

2021

## Assessing Staff Nurse Knowledge of Skills to Address Nurse Burnout

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*Walden University*

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# Walden University

College of Nursing

This is to certify that the doctoral study by

Glory Ngum Forbi

has been found to be complete and satisfactory in all respects,  
and that any and all revisions required by  
the review committee have been made.

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Walden University  
2021

Abstract

Assessing Staff Nurse Knowledge of Skills to Address Nurse Burnout

by

Glory Forbi

MS, Walden University, 2018

BS, Chamberlain University, 2015

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

Walden University

November 2021

## Abstract

The cases of burnout among nurses are increasing. The problem that has been identified for this DNP project relates to the lack of hospital nursing staff knowledge regarding the skills to address nurse burnout. Many staff nurses continue to work as usual despite showing severe symptoms of nurse burnout. The purpose of the DNP project was to fill the identified practice gap, a lack of knowledge and skills among nurses on strategies of preventing and controlling burnout, by implementing an educational program. The focus for this DNP project was to develop an evidence-based nursing staff education program on nurse burnout to help increase nurses' knowledge regarding burnout. The DNP project was informed by the conservation of resource theory and the Neumann systems model. Evidence from project participants was collected to establish the level of knowledge on burnout. An educational program was presented to 23 staff nurses via Zoom. A pre- and posttest was used to measure their change in knowledge. Ninety-eight percent of the participants attributed workload as the main cause of nurse burnout. Pre- and posttest data were analyzed using descriptive statistics, 22 participants completed both the pre- and posttest. Initial knowledge about nurse burnout was indicated by a 56.5% pretest score. After the educational presentation, participants scored an average of 98% posttest indicating that the nurses had acquired knowledge about nurse burnout. Implementing burnout reduction mechanisms through the training programs supports social change by helping nurses improve coordination, teamwork, productivity, and performance in inpatient care.

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## Dedication

This page is a dedication to all who have supported me on this journey. My Husband Saanfor Che, My children Bryan, Kiara, Niara and Darell, My sisters Patience and Stephenia, and my brother Niba Forbi, my Nieces and Nephews, Sergeant Forbi Helen, Stephen, Naya, Glory (Alias MiMi), Patrick, Bih Patience, Jaylan, my in laws Gerald and Eric, my friends and sisters, Clementine and Peter Fokam, Glory Fontah and Stephen Tanjang, Camarita Titang, Dr. Charles Bisong, and Dr. Terence Ngwa, my mentors, for the trust they have in me and all their support and encouragement during this journey. To my chair Dr Deborah Lewis and committee for believing in me. To Walden University for a lifetime of learning I will never regret, supported by world-class faculty and staff. Finally, I dedicate this paper as the culminative result of each nursing professor or nurse or doctor who has mentored me along the way. I can never thank you enough, and your time and support will never be forgotten or taken for granted. To God, for giving me the gift of life and the ability to work in a profession I will always love: nursing. Finally, to my dad John Forbi and my mom Helen Lum Forbi (may she continue to rest in peace) and my auntie Mummy Bridget Foncham for her prayers and support.

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## Section 1: Nature of the Project

Rates of burnout are particularly high in nurses (Woo et al., 2020). Woo and colleagues recently conducted a meta-analysis and found a global prevalence of 11.23% of nurses experienced burnout. Burnout has a direct effect on nurses and an indirect impact on the patients and health care facilities (Liu et al., 2018). For nurses, burnout impairs their physical, social, emotional, and psychological wellbeing (Hall et al., 2016). Additionally, nurses experiencing burnout are often mentally and physically fatigued as they are overwhelmed with the nursing workload. Specifically, a very common form of fatigue associated with burnout is compassion fatigue (Waddill-Goad, 2019; Zhang et al., 2018). Some of the nurses who cannot cope with the burnout associated with the profession choose to resign (Adams et al., 2019). Nurses who choose to stick with the profession may become apathetic and unable to provide holistic and comprehensive nursing care. As more nurse's experience burnout, the quality of nursing care reduces and this may lead to poor patient outcomes and prolonged periods of hospitalization (Nantsupawat et al., 2015). Accordingly, the health care facility suffers the impact of burnout through increased cost of treatment (Han et al., 2019). With an increase in cost of treatment, patient satisfaction is further compromised, which can lead to a reduced flow of patients to the facility. Despite these detrimental effects, evidence suggests that hospital staff lack the knowledge and skills to address their nursing-related burnout (Ross et al., 2017). Therefore, this DNP doctoral project will focus on addressing the issue of nursing burnout by developing an education program to increase the knowledge of hospital nursing staff on burnout. The primary objective of this DNP project is to

improve patient outcomes and reduce the rate of attrition among nurses within hospital settings, by decreasing nurse burnout.

### **Problem Statement**

Nurse burnout has been described as a physical, mental, and emotional state that is associated with being chronically overworked, coupled with a sustained lack of job fulfillment and support from superiors (Hewitt et al., 2020). Common burnout symptoms include physical or emotional exhaustion, job-related cynicism, and a low sense of personal accomplishment (Squiers et al., 2017). Currently, there are hospitals that do not have relevant evidence-based education programs for their nursing staff to enlighten them on how to deal with this problem (Ayaz-Alkaya et al., 2018). Nurse burnout is a serious problem due to the potentially lethal impact it can have on patient care and the delivery of services (Salyers et al., 2017). Prior studies suggest a clear positive relationship between nurse burnout and negative patient outcomes. For example, nurses working in hospital settings are unable to demonstrate adequate assertiveness in communication, when they experience symptoms of nurse burnout (Havens et al., 2018). Additionally, most of these nurses do not have the knowledge to independently eradicate their burnout symptoms.

The problem that was identified for this DNP project is the lack of knowledge among nurses regarding burnout and how to decrease or eliminate it. Most nurses continue to work as usual despite showing severe symptoms of nurse burnout; this may negatively impact their professional integrity. The lack of knowledge is further aggravated by the fact that the hospitals do not have a nursing staff education program related to nursing burnout. Importantly, this type of program would educate nurses on

how to recognize nurse burnout and provide them with the skills required to prevent or reduce the effects of burnout.

Additionally, there is a clear gap in practice and the current evidence-based literature on how to identify, prevent, and/or minimize burnout among hospital nursing staff. The current evidence-based literature does not include any studies on nurse burnout programs that have been tested within a hospital setting. However, the literature does provide information on key features that need to be addressed to reduce nurse burnout. In this DNP project, guidance was obtained from the literature for developing a hospital nursing staff education program on nurse burnout that focused on knowledge and skills to prevent or reduce nurse burnout.

With the development and future implementation of this program after graduation, I hope that I can continue assisting nursing staff practicing in a hospital setting to gain the knowledge and skills related to nurse burnout, to improve their work experience and environment. Also, it is hoped that a collaborative team culture was created by this new education program in the setting where I implemented this project, which will foster a supportive environment for those nurses who are suffering from burnout. Subsequently, there is the potential for benefits such as a reduction in nursing staff attrition rates within the hospital setting. Last, this educational program may lead to an improvement in the quality of care by the nursing staff and improvement in patient outcomes within the hospital setting.

### **Purpose Statement**

The purpose of the DNP project was to fill the identified practice gap, which is a lack of knowledge among nurses of strategies to prevent and control burnout. Burnout remains an issue of concern due to these gaps in knowledge. Although academic literature on burnout prevention strategies exists, nurses are bereft of time to read the published scientific journals because of their increasing workload. Additionally, debriefing sessions where nurses share burnout experiences and learn from each other do not exist. Possibly, this collaborative information is the missing information that will create a difference in the cases of nurses experiencing burnout. The reaction of nurses experiencing burnout will depend on their knowledge of burnout. If a nurse has little knowledge, the reaction to burnout will be inconsequential reversal measures and, as a result, most of the nurses will be unable to prevent or mitigate burnout.

