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Staff Education on Identifying Burden and Burnout in Family Caregivers

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This is to certify that the doctoral study by

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has been found to be complete and satisfactory in all respects,
and that any and all revisions required by
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Walden University
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Abstract

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by

Ekeoma Cooper

MSN, Walden University, 2018

BS, University of Texas at Arlington, 2014

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

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Abstract

The aging population in the United States continues to grow and, along with it, the need for informal caregivers. Informal caregivers provide ongoing assistance with activities of daily living to a friend or relative. Due to the sole responsibility of providing ongoing care, these individuals may experience burden and burnout, which has been defined as a state of emotional, mental, and physical exhaustion. Given the role that informal caregivers provide as part of the healthcare delivery system, caregiver burden and burnout are a public health issue. Nurse practitioners play a significant role in identifying caregiver burden and burnout, especially among those who provide care to the aging population. Guided by Watson's theory of human caring, this project was conducted to determine if an educational intervention would increase knowledge among primary care nurse practitioners. Members of professional organization were targeted for this project, and 103 nurses volunteered to participate in the educational intervention. Following a pretest survey, participants reviewed a PowerPoint presentation on burden and burnout and completed a posttest survey. A dependent t-test indicated an increase in knowledge among nurse practitioners who participated in the educational intervention ($t = –17.06$, $p < 0.001$). Additionally, there was increase in the nurse practitioners' willingness to apply the Zarit Burden Scale to their practice ($t = –4.25$, $p < 0.001$) and an increase in the perceived impact of the Zarit Burden Scale on identifying burden and burnout in informal caregivers ($t = –2.37$, $p < 0.05$). This project contributes to social change by increasing the ability of nurse practitioners to identify burden and burnout among informal caregivers, which can lead to improving quality of life.

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Dedication

This project is dedicated to God Almighty for His numerous blessings. For without Him, none of this would have been possible. Additionally, I dedicate it to my lovely sister, my mom, my dad, my daughters, and my partner in life. My family gave me the inspiration to embark on this journey to complete my DNP program, and they have been with me at every phase.

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To all the wonderful informal caregivers who provide care tirelessly and compassionately to their family members and friends: I am grateful for the outstanding work you do. Our communities, healthcare system, and patients would suffer greatly without your help. Thank you for your sacrifice and dedication. May you remain blessed, Amen.

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Section 1: Nature of the Project

Introduction

Informal caregivers are self-identified individuals who provide informal and often unpaid care to sick, disabled, and/or cognitively impaired older adults who are typically caregivers' family members, relatives, friends, or neighbors (Aksoydan et al., 2019). Informal care includes supervision, support, and assistance with activities of daily living that is provided by nonprofessional individuals in a patient's social environment (Dichter et al., 2020). Informal caregivers provide a broad range of services, including assistance with errands, custodial care, and activities of daily living such as bathing and toileting (Hagedoorn et al., 2019), thereby playing an important role in maintaining the health and well-being of the elderly population. These informal caregivers are vital to their recipients' care and are a necessary component of today's healthcare delivery system; these individuals perform a variety of tasks that, at times, may go far beyond their scope of expertise (Musich et al., 2017).

The U.S. Census (2019) predicted that the number of Americans aged 65 and over will nearly double from 52 million in 2018 to 95 million in 2060. As a result, it is anticipated that almost 25% of the U.S. population will be over the age of 65. Research has demonstrated that not only is age positively associated with the need for care, but as an individual ages, the individual prefers to be cared for at home by an informal caregiver as long as possible (Hakek et al., 2016). Currently, 16.6% of Americans provide informal care, and because of the growing elderly population, more informal caregiving will be needed (Family Caregiver Alliance 2020). Thus, informal caregiving is often considered the "cornerstone of care" for recipients living at home, and at least one-half of those receiving care are individuals with dementia (Dichter, 2020).

