiritual depletion associated with caring for patients in significant emotional pain and physical distress (Lombardo & Eyre, 2011). There has been research to study this phenomenon, but little in the way of universal adoption of an evidence-based toolkit to educate nurses on compassion fatigue and change it to compassion satisfaction in the workplace. Formulating a toolkit and establishing content validity of this toolkit to address issues related to compassion fatigue of nurses through use of Watson's caring theory, provided a holistic framework, and a way for nurses to get information about this important topic. Use of CVI to determine content validity of the toolkit provided a support for the information provided. Strategic communication to stakeholders and experts is essential to continue to drive usage and maintain visibility of the information, so all may use it to better their knowledge about compassion fatigue and utilize the materials to promote compassion satisfaction.

Section 4: Findings and Recommendations

Introduction

Care and compassion are some of the traits of a nurse; however, the cost of providing this empathic nursing care can contribute to caregiver compassion fatigue (Lombardo & Eyre, 2011). Though compassion fatigue has been discussed in nursing literature, it has not always been applied to nursing education. The purpose of this project was to develop a compassion fatigue web-based toolkit and use a panel of experts to establish content validity of the elements through a CVI. This toolkit can be used to educate nurses on compassion fatigue and prevent it from occurring.

Summary of Evidence Sources

A team of 10 experts who had 10 years of experience, a bachelor of science or bachelor of science in nursing degree, certification or leadership experience, and working knowledge of compassion fatigue were gathered in a central location and provided an outline of the expectations and assessment of the content of the toolkit. A modified Likert scale was employed (see Appendix B), and the CVI was calculated using the formula $CVI = [(E-(N/2))/(N/2)]$. The recommended CVI for more than five experts should be no lower than 0.79. Any question that had a CVI lower than 0.79 would not be validated and not used in the web-based application toolkit.

Results

The calculations were computed and the components that scored closest to 1.0 were added to the toolkit. The toolkit was constructed with the evidence of literature and review of components that were validated by the experts. The findings resulting from the

analysis of evidence submitted by the expert panel was that six out of the eight components were scored with content relevance as evidenced by a CVI. Two components not meeting scoring criteria were deleted from toolkit content. Based on the findings by the experts, and per the calculations of CVI, the listings that were included in the toolkit were: What is compassion fatigue, signs and symptoms of compassion fatigue, resources for prevention, compassion fatigue pledge, web tools and links, and goal and mission. The lowest CVI scoring items that were not included were history of compassion fatigue and changing compassion fatigue to compassion satisfaction (see Table 1).

Table 1

Experts' Assessments Collated by Question

Question	CVI	Included
History of CF	0.2	No
What is CF?	1	Yes
Signs and Symptoms of CF	1	Yes
Changing CF to Compassion Satisfaction	0.6	No
Resources for Prevention	1	Yes
Compassion Fatigue Pledge	1	Yes
Web Tools and Links	0.80	Yes
Goal and Mission	1	Yes

Content Validity Index and Scaled Content Validity Index

CVI and scaled CVI were calculated individually and then as a whole for the project. Overall score and scaling content validity was also calculated, providing a reference to the percentage of experts who scored the questions at least a 3 or 4 in the modified Likert scale. If the item level CVI was higher than 79%, the item was appropriate (see Zamanzadeh et al., 2015). Table 2 illustrates the CVI and scaled CVI.

Table 2

Expert Content Validity Index and Scaled Content Validity Index

Question	Expert										# in agreement	Item CVI
	1	2	3	4	5	6	7	8	9	10		
1		X	X			X	X	X		X	6	.20
2	X	X	X	X	X	X	X	X	X	X	10	1.0
3	X	X	X	X	X	X	X	X	X	X	10	1.0
4		X	X	X	X	X	X	X		X	8	.60
5	X	X	X	X	X	X	X	X	X	X	10	1.0
6	X	X	X	X	X	X	X	X	X	X	10	1.0
7	X	X	X	X	X		X	X	X	X	9	.80
8	X	X	X	X	X	X	X	X	X	X	10	1.0

Note. Mean expert proportion = .83; content validity index = .83; Scale level content validity index = .80; scale content validity index–universal agreement calculation = .50