The guiding practice-focused question for this DNP project is "Will the development of an evidence-based nursing staff education program on nurse burnout lead to an increase in nurses' knowledge regarding burnout?" The DNP project addressed the identified gap in the academic literature and practical implementations by empowering nurses with the knowledge and skills required for burnout prevention and management. Knowing the educational needs of nurses helped to guide the DNP student to provide continuous education. The educational program was widely accepted by nurses in the study, as it addressed their pervasive burnout symptoms. Knowledge of risk factors for burnout may inform nurses' efforts to adopt preventive measures. Nurses reported that they learned what is required to solve the problem of burnout.

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

Two sources of evidence have been utilized: namely, the research databases and primary data collected from DNP project participants. First, an extensive search of the literature was conducted in healthcare databases to retrieve recently published research on nursing burnout. The articles retrieved were critically evaluated for methodological rigor and relevance to the study. Subsequently, the selected articles were used as scientific evidence to support the need for educating nurses on strategies for alleviating burnout. Second, data were collected from participating nurses to establish the impact of the education program on burnout levels. A self-administered questionnaire in the form of a pretest and posttest (see Appendix A). was used to evaluate knowledge levels before and after implementation of the program. At the end of the training, pretest and posttest scores were compared to determine the effectiveness of the education program in increasing nurses' knowledge of burnout.

The pretest and posttest method was used to help with the data measurement and the findings. The Brigham and Women's Hospital for Nursing Excellence (BWCE) Level 2 assessment of knowledge was applied to learning outcome before and after knowledge assessment (BWCE, 2020) The data that was collected was calculated after the study to determine if there was a gain in knowledge after the educational piece. Based off this study, I successfully created and implemented the use of an Evidence Base Practice (EBP) nursing process that has shown increase in patient's safety and patient's satisfaction.



The setting for this research project was provided to all participating participants via a Zoom link, with all the participants logging in to the Zoom call due to the COVID-19 pandemic and it could not be done in person. Each participant had access to the pretest and posttest assessment (see Appendix A) to assess application of the Level 2 learning guidelines of BWCE.

### **Significance**

In addition to nurses, other stakeholders who may be impacted by the DNP project are patients, patients' relatives, and other health care providers such as physicians. Once the problem of knowledge deficit on nursing burnout is alleviated, nurses may experience increased holistic wellbeing and as a result, patients will benefit from improved quality of care (Brand et al., 2017). When the quality of nursing care improves, the rate of recovery is higher; subsequently, the period of hospitalization reduces. Additionally, the patient's relatives benefit from the project through financial and time savings. Finally, other health care providers may benefit by having a more meaningful work relationship with the nurses, leading to enhanced collaboration. In turn, effective work relationships may enhance mental wellbeing and decrease the likelihood of burnout (Havens et al., 2018).

One of the potential contributions of the DNP project to nursing practice is that the findings will form a basis for standard-setting and policy development regarding nursing burnout. The more the nurses are trained, the lower the probability of nurses experiencing burnout. Second, the DNP project will promote the provision of quality and cost-effective care within the health care facility. When a nurse is free from the stress and

depression associated with burnout and fatigue, the quality of nursing care will improve, and the patients may have improved prognoses. Finally, the DNP project may motivate nurses to understand the patients, as well as families', experiences with illness. A nurse that is free of burnout can more easily develop an effective therapeutic relationship with patients and their relatives, which ultimately allows nurses to develop a better understanding of the nature of the disease, as an in-depth comprehension of the experience of illness helps a nurse to plan the most appropriate intervention.

Nurse burnout significantly impacts care in a large hospital located in the Northeast of the United States, but is a trend seen across the United States (Reith, 2018). This hospital did not have an evidence-based nurse burnout education program. Nurses were fully engaged with the idea of a program, in part because of the high hospital patient census and the high proportion of patient-to-nurse assignments they had been given. With the added impact of the COVID-19 pandemic on the nursing staff workload, signs of increased nurse burnout were apparent. The development of a nurse burnout educational program within the hospital setting, based on current evidence-based literature, fulfilled an urgent need to address this pervasive issue. The education program that I developed may lead to an improvement in the quality of care by the nursing staff, improvement in patient outcomes, and a reduction in nursing staff attrition rates within the hospital setting.

### **Summary**

Cases of burnout among nurses are increasing. Burnout has a direct effect on the nurses and an indirect impact on the patients and health care facility. The problem that

was identified for this DNP project relates to a lack of required hospital nursing staff knowledge and skills to address nurse burnout. Most of these staff nurses continue to work as usual despite showing severe symptoms of nurse burnout. This DNP project addressed the problem of nurse burnout by developing a hospital nursing staff education program on nurse burnout that focuses on identification and elimination of gaps in the knowledge and skills required to prevent or reduce nurse burnout.

Burnout remains a concern because nurses lack knowledge of how to handle burnout and, as a result, more nurses develop burnout since the problem is left unaddressed. The guiding practice-focused question for this DNP project was " Will the development of an evidence-based nursing staff education program on nurse burnout lead to an increase in nurses' knowledge regarding burnout?"

The DNP project addressed the identified gap by empowering nurses with knowledge and skills for burnout prevention and management. Two sources of evidence were utilized, namely the research databases and primary data from DNP project participants. Two approaches were used to organize and analyze the evidence, namely theoretical and practical. The theoretical approach involved obtaining evidence from a systematic review of the findings from previously published literature supporting educational programs for alleviating nursing burnout. The practical approach, on the other hand, involved obtaining evidence from nurses, who were trained in prevention and management of nurse burnout.

Additional stakeholders impacted by the DNP project are patients, patients' relatives, and other health care providers, such as physicians. One of the potential

contributions of the DNP project to nursing practice is that the findings will form a basis for standard setting and policy development for frequent training on nurse burnout.

Secondly, the DNP project will promote the provision of quality and cost-effective care within the health care facility. Finally, the DNP project will motivate nurses to understand the patients as well as families' experiences of illness. There is a need for additional background information and the context of the issue of nursing burnout.

## Section 2: Background and Context

Nursing burnout is an issue of concern due to reported increases in cases. Nurses suffer from the detrimental effects of burnout that, in turn, impairs the delivery of quality nursing care. The problem that has been identified for this DNP project relates to the lack of hospital nursing staff knowledge and the skills to address nurse burnout. Most of these staff nurses continue to work as usual, despite showing severe symptoms of nurse burnout.

The purpose of the DNP project was to fill the identified practice gap, which is a lack of knowledge and skills among nurses on strategies for preventing and controlling burnout by implementing a hospital nursing staff education program. If a nurse has little knowledge regarding burnout, the reaction to burnout results in minimal reversal measures and, as a result, many nurses may leave the field of nursing due to burnout; hence, a hospital nursing staff education program was needed. This section addresses concepts, models, and theories; relevance to nursing practice; local background and context; the role of the DNP student; and the role of the project team.

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

The DNP project was informed by the conservation of resource theory, the Neumann systems model, and the two concepts of nursing burnout and educational program.