On average, 96% of informal caregivers provide help with activities of daily living; 46% of informal caregivers perform medical and nursing tasks (Family Caregiver Alliance, 2020). Informal caregiving saves 257 billion dollars per year, as informal caregivers provide an estimated 37 billion hours of unpaid care, equating an estimated value of $470 billion (Happ, 2017). Additionally, informal caregiving also generates high role satisfaction, a sense of accomplishment, and emotional fulfilment in taking care of a loved family member. Caregivers report developing new skills and close relationships with recipients and feelings of companionship, fulfillment, and personal growth (Pristavec, 2019). Nonetheless, caregiving can be physically, psychologically, and financially draining and result in the caregiver experiencing fatigue or burden. Thus, caregiving can be multifaceted, including positive appraisals and negative burdens (Kent et al., 2019).

The role of informal caregivers is becoming an important issue at a political, sociological, and economic level (Bom et al., 2019). Caregiving is not an easy task, especially when it comes to providing care for elderly patients, which often includes physical, emotional, and psychological risks for caregivers (Lee et al., 2018). A study conducted in Massachusetts revealed that, from 2007 to 2009, informal caregivers performed 24.9 million hours a day of unpaid care work, which is the equivalent of 3.1 million full-time workers, for a total population of 6.4 million (Happ, 2017). As such, caregiving has been associated with perceived physical and mental health burdens (Cheng et al., 2018) on the individuals providing care. Among informal caregivers, from 15% to 32% report burnout and burden, depending upon the study population and mainly affecting those providing care for patients with long-term illnesses (Musich et al., 2017).

Informal caregivers tend to have high levels of anxiety and depression (Kim et al., 2016). Happ (2017) concluded that when caregivers provide care over long periods of time without assistance, they are more likely to show stress symptoms, which can also alter physical health, increase anxiety and social isolation, alter interpersonal relationships, provoke lesser well-being, and lead to depressive symptoms and even premature death. Moreover, 57% of all informal caregivers report that they do not have a choice in caregiving, and this lack of choice is self-imposed (Family Caregiver Alliance, 2020). Other risk factors associated with caregiver burden include lower income, lower education, living with care recipient, higher number of hours spent providing care, self-reported depression, social isolation, financial stress, and lack of choice of being a caregiver (Musich et al., 2017).

As demonstrated, informal caregivers are vital determinants of positive health outcomes for people they provide care for (Farina et al., 2017), as they fill an important gap in enhancing the psychological well-being and physical health of elderly people (Pristavec, 2019). However, the negative aspects of informal caregiving can contribute to mental and physical exhaustion, stress, and other health concerns. Because of this, burden and burnout experienced by informal caregivers have emerged as a cause for concern. These individuals continually provide care, such as bathing, dressing, eating, dispensing medications, and assisting in the toilet, 24 hours a day, every day of the year to support the care recipients (Jaracz et al., 2015). Caregivers tend to lose their jobs because they are unable to work outside the home and often limit social relationships with friends. When caregivers embrace all the responsibilities of the patient, they may develop feelings of anger, displeasure, loss, stigma, fear, insignificance, shame, guilt, despair, uncertainty, anxiety about the future, stress, and depression (Kruithof et al., 2016).

Caregivers play an important role in healthcare delivery, and to maintain their contribution, their experiences must be investigated to provide them with appropriate support (Turten et al., 2017). Programs for caregivers can provide high-quality care and minimize burdens of caring, thereby enabling ongoing care. This can be achieved through evidence-based practice, which entails applying study results from experimental settings to practical settings (Tak et al., 2019). The International Council of Nurses defines *evidence-based practice* as a problem-solving approach to clinical decision making that incorporates a search for the best and latest evidence, clinical expertise and assessment, and patient preference values within a context of caring. Evidence-based practice improves clinical practice and ensures accountability in nursing (Mackey & Bassendowski, 2017).

As such, nurse practitioners in primary care arenas are plausible “first lines of defense” in recognizing and assessing informal caregivers for burden and burnout as many informal caregivers accompany their loved one or friend to provider appointments. By educating nurse practitioners on the importance and identification of burden and burnout among informal caregivers, they may be able to assess and provide adequate caregiver support that may go undetected in other settings. Thus, the purpose of this project was to educate nurse practitioners on the signs and symptoms of caregiver burden and burnout among informal caregivers of patients with chronic diseases with the hope of early identification and interventions geared toward assisting informal caregivers.