Recommendations

Based on the findings of this project, the toolkit clearly and concisely presents the topic of compassion fatigue, making it important to integrate into the nurses' professional development. This toolkit can be used to increase compassion satisfaction, potentially increasing nurse retention and general well-being of nurses. First, the compassion fatigue toolkit should be included in orientation of new nurses. From the moment of hire, the work environment often shapes a nurse's attitude and satisfaction (Dellasaga, Gabbay, Durdock, & Martinez-King, 2013). It is important that new hires have knowledge of CF so that they may recognize the signs and symptoms. As presented in the literature, orientation is a crucial time for nurses to learn the culture of the organization. Having the toolkit available as part of orientation will demonstrate the importance of the topic in the organization to the newly employed nurse.

Second, it may be beneficial to include the CF toolkit as part of the annual educational component for nurses. Compassion fatigue was a part of the service

excellence skills fair, a mandatory requirement for all employees. The website for prevention of compassion fatigue was given to all nurses. This will be ongoing annually, along with learning modules on the education web-based tool the hospital uses for ongoing training, that are mandatory for each nurse while working at this institution.

The CF toolkit should also be available on the hospital intranet. This would allow quick access to the toolkit and its educational components. This provides a quick resource to education about this important topic and can be used at any time. The information in the toolkit should have a backup in case there is a problem with the website. It is imperative to test data restoration periodically as part of the backup and restore strategy (Akhtar, Buchholtz, Ryan, & Setty, 2012). The compassion fatigue toolkit should be available on the hospital intranet. This would allow quick access to the toolkit and its educational components as a resource for nurses. In the event of an internet downtime, paper manuals containing the information from the website are in the nursing supervisor's office to ensure that the information will be always available to all nurses. The information is currently on a thumb drive disc and binder that is available through the house supervisors, who are staff 24 hours a day, 7 days a week.

Implications Resulting from Findings and Potential Implications of Social Change

The subject of compassion fatigue should be brought out into the forefront, so nurses taxed with myriad issues, tasks, and regulations, can truly understand the importance of mind, body, and spirit wellness to gain compassion satisfaction. The benefit of this educational toolkit will be the nurses understanding of compassion fatigue and ability to identify it in themselves and others. As outlined, much research has been

done to establish compassion fatigue as a real issue among nursing, but little has been done to compile a teaching tool that can be utilized. Experts found pertinent elements based on CVI: what is compassion fatigue, signs and symptoms, resources for prevention, web tools and links, compassion fatigue pledge, and goals and mission.

Almost 600 employees came through skills fair and learned about compassion fatigue and were directed to the website for more information. Since the website inception and project completion there have been 354 visits to the website. By educating nurses on compassion fatigue, the health and well-being of nurses is being supported. As health care workers face a wide range of psychosocial stressors, they are at a high risk of developing burnout syndrome, which in turn may affect hospital outcomes such as the quality and safety of provided care (Portoghese, Galletta, Coppola, Finco, & Campagna, 2014). By utilizing the information on prevention of compassion fatigue and fostering healthy workers, organizational outcomes can be impacted positively

Strengths and Limitations of Project

The expert panel were well-versed of the topic and expressed support for the web-based toolkit. They were interested in participating and met at the appointed time. The rooms were adequate temperature and size to house the panel.

Twelve experts were invited to be a part of the project, with ten agreeing and meeting the expert criteria, thus a small sample size. Inclusion criteria called for nurses with working knowledge of compassion fatigue, however there is no scale to ascertain the complete knowledge of the individual. Secondly, there could be articles on CF that were not included in the creation of the toolkit. Lastly, it is important to recognize that

because the CVI is constructed on a dichotomized scale, there is the possibility of inflated values.

Recommendations for Future Projects

For this project, there are several items recommended for continued tracking. Tracking of people viewing the website is supplied every month from the website. This includes the amount of times it was accessed and where the accesses were coming from. This will be tracked monthly and graphed. The panel of experts and analysis of the content validity could be used in other projects of building educational toolkits. Building a panel of experts with certain qualifications, such as education, years of experience, and certifications was a good way to validate the project components. Adequate time to engage the expert panel and the project was done through a Gantt chart. This kept the project on track.