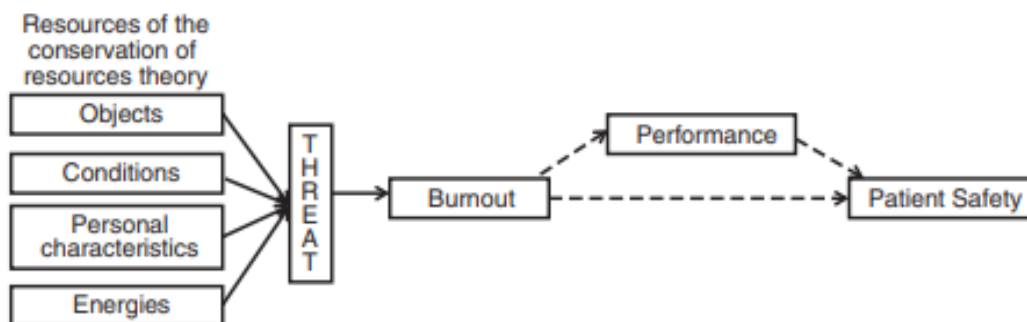
#### **Conservation of Resource Theory**

The conservation resource theory was developed in 1989 by Hobfoll to provide an in-depth conceptualization of the nature of stress at work and demonstrate that employees

strive to create resources that they value (Prapanjaroensin et al., 2017). According to the theory, stress is described as an individual's reaction to the environment under three threats: when resources are likely to be lost, when resources are lost, and when resources cannot be accessed. The four types of resources are objects, conditions, personal characteristics, and energies (Prapanjaroensin et al., 2017).

Objects are resources with a physical presence, such as food. Conditions are structures, such as effective social relationships and good health. Personal characteristics are individual personalities and coping abilities. Energies are skills, such as abilities that can be exchanged for resources like time and money. The conservation resource theory states that persistent threat to the four resources leads to burnout. The rationale for selecting the conservation resource theory as a basis for the DNP project is to create awareness that there is a need for increased accessibility and availability of resources to prevent burnout.

The educational program focused on empowering nurses with information on how to access the available resources. The conservation resource theory further states that if burnout is not addressed, the efficiency of performance at work will reduce and the patient's safety will be compromised, as indicated in Figure 1. Therefore, there is an urgent need to implement the nursing staff education program.

**Figure 1***Conservation Resource Theory and Nursing Burnout*

*Note.* Source: Prapanjaroensin et al., 2017.

**Neuman Systems Model**

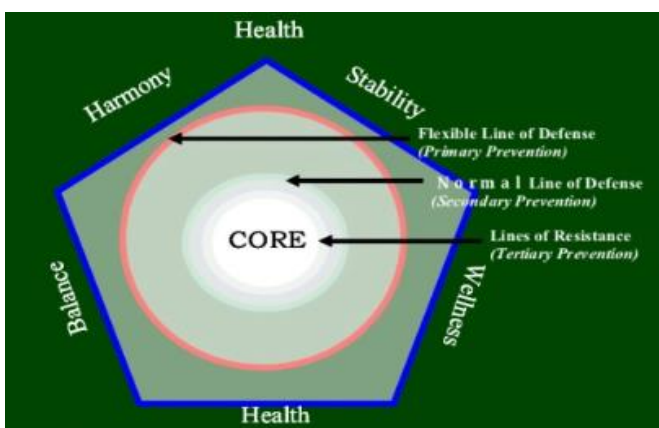
The Neuman system model was developed by Betty Neuman to describe the interaction between an individual's health and the environment. A person freely interacts with the environment to obtain physical, as well as mental, wellbeing (Verberk & Fawcett, 2017). At the center (core) of the model is an individual energy resource that, when faced with stressors, increases the vulnerability of a person to illness (Verberk & Fawcett, 2017). The center is protected by lines of defense that prevent the stressors from reaching an individual and creating instability. These lines of protection are the normal line, flexible line, and resistance line (see Figures 2 and 3).

A flexible line acts as a buffer to the normal line. The resistance line protects the center and it is activated when the normal line is faced with environmental stressors. The resistance line, therefore, ensures that the system is reconstituted back to normal, and stability is restored. The rationale for selecting the Neuman system model as a foundation for the DNP project is to describe the association between nursing burnout and coping

skills. Once the stressors are identified, prevention strategies can be developed as either primary, secondary, or tertiary. The educational program focused on training nurses in primary, secondary, and tertiary prevention of burnout based on the identified stressors at the health care facility.

**Figure 2**

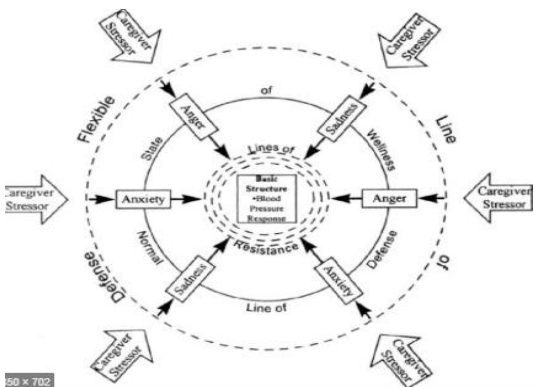
*Neuman System Model*



Note. Source: Hrubes, 2015.

**Figure 3**

*Neuman System Model and Nursing Burnout*



Note. Source: Picot et al., 1999.



## **Concepts**

### **Nursing Burnout**

Emotional, psychological, and physical fatigue among nurses that develop due to prolonged exposure to stress (Hall et al., 2016).

### **Educational Program**

A training program for nurses on nursing burnout. The program for this DNP project was implemented to empower nurses with knowledge and skills for prevention and control of nursing burnout (Russell, 2016).

### **Relevance to Nursing Practice**

The DNP project is embedded in the fact that nursing burnout is prevalent, yet nurses have little knowledge of its prevention and management. As burnout prevails, nurses suffer from physical and mental fatigue, leading to poor quality of nursing care (Monsalve-Reyes et al., 2018). Since most nurses have inadequate knowledge, they are not able to cope with the situation and some resign. The number of nurses who remain cannot cope up with the increased nursing workload, due to staff shortages, and this further worsens the problem of nursing burnout. Nursing burnout has been linked to an increased period of hospitalization, medical errors, and reduce safety (Cooper et al., 2016). Cases of patient falls, and medication administration errors have been positively correlated with nursing burnout (Monsalve-Reyes et al., 2018). To improve the wellbeing of nurses and patients, there is an urgent need for developing strategies to address nursing burnout.

Several educational strategies have been found to be effective in preventing burnout by addressing the knowledge gap. Jennings, (2008) has shown how stress factors contribute to the nurse burnout problem. A key factor that contributes to stress is increased workload among the nurses. Evidence has shown that teamwork can help to reduce workload among nurses through spreading responsibility. Therefore, the education program was focus on encouraging teamwork among nurses to prevent stress and burnout problems.

Darban et al. (2016) have suggested that teaching assertiveness to nurses plays a significant role in reducing instances of burnout. Darban et al. (2016) have also suggested that communication skills training is necessary for reducing instances of nurse burnout. The evidence provided informed the creation of a nurse education program that incorporates teaching communication skills to nurses. It is evident from the strategies that the current DNP project, which is an educational program, will empower nurses with the knowledge and skills to reduce cases of nurse burnout.

### **Local Background and Context**

The context of this newly developed evidence-based education project took place in a hospital setting in the north-eastern part of the United States. There is full support from both nursing and medical departments within the hospital setting. It is feasible to implement this staff education project for nurse burnout, as there is currently a lack of staff education and support within the hospital departments. In hospital settings, nurses are rarely educated about the problem of nurse burnout and its implications on patient safety. Currently, there are no education programs related to the issue within the

northeastern part of the United States. The problem identified for this DNP project is a gap in knowledge and skills that can be implemented in a hospital setting to prevent or reduce nursing staff burnout. Therefore, developing a new evidence-based nurse burnout education program is needed.

After obtaining approval of this staff education project from the appropriate committees, the nurse burnout education program was implemented in the Northeastern US hospital. It was expected that the newly developed education will lead to an improvement in the quality of care provided by the nursing staff, improvement in patient outcomes, and a reduction in nursing staff attrition rates within the hospital settings.