Problem Statement

In 2015, an estimated 17.7 million people in the United States were informal caregivers who provided substantial services through in-home, unpaid assistance to family members and friends (Edwards et al., 2020). A 2015 National Alliance for Caregivers survey revealed that approximately 2.8 million individuals (7% of the 39.8 million caregivers surveyed) provided care to an adult living with cancer. A separate estimate from the National Cancer Institute of Health Information and National Trends in 2017-2018 found that as many as 4.3 to 6.1 million adult individuals provide care for adults or children with cancer (Kent, et al., 2019). As the U.S. population continues to age and long-term diseases like dementia and cancer increase, the need for informal caregivers will increase as well (Au et al., 2019).

The role of an informal caregiver is complex especially when the caregiver is caring for an elderly patient. An informal caregiver may provide services for an individual, such as bathing, toileting, dressing, food preparation, maintaining their hygiene, and helping them with basic activities like exercise, dispensing routine medication, housekeeping, shopping, laundry, and other errands or administrative tasks such as paying bills. A single care recipient might have several individuals acting as caregivers, and caregivers might be caring for more than one individual (Kent et al., 2019). In some cases, caring for an ill, aging, or disabled person can be a rewarding experience and can enhance the bond between caregiver and recipient, but the caregiving relationship can also place an emotional and physical strain on caregivers, leading to higher rates of depression, lower quality of life, and poorer overall health (Edwards et al., 2020).

Given the importance of the role and relevance of the informal caregiver, it is imperative for providers to acknowledge the mental, physical, and financial tolls that informal caregiving can take on an individual. The American Medical Association identified that informal caregiving can place an individual at higher risk for experiencing caregiver burnout. Thus, it is important for formal providers to not only care for the individual but also oversee and assess the health and well-being of the informal caregiver. Informal caregivers are at risk of chronic illnesses, such as diabetes and hypertension, stress, burnout, and other psychological disturbances that can negatively affect their ability to deliver care (Abreu et al., 2015). Understanding the challenges faced by informal caregivers could inform implementation of improvements in support systems that could not only enhance the health of the caregiver, but of the care recipient as well.

The emphasis in this doctoral study was to identify ways of improving the quality of life of informal caregivers. These caregivers give countless efforts to help patients heal, often to the caregivers' own detriment. To effectively manage and preserve the health of informal caregivers, it is essential to first identify the factors that influence a caregiver's well-being (Lee et al., 2018). The high rate of terminal illnesses, such as cancer, dementia, and the aging population is on the increase. These illnesses are the challenging situations that caregivers are tasked with while caring for a loved one.

The outcome of this project has the potential to reduce the problems that informal caregivers face. The findings of this study can also help provide necessary assistance and support to caregivers. Additionally, the results of this project can influence nursing practice by identifying burden and burnout experienced by informal caregivers through education and staff awareness. Providing such an outline and format for an educational program can assist nurse practitioners in the Texas community to identify burden and burnout experienced by informal caregivers.

Purpose Statement

The purpose of this research project was to determine if an educational intervention on the signs and symptoms of caregiver burden and burnout among informal caregivers of patients with chronic diseases increases knowledge among nurse practitioners working in primary care settings. The goal was to increase knowledge of informal caregiver burden and burnout among nurse practitioners in a primary care setting. The gap in practice addressed by this doctoral project was lack of sufficient education on strategies to reduce burden and burnout experienced by informal caregivers. Increased knowledge may translate into practice so that informal caregivers who may be suffering from caregiver burden and burnout can be identified and effective strategies can be implemented to support them.

Nature of the Doctoral Project

To achieve the purpose of this staff education project, a comprehensive search of several peer-reviewed journals and course books was conducted for information retrieval. Several databases, including the Cumulative Index to Nursing and Allied Health Literature (CINAHL) plus with full text, nursing and health databases, Medline with full text and Ovid, Pub Med, Google Scholar among other databases were accessed for relevant evidence-based strategies to help identify burden and burnout of informal caregivers. The following search terms were used to identify the evidence: *informal caregiving, burden and burnout, evidence-based approach to burden and burnout, burden and burnout education,* and *staff education on burden and burnout*. Other key terms included *informal caregivers, staff knowledge of burden and burnout,* and *how to identify burden and burnout* as well as a combination of these search terms.