Section 5: Dissemination Plan

Dissemination of the webpage was provided to staff in a power point presentation via e-mail and in a skill fair and in orientation to new nurses coming into the organization. Hard copies of the information were made available to house nursing supervisors, so it was available in the event of a computer downtime. The webpage is accessed by typing www.compassionfatiguetoolkit.com in the URL toolbar. Upon accessing the website there are different tabs that provide information.

Analysis of Self

This project was an arduous task, with planning strategies, preparation and presentation, and multiple opportunities to perfect the project dynamic. Time constraints and school–life balance was maintained through compartmentalization. The website was also a challenge because I have never built a webpage for display. However, the web engine selected was helpful in assisting with questions and was easy to revise to ensure that the information was presented in a manner that could be understood and uploaded easily. The support of family and friends was also essential in providing the time needed to complete a project of this magnitude.

This DNP project is supported by multiple DNP essentials as part of the program at Walden. For the DNP Essential I, the patterning of human behavior in interaction with the environment in normal life events and critical situations is supported. In Essential III, clinical scholarship and analytical methods for evidence-based practice are employed. Preparation to address current and future practice issues requires a strong scientific foundation for practice (American Association of Colleges of Nursing, 2006). This is

prevalent in this project, as the compassion fatigue toolkit provides application of relevant findings to develop practice guidelines and improve practice in the nursing environment. Essential VIII, advanced nursing practice, is relevant here as well because the toolkit educates and guides individuals and groups through complex health and situational transitions. Doctoral work is a building of character, constituting patience for protocol and detail, tenacity to continue to pursue avenues of evidence, and sometimes reflection and humility. With the completion of this project, the benefit to social change can be manifested.

Summary

Compassion fatigue is a combination of physical, emotional, and spiritual depletion associated with caring for patients in significant emotional pain and physical distress (Lombardo & Eyre, 2011). The purpose of this project was to establish a web-based compassion fatigue educational toolkit to detect and prevent compassion fatigue. Through this project, this educational toolkit has been realized by content validation by an expert panel and the collation of the validation through CVI. A Gantt chart was used to keep on task, and the participants were available and engaged in being a part of the project. The benefits to the nursing population of this institution can be realized in anecdotal feedback and nursing satisfaction through survey by the hospital. Although the toolkit is web-based, the material is available to all nurses in case of computer downtime. The website itself, www.compassionfatiguetoolkit.com, is designed to be appealing and has links to social media such as Dr. Jean Watson's Caring Consortium.

With the completion of this project, the lack of evidence about the importance of compassion fatigue is now translated to education that is validated and can provide ways to limit compassion fatigue in nurses. More research on the long-term effects of compassion fatigue should be done to continue to find ways to support nurses who experience compassion fatigue so that burnout can be avoided, and the continuing mental health of nurses can be assured.

References

- Abendroth, M. (2011). Compassion fatigue: Caregivers At risk. *OJIN: The Online Journal of Issues and Nursing*, 16(1). Retrieved from <http://nursingworld.org>
- American Association of Colleges of Nursing. (2006). The essential of doctoral education for advanced nursing practice. Retrieved from <http://www.aacn.nche.edu/publications/position/DNPEssentials.pdf>
- Akhtar, A., Buckhholtz, J., Ryan, M., & Setty, K. (2012). Database backup and recovery best practices. *ISICA Journal*. Retrieved from <https://www.isaca.org/Journal/archives/2012/Volume-1/Documents/12v1-Database-Backup.pdf>
- Chirewa, B. (2012). Development of a practical toolkit using participatory action Research to address health inequalities through Ngo's in the UK: Challenges and lessons learned. *Perspectives in Public Health*, 132(5), 228-234.
doi:10.1177/1757913911399364
- Clark, C. (2016). Watsons human caring theory: Pertinent transpersonal and humanities concepts for educators. *Humanities*, 5(2), 21. doi:10.3390/h5020021
- Dellasega, C., Gabbay, R., Durdock, K., & Martinez-King, N. (2013). An exploratory study of the orientation needs of experienced nurses. *Journal of Continuing Education of Nursing*, 40(7), 311-316. doi:10.3928/00220124-20090623-04
- Dobbs, K. (2014). Compassion fatigue: The cost of caring. *Veterinary Team Brief*. Retrieved from <http://www.veterinaryteambrief.com>
- Dunn, P. (2012). Addressing nurse burnout. *Nursing Made Incredibly Easy*, 10(4), 5-6.

doi: 10.1097/01.nme.0000415014.03944.c5

Edmunds, M. (2010). Caring too much: Compassion fatigue in nursing. *Appl Nurs Res*.