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

One of the professional roles of a DNP student is to conduct research. Concerning this professional context, my role was to ensure that the project is conducted in alignment with the relevant procedures. This involves obtaining approval from the ethics review board and adhering to the ethical principles underlining the protection of human participants. My second role was to act as a team leader, developing the educational program and creating awareness among nurses on the need to participate in the educational program. My third role was to implement the educational program. My final role was to monitor and evaluate the impact of the program to ensure that it increases nurses' knowledge regarding burnout.

My motivation for this project is to enhance the wellbeing of nurses and patients. A nurse who is holistically healthy will provide quality nursing care. On top of this, a healthy nurse is unlikely to resign, and this reduces the growing problem of increased

workload, which is also a major contributor to nurse burnout. Patients will also experience improved disease outcomes, which will feed into a greater likelihood of seeking health care services at this hospital in the future. The hospitals should benefit from increased profit margins as more patients are served. One potential bias is an overemphasis on the results that suggest the implemented DNP project supports the adoption of the educational program. To alleviate this bias, I have ensured that I follow the correct steps of data editing and analysis.

### **Summary**

Nurses suffer from the detrimental effects of burnout, which in turn impairs their delivery of quality nursing care. The DNP project was informed by the Conservation of resource theory, the Neumann systems model, and the two concepts of nurse burnout and educational programs. The rationale for selecting the conservation resource theory as a basis for the DNP project is to create awareness that preventing burnout requires increased accessibility and availability of resources. The rationale for selecting the Neuman system model as a foundation for the DNP project is to outline the association between nurse burnout and coping skills.

Once the stressors are identified, prevention strategies can be developed as either primary, secondary, or tertiary. The DNP project is embedded in the fact that nurse burnout is prevalent, yet nurses have little knowledge of its prevention and management. Several educational strategies have proven effective in preventing burnout by addressing this knowledge gap. Therefore, a need for collection and analysis of evidence that supports the educational program has been demonstrated.

### Section 3: Collection and Analysis of Evidence

This DNP project addressed the problem of nurse burnout by developing a hospital nursing staff education program that focuses on knowledge and skill acquisition to prevent or reduce nurse burnout. The purpose of the DNP project was to fill the identified practice gap, which is a lack of knowledge and skills among nurses regarding strategies of preventing and controlling burnout. The DNP project was informed by the conservation of resource theory (Prapanjaroensin et al., 2017), the Neumann systems model (Verberk & Fawcett, 2017), and the two concepts of nurse burnout and educational program (Russell, 2016). The relevance of the project to nursing is to alleviate nurse burnout and improve nursing practice. The context of this newly developed evidence-based education project is a hospital setting in the northeastern part of the United States.

#### **Practice Focused Question (s)**

Will the development of an evidence-based nursing staff education program on nurse burnout lead to an increase in nurses' knowledge regarding burnout?

#### **Sources of Evidence**

The two sources of evidence used in this project were research databases and DNP project participants. Research databases involved collecting data by retrieving information from previously published literature on nurse burnout and the effectiveness of the educational program. Evidence from project participants was collected via a pretest and posttest questionnaire (see Appendix A). The questionnaire was used to establish the increase in nurses' knowledge regarding burnout.

The sources of evidence are related to the purpose of the DNP project which is to increase knowledge and reduce the prevalence of nurse burnout. Evidence from the pretest and posttest was used to determine whether the educational program should continue to be used. A statistically significant increase in nurses' knowledge regarding burnout will support continued use of the educational program.

### **Published Outcomes and Research**

The databases searched included Google Scholar, Pubmed, EBSCOhost, and Consumer Health. These databases were selected because they have scholarly articles on health care issues. The need for a review of previously published literature was to obtain in-depth information to be used as evidence for the implementation of the educational program. The search terms used included *burnout, nursing, nurse burnout, prevention, control, management, education, training, and work stress*. The search terms were combined using Boolean operators namely AND and OR. AND was used to join keywords with different meanings, such as *burnout* and *nursing*. OR was used to combine keywords with the same meaning, such as *education* OR *training*.

Truncation, by use of the \* symbol, was utilized to increase the search criteria to include articles with the same word but with different endings. For instance, *nurs\** to identify articles with words such as *nursing, nurse, and nurses*. Finally, quotation marks were used to retrieve articles with a similar phrase, e.g. "*nurse burnout*." An example of a search phrase is "*nurse burnout*" AND *prevention* OR *control* AND *education* OR *training* AND *nurs\**.

The search databases were limited to articles published in English, since English is the language of instruction. The year of publication was set at 5 years to obtain contemporary and up-to-date research. The type of literature was limited to primary research articles and reviews of randomized control trials, since these two types of literature are considered the gold standard with regards to evidence. To obtain an exhaustive and comprehensive search, the retrieved articles were evaluated for methodological rigor and relevance to the DNP project.

Evaluation for methodological rigor involved a critical review of each of the articles to ensure that the results were valid and reliable. Additionally, evaluation for relevance to the DNP project involved an in-depth examination of the findings of each of the selected articles. This examination was aimed to establish whether the results supported the use of the educational program for addressing the issue of knowledge deficits regarding nurse burnout.

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

#### **Participants**

The nurses who participated in the DNP project provided evidence to address the practice-focused question. Nurses are the target population because they are directly affected by the problem of burnout, yet many have minimal knowledge on how to deal with the problem. Nurses in the hospital were invited via email and word of mouth to participate. Nurse leaders were encouraged to disseminate information about the educational program among their staff. The target sample size was 40-50 nurses. Nurses

who did not consent to participate were excluded. Twenty-three nurses participated in the educational program.

### **Procedures**

Questionnaires developed by the DNP researcher were used as pre-test and post-test evaluation tools. The questionnaire was used to establish the level of knowledge that the nurses possess before and after the implementation of the educational program. Pre-test and post-test questionnaires contained the same items (see Appendix A). The tool was reviewed by an expert in the field to ensure that they have been developed in consistency with the purpose of the study and the guiding questions. To ensure that the developed tools are valid and reliable, a pilot was conducted on the first few participants. Following the pilot, the tools were adjusted accordingly to ensure that these tools are measuring what they should measure and are also accurate and consistent. Questions that are ambiguous or of otherwise poor quality were removed.

### **Protection**

Approval to implement the DNP project was obtained from Walden University IRB. Approval was a sign that the proposed project adhered to all the ethical principles underlining the protection of human participants. Permission to collect data from the nurses was obtained from the administration of the hospital. The recruitment of participants was voluntary. Nurses were not forced or coerced to participate in the study. Nurses willing to be part of the project were required to sign an informed consent form. The signing of the consent form was taken as an indication that the nurse is fully aware of the nature of the project, including the benefits and associated risks. Nurses could



withdraw at any stage of the DNP project. Anonymity was maintained, since the nurses were not required to write their names on the data collection tools. Confidentiality was maintained by keeping the collected data in a safe place that cannot be accessed by an unauthorized person. Data in soft copy was stored in a computer protected by a password.

### **Analysis and Synthesis**

This project employed a quantitative methodology and pre-test and post-test design using data obtained from the project participants. Upon collection of quantitative data, the questionnaires were assessed for completeness. Tools with more than 50% missing or incomplete data were eliminated from the analysis. The data were analysed using descriptive statistics.