The goal of the project was to develop a staff education program for nurse practitioners who are registered members of a national professional organization located in south central United States. The content of the educational program was focused on identifying burden and burnout in informal caregivers, the negative outcomes of informal caregiver burden, and possible measures to take on managing burden and burnout. The development of a staff education program helped accomplish the goal of translation of evidence into practice for improved quality of life of informal caregivers, especially those who experience burden and burnout.

Significance

Stakeholders who may be potentially impacted by addressing the issue of burden and burnout among informal caregivers include the government, medical directors, nurse practitioners, registered nurses, and the informal caregivers. Educating providers on how to support informal caregivers will help them assess for caregiver burden and burnout and intervene when necessary to improve both caregiver and patient outcomes.

Burden and burnout have been identified as a public health issue that not only can affect healthcare services but also can create financial pressures on the social protection system (Garcés et al., 2010). Significant societal changes taking place will have an impact on informal caregivers, especially with regard to roles filled by women who have typically acted as primary caregivers and as their presence in the labor market continues to grow (Toribio-Díaz et al., 2013). Caregivers' own health problems can convert them into consumers of the healthcare system, which can add to the pressure of the dependents' need for healthcare. This can create political, health, social and economic problems especially given the current lack of sustainability of social protection systems (Garcés et al., 2010).

To develop and implement effective strategies to reduce informal care costs and alleviate associated burdens and burnout, policymakers and governmental and health institutions must have an understanding of the caregiver experience (Tang et al., 2013). For example, the demand and struggles with long-term care can save the United States about 257 billion dollars annually in providing care (Happ, 2017). In the healthcare system, for informal caregivers of patients who experience burden and burnout to have a meaningful and positive clinical implication (Ata & Doğan), healthcare professionals are encouraged to be critical of the informal caregivers' evidence of burden and burnout, and greater healthcare professional training on this is advocated for (Van Durme et al., 2012). Given the social burden and significant cost of institutionalization, finding evidence-based practices in the healthcare system will improve outcomes, maintain independence, reduce impact on patients and families (Hanna et al., 2018), and enhance positive social change. This project has the potential to contribute to positive social change by improving nurse practitioners' awareness of ways to identify burden and burnout among informal caregivers.

Summary

Informal caregivers are often considered the backbone of the healthcare system. Informal caregivers provide much-needed care to the aging population with little to no regard for their own health and well-being. These caregivers need support and interventions to alleviate the burden and burnout they experience while caring for their loved ones long term. Educational intervention has been identified as an approach to help support informal caregivers. This will bring about actionable practices that can help reduce burden and burnout experienced by informal caregivers. In Section 2, a theoretical model will be presented to guide education services on strategies to identify burden and burnout, providing a more detailed background, context, and theoretical framework to support this project. Relevance of the project to nursing practice and application to local clinical setting is discussed.

Section 2: Background and Context

Introduction

Identifying burden and burnout experienced by informal caregivers is a public health problem that needs to be addressed. Nurses and nurse practitioners make up the largest group of health workers, and there is a need to keep current and anticipated needs in the healthcare environment (Beccaria et al., 2018; Muraraneza & Mtshali, 2018). This project involved assessing the knowledge of nurse practitioners on identifying burden and burnout experienced by informal caregivers before educational intervention, presenting relevant literature or educational materials, returning demonstration of learned information, and retesting.

Concepts, Models, and Theories

The theoretical framework for this project incorporated a variety of theories and models. These chosen theories and models help improve knowledge, skills, and ability among nurse practitioners to improve the quality of life of informal caregivers. Among these theories are Watson's theory of human caring, role theory, adult learning theory, and stress theory. The frameworks of these theories were used to actualize a module on creating a support system for informal caregivers, thereby assisting them on how to have a good quality of life while taking care of patients with long-term chronic illnesses.

Watson's Theory of Human Caring

Watson's theory of human caring is focused on the human and nursing paradigm (Gazarian et al., 2020). Watson viewed caring as the most valuable attribute nursing has to offer and believed that disease might be cured but illness would remain because without caring, health is not fully attained (Tektaş & Çam, 2017). The theory of human caring asserts that a human being cannot be healed as an object. This theory argues that a person is part of their self-environment, nature, and the large universe. In this theory, the environment is defined as comfortable, beautiful, and peaceful and caring is the moral ideal that entails mind-body-soul engagement with one another (Tektaş & Çam, 2017). Nursing is categorized as a profession that performs personal, scientific, ethical, and aesthetical practice (Beccaria et al., 2018). Watson's theory of human caring aims to ensure a balance and harmony between health and illness experiences of a person (Tektaş & Çam, 2017). Watson stated that a holistic approach to caring for a human involves mind-body-soul subdimensions, which reflect the whole, and the whole is different from the human's subdimensions (Tektaş & Çam, 2017). Therefore, applying Watson's theory of human caring to the nursing practice of identifying burden and burnout experienced by informal caregivers is an appropriate approach.