23, 191-197. Retrieved from <https://www.medscape.com/viewarticle/732211>

El-Bar, N., Levey, A., Wald, H., & Biderman, A. (2013). Compassion fatigue, burnout, and compassion satisfaction among family physicians in the Negev area: A cross-sectional study. *Israel Journal of Health Policy Research*, 2(1), 31.

doi:10.1186/2045-4015-2-31

Emanuel, L., Ferris, F., von Gunten, C., & Von Roenn, J. (2011). Compassion fatigue and Burnout in health care providers caring for patients with cancer: Management of burnout and compassion Retrieved from

http://www.medscape.org/viewarticle/754366_5

Flinkman, M., Isopahkala-Bouret, U., & Salanterä, S. (2013). Young registered nurses' intention to leave the profession and professional turnover in early career: A qualitative case study. *ISRN Nurse*. doi:10.1155/2013/916061

Garrin, J. (2014). The power of workplace wellness: A theoretical model for social change agency. *Journal of Social Change*, 6(1), 109-117. Retrieved from

<http://scholarworks.waldenu.edu/cgi/viewcontent.cgi?article=1077&context=jsc>

Gillies, C., Bristow, B., Gallant, F., Osmar, K., Lange-Mechlen, I., & Tran, W. T. (2014).

Results of a Canadian study examining the prevalence and potential for developing compassion fatigue and burnout in radiation therapists. *Journal of Radiotherapy in Practice*, 13(4), 383-392. doi:10.1017/S1460396914000144

Harris, C., & Griffin, M. (2015). Nursing on empty. *JCN*, 32(2). Retrieved from

Nursing_on_Empty_Compassion_Fatigue_Signs, 8.pdf

- Hegney, D. G., Craigie, M., Hemsworth, D., Osseiran-Moisson, R., Aoun, S., Francis, K., & Drury, V. (2014). Compassion satisfaction, compassion fatigue, anxiety, depression and stress in registered nurses in Australia: Study 1 results. *Journal of Nursing Management*, 22(4), 506-518. doi:10.1111/jonm.12160
- Hinderer, K. A., VonRueden, K. T., Friedmann, E., McQuillan, K. A., Gilmore, R., Kramer, B., & Murray, M. (2014). Burnout, compassion fatigue, compassion satisfaction, and secondary traumatic stress in trauma nurses. *Journal of Trauma Nursing*, 21(4), 160-169. doi:10.1097/JTN.0000000000000055
- Holdren, P., Paul, D., III, & Coustasse, A. (2015). Burnout syndrome in hospital nurses. Paper presented at BHAA International 2015 in Chicago, IL.
- Jones, B. (2013, June). Compassion fatigue and the challenge of developing resilience. *Oncology Nursing News*. Retrieved from <http://nursing.onclive.com>
- Kennedy, C. (2014). Communicating disparity: How social design can create public engagement with issues of inequality. *Journal of Development and Communication Studies*, 3(1). Retrieved from <https://www.ajol.info/index.php/jdcs/article/view/112351>
- Kettner, P., Moroney, R., & Martin, L. (2013). *Designing and managing programs: An effectiveness –based approach* (4th ed.). Thousand Oaks, CA: Sage.
- Lombardo, B., & Eyre, C. (2011). Compassion fatigue: A nurse's primer. *ANA Periodicals OIJN*, 16(1). Retrieved from <http://nursingworld.org>
- Mangoulia, P., Fildissis, G., Koukia, E., Alevizopoulos, G., & Katostarar, T. (2011).