The pre-test and post-test method was used to help with the data measurement and the findings. The Brigham and Women's Hospital for Nursing Excellence (BWCE) Level 2 assessment of knowledge was applied to learning outcome pre and post knowledge assessment (BWCE, 2020). The data that was collected was calculated after the study to determine if there was a gain in knowledge after the education. The setting for this research project was a US Northeastern hospital, the education session was provided using Zoom, due to covid restrictions. The Zoom link that was provided to all participating participants, with all the participants logging in to the zoom call due to the Covid 19 pandemic and it could not be done in person. Each participant had access to the pre-test and post-test assessment applying the Level 2 learning guidelines by BWCE.

Specifically, an average difference in scores was estimated. This difference represents the knowledge gain post-intervention. The findings were disseminated through a conference presentation and a written report for the hospital.

### **Summary**

The two sources of evidence were research databases and DNP project participants. The databases searched include Google Scholar, PubMed, EBSCOhost, and Consumer Health. The nurses who participated in the DNP project provided evidence to address the practice-focused question. The tools used for data collection was questionnaires in the form of a pre-test and a post-test (see Appendix A).

#### Section 4: Findings and Recommendations

Nurse burnout is a state where nurses feel overwhelmed due to psychological distress, which leads to physical, emotional, and mental exhaustion. Excess burnout promotes empathy-related imbalance leading to the nurses feeling overly concerned about their patients and dissatisfaction in their respective job fulfillment. Increased burnout leads to confusion as the nurses cannot create distinct boundaries on interpreting feelings, thus creating poor connection and relationship with the patient (Hall et al.2016). High emotional, mental, and physical distress creates an increased imbalance in creating a compelling link between the nurse and the patients. The lack of educational program that focuses on knowledge and skill acquisition to prevent nurse burnout among the nursing staff on dealing with burnout has led to increased emotional imbalance. Distress increases the potential that nurses will neglect their personal needs, including mental, physical, and social conditions, and often dedicate all their time to attending to the needs of their respective adult palliative patients leading to increased individual burnout (Özbaş & Tel, 2016). A nurse's poor self-care leads to increased physical complaints, lack of sleep, exhaustion, and poor endurance, which raises levels of compassion fatigue.

The problem identified in this DNP project was the impact of nurse burnout and inadequate knowledge in dealing with burnout effects, including individual, patient, and work-related burnouts. The lack of an educational program that focuses on understanding and skill acquisition to prevent nurse burnout among the nursing staff on dealing with burnout within the hospital setting makes it a considerable challenge for nurse's productivity and performance (Lee et al. 2016). The gap-in-practice is evident in the

inability to identify, reduce, and eliminate burnout among nurses (Warren et al. 2016). Even though the current evidence-based literature does not overtly provide insights into burnout training programs and their efficacy within the hospital setting, critical insights can be incorporated to reduce nurse burnout levels. The guidance for this project was provided by literature to initiate burnout training programs to minimize burnout levels. The training programs significantly help nurses gain the necessary skills and knowledge to reduce burnout and increase productivity and performance (Sabancioogullari & Dogan, 2015). Additionally, the burnout training program fosters cooperation and collaboration in improving teamwork and an organizational culture that enhances the quality-of-care provision and positive patient treatment outcomes (Rees et al., 2019).

### **Findings and Implications**

The following table indicates the percent learning gain in pre- and posttest values.

It was calculated using the following formula:

$$((98-59.5) / (100-59.5)) \times 100 = (38.5/40.5) \times 100 = 95\%$$

Based on the project, prior to attending the educational study, the nurses understanding regarding the signs of burnout was 59.5%; posttest, following the education, the score was 98% indicating that the education program improved the nurse's knowledge related to burnout (see Table 1).

**Table 1***Findings – Learning Gain*

	Pretest (N = 22)	Posttest (N = 23)
Total Score (%) correct	59.5%	98%
Percentage Change Learning Gain		95%

Educational opportunities help provide knowledge in effectively understanding burnout, its impact in increasing compassion fatigue, mental, physical, and emotional illness, and how it can be reduced. Educational programs helped nurses acknowledge the impact of workload in improving nurse burnout. Educational training programs will help hospital management effectively address nurse burnout, which is gradually developing into an epidemic as the results indicate work overload as the factor increasing nurse burnout.

According to the pretest question, staff are experiencing burnout, 11 out 22 (47%) participants indicated the management, 8/23 (35%) stated the team, and 1/23 (4%) stated family members contributed to their burnout. In comparison, 2/23 (8%) indicated none of those factors. The posttests on the same questions, which were done after the education, indicated that all the participants agreed on the responsibility being on the staff in determining burnout. Therefore, this shows that educational programs on nurses can increase staff awareness of burnout, thus promoting staff empowerment and providing optimal care, thus increasing productivity and performance. Education program provides

nurses with the knowledge to acknowledge the existence and mechanisms to determine nurse burnout levels among fellow staff and skill empowerment to reduce burnout levels and stay afloat amid this era of service competition, promoting efficiency, responsiveness, fast and independent workforce.

The pre-test question on who suffers the consequences of burnout indicated the results as nurses at 13/23 (56%) nurses, management at 20/23 (86%), family members at 13/23 (56%). The post-test responses showed 22/23 (95%) agreed nurses suffering from the consequences of burnout while 1/23 (4%) agreed that management suffered from burnout levels. Adequate nurse empowerment through the educational program- in their working environment depicted knowledge and understanding on burnout levels. Nurse empowerment involves developing clear and feasible opportunities for advancement, adequate access to educational resources, support, and information which increases informed decision making in reducing stressors and burnouts. The nursing staff education program promotes nurse empowerment where nurses can acquire and possess the ability and the power to acknowledge the presence of burnout levels and develop mechanisms to manage the burnout levels in performing their duties in their working environment effectively, reducing risks of physical and mental illness thus helping them achieve their individual and the hospital goals and objectives efficiently.

All participants did not agree on the pre-post question on hospital management saving money by providing enough support to staff and having resources available to help them with work-related. In contrast, the results from the post-test response showed that all participants agreed with the latter. An educational program that focuses on

knowledge and skill acquisition in preventing nurse burnout helps facilitates the creation of opportunities for creativity and innovation in taking the initiative, responsibility, and accountability of actions and taking control of their stressors and working environment. This factor significantly reduces burnout levels.

The pre-test question on nurse burnout's impact on patient outcome indicated 19/22 (82%) agreed on slower recovery, 13/22(65%) agreed on the increased risk of complications, increased cost of care, and increased mental illness and compassion fatigue. The post-test response indicated that all respondents agreed that nurse burnout affects patient outcomes by increasing compassion fatigue, mental illness, increased cost of care, and increased risks of complications. The results on the pre-test question on what consequences does burnout have on the nurse were as follows: 20/23 (87%) on slower recovery, increased cost of care, increased risk of complications, compassion fatigue, and increased mental illness, 1/23 (4%) indicate the impact to be increased mental illness while 2/23 (8%) stated compassion fatigue. The post-result on the same question indicated that all participants agreed that burnout promotes slower recovery, increased cost of care, increased risk of complications, and compassion fatigue. Organizational support through the management on providing burnout training programs helps advance nurses' knowledge and skills. This provides psychological empowerment in mending the relationship between the dimensions of nurse's emotional exhaustion, personal and work accomplishment, and structural empowerment. Inadequate support from the hospital management in reducing burnout increases compassion fatigue.

### **Individuals, Communities, and Institutions**

The implication of the study included the significance of nurse staff educational programs in reducing burnout levels. At the time of the study, there were few formal training programs available for nurses in reducing burnout levels. Educational training programs create a safe space that helps nurses share their nursing experiences, thus relieving their stress levels related to their work (Arrigoni et al., 2015). New skills and knowledge allow nurses to develop better relationships and connections, fostering teamwork and healthy relationships with their patients enabling optimal care provision (Chang et al., 2018). Therefore, physical, emotional, and mental wellness and equilibrium promote better connection and relationship between the nurses and the patients, reducing fatigue and burnout and translating to quality care.

Reduced burnouts create a safe and healthy space and understand and share feelings that reduce stress levels. Educational programs provide essential aspects of maintaining healthy behavior's, including physical exercise, eating well, and having enough sleep (Patel et al., 2019). Through the training programs, new knowledge, concepts, and skills facilitate bog empowerment and satisfaction, low risks and patient malpractices and negligence, and low turnover in hospital institutions and systems. Institutions and system implementation of nurse training educational programs

### **Anticipated Limitations**

Short scientific work was an anticipated limitation in the findings of this project as it translates to scarcity of prevention and control of burnout levels. Most of the available research and literature provided insights and focus on eliminating burnout when



the burnout levels become present among the nurse and health professionals. The tools and different methods used to evaluate and measure burnout levels in nurses' presents another limitation due to their low efficacy and feasibility.

### **Implications for Positive Social Change**

The educational programs impact nurses with new skills and contemporary knowledge that fosters liberation from selected and mechanical thinking, nurse motivation in care provision professional responsibility, informed decision making, and creating a conducive personal, patient and working environment reducing burnout levels and compassion fatigue (Valdez et al. 2019). A nurse overwhelmed with individual, work, and patient-related burnouts cannot fully perform their tasks. Through educational programs within the hospital and nurse's working environment, nurses are equipped with knowledge and skills to manage and minimize burnout levels. Implementing burnout reduction mechanisms through the training programs helps nurses improve coordination, teamwork, productivity, and performance in inpatient care.

### **Recommendations**

Hospital management should create a conducive working environment to improve optimal productivity and performance in inpatient care. A routine and non-nursing operations should be implemented within the working environment to check up on the nurses' mental, emotional, and physical conditions, thus reducing stressors and fatigue that promote burnout levels. Hospital management should improve communication channels and encourage teamwork nurses to address nurse burnout levels, thus promoting patient safety and positive treatment outcome. There should be clear nurse job

descriptions in the professional nursing care model establishment to implement standard nursing operation procedures through hospital management fully. Hospital management should improve the information system integration with the electronic documentation system to promote optimal patient care. Continuous educational training programs and seminars should be conducted to create awareness of their benefits and encourage nurses to participate.

Although burnout is often present in nursing, there are inadequate methods of coping and eliminating burnouts. The results of this project indicate the availability of burnout reduction mechanisms, and their practical application can result in positive burnout elimination through the introduction of educational programs that provide knowledge and skills among nurses in reducing burnout levels. Therefore, the implementation of educational programs would be beneficial to nurses as they can be effectively tailored to meet the needs of the nurses. Training can be conducted in seminars and workshops at a scheduled time that is convenient for nurses. The components of the recommended training program include a pre-test to evaluate and assess basic knowledge, delivery mechanism, and post-test to evaluate and assess the learning outcomes.

### **Educational Product**

The pre-test and post-test result completed as part of the educational program indicated that education could improve nurses understanding of nurse burnout. The academic plan is included in Appendix A.

### **Contributions of the Doctoral Project Team**

The DNP doctoral project greatly benefited from the doctoral project team contributions. Nursing administration, nurse staff, and the hospital management staff comprised the doctoral project team. Team members were given the opportunity to contribute to the education on reducing burnout.

### **Team Member Roles**

Nurses provided meaningful insights into factors that contribute to their burnout levels, the consequences of burnout, and who gets impacted with the latter. Nurses' feedback included workload, personal stress, lack of job satisfaction, empowerment, and a conducive working environment that contributed to their level of burnout. The input from the hospital management was equally significant as they have an active role in promoting a conducive environment and effective organizational cultures that ensure nurse optimal productivity and performance.

### **Project Expansion Beyond the DNP Doctoral Project**

The expansion of this project will occur at a future projected seminar at a date and time determined by the educational program members and communicated to the nurse staff. The seminar will provide an ample opportunity for sharing new knowledge, skills, and techniques to reduce burnout levels. The presentation of the project at this seminar will enable all those in attendance to learn how to manage and control burnout levels and further develop the educational program for other surrounding hospitals.

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

### **Strengths**

The project has rich insights on evidence-based knowledge that supported the development of the educational program. Each source and literature review used in the project was backed with conclusive evidence from previous peer reviews and studies. The integration of evidence-based research on educational synthesis provided an opportunity for the task to accomplish its goals and objectives. The use of the doctoral project team helped in providing review and feedback for drafting the final presentation. Therefore, this DNP project contributed to the need for educational programs to assist nurses in reducing burnout levels.

### **Limitations**

The project design limited the success of the findings on the project because input was only incorporated from the doctoral project team members. The results and conclusions of the project were only limited to the participants involved in the study and the institutional systems.

## **Recommendations for the Future Project**

The recommendation for the future project would be based on determining whether the educational program was effective. Additionally, future use would ensure assessing the project for feasibility and efficacy in reducing burnout among nurses. Moreover, the recommendation would be drafted to expand the insights on the evidence-based educational programs in reducing burnout among nurses in their respective working environments.

## Section 5: Dissemination plan

### **Institutional Level**

In the future, this DNP project will be disseminated in different sites with health institutions. During the seminar that was completed, the nursing staff was exposed to contemporary knowledge and skills through the educational program. Additionally, projects done by other researchers and graduate students are presented to boost the significance of academic programs in reducing burnout levels. The presentation will enable all the attendees to effectively learn the importance of the educational programs and incorporate the knowledge and skill in managing and controlling burnout levels. The seminar sessions and events are recorded and stored for future reference.

### **Intended Audience**

The intended audience in this project is nursing staff and health institution and system management. Different venues and locations may effectively disseminate this project, including hospital conference areas, nursing councils, professional practice sessions, and new nursing learning orientation meetings. I can present the project information on the different nursing councils and hospital management forums on a high-level scope. Such forums host nurses and institutional management leaders from a broad spectrum of health systems and provide a program presentation focused on individual individuals' holistic development.

### **Educational Plan**

The educational plan acknowledged the various factors contributing to nursing burnout, including remuneration, workload, and personal stress. The hospital

management must continually assess whether nurses are experiencing burnout, thus initiating educational programs to help manage and control burnouts. The academic plan incorporated the consequences of nurse burnout, including compassion fatigue and increased risk of mental and physical illness

### **Analysis of Self**

During this doctoral project, I encountered and experienced a wide range of changes and perspectives in how I approach nursing practice and the overall research.

### **Practitioner Role**

Nursing has always been my calling, including acquiring the necessary skills and knowledge to increase my professional practice. Throughout this doctoral project, I have gained a tremendous understanding of the nursing profession, especially in nursing operations and care provision. My goal for this project helped me interact and develop a network base with other nursing practitioners to gain insights and understand the impact and need for controlling burnout levels. Although the foundation and basis of nursing practitioners in the burnout factor are overly similar, how each nurse is affected is quite different in intensity and burnout levels.

During the research, I interacted with other nursing practitioners and hospital management to share ideas, significance, and techniques for reducing burnout, which primarily affected nurses' productivity and performance. These valuable interactions helped me as a nursing practitioner to increase my skills and knowledge on the impact of burnout levels and the various ways in which the burnout levels can be managed and controlled to promote optimal care and patient treatment outcomes. Before this project, I

thought that there were no solutions to burnout levels. Indeed, I assumed that educational programs could not be effective, but now I acknowledge educational programs have a high potential of reducing, managing, and controlling burnout levels among nurses.