- Factors associated with compassion fatigue among ICU nurses in Greece. *Critical Care*, 15(Supp 1), 489. doi:10.1186/cc9909
- Mealer, M., Jones, J., & Meek, P. (2017). Development of post-traumatic stress disorder in critical care nurses. *American Journal of Critical Care*, 26(3), 184-192. doi:10.4037/ajcc2017798
- Neville, K., & Cole, D. (2013). The relationships among health promotion behaviors, compassion fatigue, burnout, and compassion satisfaction in nurses practicing in a community medical center. *Journal of Nursing Administration*. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/23708503>
- OWL. (2013). Four main components for effective outlines. Retrieved from <https://owl.english.purdue.edu/owl/resource/544/01/>
- Polit, D., & Beck, C. (2008). *Nursing research: Generating and assessing evidence for nursing practice* (8th ed.). Philadelphia, PA: Lippincott, Williams & Wilkins.
- Portnoy, D. (2011). Burnout and compassion fatigue: Watch for the signs. *The Catholic Health Association of the United States*. Retrieved from <http://www.compassionfatigue.org/pages/healthprogress.pdf>
- Portoghese, I., Galletta, M., Coppola, R., Finco, G., & Campagna, M. (2014). Burnout and workload among health care workers: The moderating role of job control. *Safety and Health at Work*, 5(3), 152-157. doi:10.1016/j.shaw.2014.05.004
- Ray, S., Wong, C., White, D., & Heaslip, K. (2013). Compassion satisfaction, compassion fatigue, work life conditions, and burnout among frontline mental health care professionals. *Traumatology*, 19(4) 255-267.

doi:10.1177/1534765612471144

Sabo, B. (2011). Reflecting on the concept of compassion fatigue. *The Online Journal of Issues in Nursing*, 16(1). Retrieved from <http://nursingworld.org>

Schroeter, K. (2014). Compassion fatigue: An unwanted reflection of your reality. *Journal of Trauma Nursing*, 21(2), 37-38. Retrieved from <https://www.nursingcenter.com>

Terry, A. (2012). *Clinical research for the doctor of nursing practice*. Montgomery, AL: Jones & Bartlett Learning.

vanMol, M., Kompanje, E., Benoit, D., Bakker, J., Nijkamp, M. (2015). The prevalence of compassion fatigue and burnout among healthcare professionals in intensive care units: A systematic review.

doi:<https://doi.org/10.1371/journal.pone.0136955>

Watson, J. (2008). *Nursing: The philosophy and science of caring* (Rev ed.). Boulder: University Press of Colorado.

White, K., & Dudley-Brown, S. (2012). *Translation of evidence into nursing and health care practice*. New York, NY: Springer.

Yoder, E. A. (2010). Compassion fatigue in nursing. *Applied Nursing Research*, 23(4), 191-197. doi: 10.1016/j.apnr.2008.09.003

Zamanzadeh, V., Ghahramanian A., Rassouli, M., Abbaszadeh, A., Alavi-Majid, H., & Nikanfar, A. (2015). *Journal of Caring Science*, 4(2), 165-178.

doi:10.15171/jcs.2015.017

Appendix A: Schematic of the Web-Based Toolkit

The toolkit is a web-based application that has information about compassion fatigue in one place. In the web-based application, the reader is first welcomed to the webpage. The graphics should be related to caring concepts. At the home page are various tabs that, based on the importance of the subjects per the experts, will be marked in sequence so that one may pick it and scroll down to read about that subject line. The tabs will include what the experts validate as important as well as references, and links to caring concepts pages, and social media page, so that feedback and networking among nurses can be implemented and evaluated. The webpage can be found www.compassionfatiguetoollkit.com. Tabs are below.

- Home
- What is Compassion Fatigue?
- Who is Affected by Compassion Fatigue
- Signs and Symptoms
- Compassion Satisfaction
- Resources for Prevention
- Links
- References
- Compassion Fatigue Pledge

Appendix B: Data Collection Tool

Question	CVI rating
Formula: $[(E-(N/2))/(N/2)]$	E- Essential
1- Not relevant	N- Total number of experts
2- Somewhat relevant	
3- Quite relevant	
4- Highly relevant	
<hr/>	
1. History of CF- *Present articles to substantiate the elements	
<hr/>	
2. What is CF	
<hr/>	
3. Signs and Symptoms of CF	
<hr/>	
4. Changing CF to Compassion Satisfaction	
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5. Resources for prevention	
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6. Compassion Fatigue pledge	
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7. Web tools and links	
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8. Goal and Mission	
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