### **Project Manager**

My role as a project manager in this doctoral was quite exciting and a rare opportunity and responsibility. Even though I have been a lead manager before, this project allowed me to lead a massive undertaking as this project contained high levels of personal, teamwork, and professional input. My project team members helped me understand how the nursing practitioner and hospital management function daily in providing care services to patients. I also became aware of the burnout level challenges existing with another medical-related professional, and this doctoral project could positively impact them if they effectively incorporate its findings. Teamwork helped me become more responsible, accountable, and open-minded and not overly criticize some nursing practices. I was able to significantly improve my communications skills, reading, and critical thinking to understand the information provided by the participants and the information contained in incorporated literature into this study.

### **Scholar Role**

The role of being a scholar required effective incorporation and integration of all skills and knowledge that I had acquired in my process of learning up to this project juncture. I had never conducted an DNP doctoral project before; therefore, this was a new phenomenon and experience. For example, despite conducting a literature review

previously, I still had some challenges in effectively sorting and evaluating relevant literature reviews for this project.

### **Project Completion**

The process of completing this DNP was quite challenging because of the complex nature of ensuring an understanding of the significance of evidence-based educational programs in helping nurse staff manage and control burnout levels. There was the anxiety in delivering a high-quality educational product that would be feasible when presented to other DNP projects and other stakeholders who had invested their time and energy into the project. Effective collaboration and coordination with my project team members helped synthesize the significance of the educational program among nurse staff in reducing burnout. Conducting this doctoral project allowed me to enhance my skills and knowledge in understanding nurse burnout and the impact of academic programs in promoting performance and productivity.

### **Summary**

Nurses often face the challenge of maintaining an equilibrium between work stressors and everyday stressors that promote high levels of burnout. Burnout can be described as work-related events and situations that increase levels of distress, leading to the care nurses developing dysfunction and exhaustion socially, emotionally, and physically. Excessive burnout promotes empathy-related imbalance leading to the nurses feeling overly dissatisfied with their job due to low empowerment. Increased burnout leads to confusion as the nurse cannot create distinct boundaries on the interpretation of feelings, thus creating poor connection and relationship with the patient growing



compassion fatigue. High emotional, mental, and physical distress creates an increased imbalance in creating a compelling link between the nurse and the patients, consequently burnouts. Educational training programs are effective in reducing and controlling burnout levels among nurses. Educational programs help nurses helps in increasing job satisfaction, job empowerment, and the ability to provide optimal care, thus increasing productivity and performance. Organizational support through educational program empowerment helps advance nurses' knowledge and skills, providing psychological empowerment, thus reducing burnout levels.

## References

- Adams, A., Hollingsworth, A., & Osman, A. (2019). The implementation of a cultural change toolkit to reduce nursing burnout and mitigate nurse turnover in the emergency department. *Journal of Emergency Nursing, 45*(4), 452-456.  
<https://doi.org/10.1016/j.jen.2019.03.004>
- Arrigoni, C., Caruso, R., Campanella, F., Berzolari, F. G., Miazza, D., & Pelissero, G. (2015). Investigating burnout situations, nurses' stress perception and effect of a post-graduate education program in health care organizations of northern Italy: a multicenter study. *G Ital Med Lav Ergon, 37*(1), 39-45.
- Ayaz-Alkaya, S., Yaman-Sözbir, Ş., & Bayrak-Kahraman, B. (2018). The effect of nursing internship program on burnout and professional commitment. *Nurse Education Today, 68*, 19-22.
- Brand, S. L., Thompson Coon, J., Fleming, L. E., Carroll, L., Bethel, A., & Wyatt, K. (2017). Whole-system approaches to improving the health and wellbeing of healthcare workers: a systematic review. *PloS One, 12*(12), e0188418.
- Cooper, S. L., Carleton, H. L., Chamberlain, S. A., Cummings, G. G., Bambrick, W., & Estabrooks, C. A. (2016). Burnout in the nursing home health care aide: A systematic review. *Burnout Research, 3*(3), 76-87.
- Chang, H. Y., Friesner, D., Chu, T. L., Huang, T. L., Liao, Y. N., & Teng, C. I. (2018). The impact of burnout on self-efficacy, outcome expectations, career interest, and nurse turnover. *Journal of Advanced Nursing, 74*(11), 2555-2565.

- Darban, F., Balouchi, A., Narouipour, A., Safarzaei, E., & Shahdadi, H. (2016). Effect of communication skills training on the burnout of nurses: A cross-sectional study. *Journal of Clinical and Diagnostic Research: JCDR*, *10*(4), IC01.
- Hall, L. H., Johnson, J., Watt, I., Tsipa, A., & O'Connor, D. B. (2016). Healthcare staff wellbeing, burnout, and patient safety: a systematic review. *PloS one*, *11*(7), e0159015.
- Han, S., Shanafelt, T. D., Sinsky, C. A., Awad, K. M., Dyrbye, L. N., Fiscus, L. C., ... & Goh, J. (2019). Estimating the attributable cost of physician burnout in the United States. *Annals of Internal Medicine*, *170*(11), 784-790.
- Havens, D. S., Gittell, J. H., & Vasey, J. (2018). Impact of relational coordination on nurse job satisfaction, work engagement and burnout: Achieving the quadruple aim. *JONA: The Journal of Nursing Administration*, *48*(3), 132-140.
- Hewitt, D. B., Ellis, R. J., Hu, Y. Y., Cheung, E. O., Moskowitz, J. T., Agarwal, G., & Bilimoria, K. Y. (2020). Evaluating the association of multiple burnout definitions and thresholds with prevalence and outcomes. *JAMA Surgery*, *155*(11), 1043-1049. <https://doi.org/10.1001/jamasurg.2020.3351>
- Hrubes, M.T. (2015). Application of Betty Neuman systems model in the operating room. *Theory Application Paper*. <https://mariahrubes.wordpress.com/nur-306-theory-paper/>
- Jennings, B. M. (2008). Work stress and burnout among nurses: Role of the work environment and working conditions. In *Patient safety and quality: An evidence-based handbook for nurses*. Agency for Healthcare Research and Quality (US).

- Kutney-Lee, A., Wu, E. S., Sloane, D. M., & Aiken, L. H. (2013). Changes in hospital nurse work environments and nurse job outcomes: an analysis of panel data. *International Journal of Nursing Studies*, *50*(2), 195–201.  
<https://doi.org/10.1016/j.ijnurstu.2012.07.014>
- Lee, H. F., Kuo, C. C., Chien, T. W., & Wang, Y. R. (2016). A meta-analysis of the effects of coping strategies on reducing nurse burnout. *Applied Nursing Research*, *31*, 100-110.
- Liu, X., Zheng, J., Liu, K., Baggs, J. G., Liu, J., Wu, Y., & You, L. (2018). Hospital nursing organizational factors, nursing care left undone, and nurse burnout as predictors of patient safety: A structural equation modeling analysis. *International Journal of Nursing Studies*, *86*, 82-89.
- Monsalve-Reyes, C. S., San Luis-Costas, C., Gómez-Urquiza, J. L., Albendín-García, L., Aguayo, R., & Cañadas-De la Fuente, G. A. (2018). Burnout syndrome and its prevalence in primary care nursing: A systematic review and meta-analysis. *BMC Family Practice*, *19*(1), 59-60.
- Nantsupawat, A., Nantsupawat, R., Kunaviktikul, W., Turale, S., & Poghosyan, L. (2016). Nurse burnout, nurse-reported quality of care, and patient outcomes in Thai hospitals. *Journal of Nursing Scholarship*, *48*(1), 83-90.
- O'Brien-Pallas, L., Murphy, G.T., Shamian, J., Li, X., & Hayes, L.J. (2010). Impact and determinants of nurse turnover: A Pan-Canadian study. *Journal of Nursing Management*, *18*, 1074-1086. <https://doi.org/10.1111/j.1365-2834.2010.01167.x>

- Özbaş, A. A., & Tel, H. (2016). The effect of a psychological empowerment program based on psychodrama on empowerment perception and burnout levels in oncology nurses: Psychological empowerment in oncology nurses. *Palliative & Supportive Care, 14*(4), 393-401.
- Patel, R. S., Sekhri, S., Bhimanadham, N. N., Imran, S., & Hossain, S. (2019). A review on strategies to manage physician burnout. *Cureus, 11*(6).
- Picot, S.J.F., Zauszniewski, J., Holston, E., & Debanne, S. (1999). Mood and blood pressure responses in black female caregivers and noncaregivers. *Nursing Research, 48*. 241-241.
- Prapanjaroensin, A., Patrician, P. A., & Vance, D. E. (2017). Conservation of resources theory in nurse burnout and patient safety. *Journal of Advanced Nursing, 73*(11), 2558-2565.
- Russell K. (2016). Perceptions of Burnout, Its Prevention, and Its Effect on Patient Care as Described by Oncology Nurses in the Hospital Setting. *Oncology Nursing Forum, 43*(1), 103–109. <https://doi.org/10.1188/16.ONF.103-109>
- Rees, C. S., Eley, R., Osseiran-Moisson, R., Francis, K., Cusack, L., Heritage, B., & Hegney, D. (2019). Individual and environmental determinants of burnout among nurses. *Journal of Health Services Research & Policy, 24*(3), 191-200.
- Reith, T. P. (2018). Burnout in United States healthcare professionals: a narrative review. *Cureus, 10*(12).

- Ross, A., Bevans, M., Brooks, A. T., Gibbons, S., & Wallen, G. R. (2017). Nurses and health-promoting behaviors: Knowledge may not translate into self-care. *AORN Journal*, *105*(3), 267-275.
- Sabancıogullari, S., & Dogan, S. (2015). Effects of the professional identity development program on nurses' professional identity, job satisfaction, and burnout levels: A pilot study. *International Journal of Nursing Practice*, *21*(6), 847-857.
- Salyers, M. P., Bonfils, K. A., Luther, L., Firmin, R. L., White, D. A., Adams, E. L., & Rollins, A. L. (2017). The relationship between professional burnout and quality and safety in healthcare: a meta-analysis. *Journal of General Internal Medicine*, *32*(4), 475-482.
- Squiers, J. J., Lobdell, K. W., Fann, J. I., & DiMaio, J. M. (2017). Physician burnout: are we treating the symptoms instead of the disease? *The Annals of Thoracic Surgery*, *104*(4), 1117-1122.
- Valdez, G. F. D., Cayaban, A. R., Mathews, S., & Doloolat, Z. A. (2019). Workplace empowerment, burnout, and job satisfaction among nursing faculty members: Testing Kanter's theory. *Nurs Palliative Care Int*, *2*(1), 29-35.
- Verberk, F., & Fawcett, J. (2017). Thoughts About Created Environment: A Neuman Systems Model Concept. *Nursing Science Quarterly*, *30*(2), 179-181.
- Waddill-Goad, S. M. (2019). Stress, fatigue, and burnout in nursing. *Journal of Radiology Nursing*, *38*(1), 44-46.
- Warren, J. N., Luctkar-Flude, M., Godfrey, C., & Lukewich, J. (2016). A systematic review of the effectiveness of simulation-based education on satisfaction and

learning outcomes in nurse practitioner programs. *Nurse Education Today*, 46, 99-108.

Woo, T., Ho, R., Tang, A., & Tam, W. (2020). Global prevalence of burnout symptoms among nurses: A systematic review and meta-analysis. *Journal of Psychiatric Research*, 123, 9-20.

Zhang, Y. Y., Han, W. L., Qin, W., Yin, H. X., Zhang, C. F., Kong, C., & Wang, Y. L. (2018). Extent of compassion satisfaction, compassion fatigue and burnout in nursing: A meta-analysis. *Journal of Nursing Management*, 26(7), 810-819.

## Appendix A: Pre- and Posttest Questions

1. What are the factors that contribute to nurses' burnout?
  - a. Personal stress
  - b. Remuneration
  - c. *Workload*
  - d. All the above
2. Whose responsibility is it to determine whether or not staff are experiencing burnout?
  - a. Management
  - b. *Staff*
  - c. Family members
  - d. None of the above
3. Who suffers the consequences of nurse burnout (Select all that apply)?
  - a. *Nurses*
  - b. Management
  - c. Family members
  - d. Government
4. The hospital management may save money by providing enough support to staff and having resources available to help them deal with work related stress? *True/False*
5. The hospital will save funds by ignoring staff burnout. *True/False*



6. What impact does nurse burnout have on patient outcome (Select all that apply)?
- a. Slower recovery*
  - b. Increased cost of care*
  - c. Increased risk of complications*
  - d. Compassion fatigue
7. What consequence does burnout have on the nurse?
- a. Compassion fatigue
  - b. Increased risk of mental illness
  - c. Increased risk of physical illness
  - d. All the above*

## Appendix B: Nurse Educational Program

### **Identification of Problem**

Health care workers like nurse's encounter stress at work daily. Typically, the pressure is because nurses "face high expectations and they may not have adequate time, skills, resources and social support at work. High stress on the nurse can result to severe distress, burnout or physical illness. In the end, healthcare workers may not be able to provide high-quality healthcare services" (Ruotsalainen, 2014, p. 2). Burnout that can be generated by stress doesn't just affect patient outcome, because of reduced ability for the nurse to provide quality care to patients, it can also be costly to organizations. According to Ruotsalainen (2014), "stress and burnout can also be costly because affected healthcare workers request sick leave and may even change jobs" (p. 2). According to Russell (2016), some nurses reported that they experience burnout because of emotional exhaustion and depersonalization because of missed, shortened, or skipped breaks and lunches (p. 103). Shortage of staff and numerous call-ins sometimes make it necessary to use many supplemental and staffing agency nurses. The use of supplemental staff sometimes puts pressure and stress on regular employees because the supplemental staff usually need help finding where things are and may not know hospital protocols or how to navigate computer applications to chart patient assessments or put in orders. This might result in delay of care to patients, which leads to low patient satisfaction scores.

### **Significance to Nursing Practice**

Burnout and stress in the workplace have a detrimental impact on both the nurse and the facility. The effects of burnout symptoms can be felt not only by the person involved but also by the organization and patients as well with higher risk to reduce productivity and adverse quality of service (Kutney-Lee et al., 2013). Burnout can result from nurses being overworked, especially when their counterparts call in sick or they are not efficient team players. Usually, if an employee calls in sick, it takes some time for another staff to get a replacement. When nurses get stressed from working hard without breaks, it can make them to have a slowed reaction time, lapses of attention to critical details, errors of omission, compromised problem solving, bad judgement, reduced

motivation, and decreased vigor for successful completion of required tasks (Russell, 2016). Burnout due to the nurse being overworked can lead to job dissatisfaction and high turnover which can result in the lack of continuity of care, thus negatively affecting patients (O'Brien-Pallas et al., 2010, p. 1074). When a nurse is overworked, they may be putting the safety of the patient, themselves, and their co-workers at risk.

According to O'Brien-Pallas et al. (2010) it is alarming to find out that facilities incur “a cost of \$42 000 to replace a medical–surgical nurse and \$64 000 to replace a specialty nurse (p. 1074). Furthermore, “the indirect costs of nurse turnover are thought to be particularly significant because of the combined effects of an initial decreased productivity of the new employee and a decrease in staff morale and group productivity caused by turnover” (p. 1074).