Stress Theory

Stress theory deals with normal human functioning. Stress adaptation and coping are natural parts of life, but the quantification of stressors could have a huge impact on the individual (Zhang & Lee, 2017). Pearlin's stress process model suggests stressors and resources exist that affect individual well-being. Within this model, primary stressors, secondary stressors, and mediators interact in a way that ultimately impacts individuals (McEwen & Wills, 2014). Stress theory stressors contribute to burden and burnout experienced by informal caregivers and therefore guide the educational tool to be used in this project. With this model, some of the stressors will be specifically identified.

Role Theory

Role theory indicates that humans act in varying predictable ways based on the expectations and conditions of the social role they are assuming (Cheng et al., 2018). The scarcity hypotheses suggest that role overload and role conflict arise when time and resources are limited and individuals do not agree on certain role expectations (Otis-Green & Juarez, 2012). Informal caregivers spend a minimum of 37+ hours taking care of patients with long-term chronic illness. This time may not be enough to fulfill the obligations associated with their role, hence role overload (Lefaiver, 2012). Role conflict occurs when the expectations of various roles are not compatible. This is important when discussing the burden and burnout experienced by informal caregivers.

Female caregivers are more likely to provide emotional support to patients. This support includes listening, sharing feelings, showing warmth, and discussing problems; whereas men provide instrumental support and assistance (Garcés et al., 2010). As such, female informal caregivers are more likely to have a poorer well-being and less happiness as compared to male caregivers. This will have psychological impact on female informal caregivers.

Adult Learning Theory

Adult learning theory will guide the model for developing the informal caregiver education module. The theory by Knowles shows that adults require certain considerations to learn effectively (McEwen & Wills, 2014). Adult learning theory demonstrates that using an adult’s experience, orientation to learning, and intrinsic satisfaction can help nurse practitioners identify burden and burnout experienced by informal caregivers, as they are mainly adults (Im & Lee, 2018). In adult education, instructional design centers on learners’ needs and interests.

Practicing adult learning introduces a new qualitative approach and optimizes innovative motivation for learning. Adults need to know why they must learn something before they start and want to be perceived as self-directed.

Relevance to Nursing Practice

Nursing care began as an idea to provide better outcomes for patients by providing safe and competent care. Informal caregiving is crucial and relevant in improving the lives of patients with long-term chronic diseases. Little research has been conducted on informal caregiving, and nurses must be proactive in their quest for research/knowledge to fill the gap between theory and practice to ensure positive outcomes for patients (Mackey & Bassendowski, 2017). Nurse practitioners should be able to provide high-quality accessible healthcare that is effective and responsive to the needs of a diverse population (Roush & Tesoro, 2018). Informal caregivers need this type of support to enable them to take care of their loved ones. This kind of care should be the quality of care that ensures care is safe, effective, patient-centered, timely, efficient, and equitable (VanFosson et al., 2016). Identifying burden and burnout among caregivers is a nursing domain that requires strict and undivided nursing attention during implementation. Adequate measures should be taken to help informal caregivers who experience burden and burnout while providing care. With an increase in informal caregivers because of increases in the aging population and long-term illnesses, nurse practitioners’ knowledge and awareness are required through appropriate education to arm themselves with enough information to identify when informal caregivers experience burden and burnout while providing care.

Nurse practitioners have the professional obligation to advocate for and facilitate the use of evidence-based strategies to minimize the rate at which informal caregivers experience burden and burnout while providing care. Evidence-based practice interventions have been developed to minimize caregiver burden and improve caregivers' well-being and optimize patient outcomes (Alnazly, 2018). This educational program could improve on the standard of care provided to informal caregivers by enabling nurse practitioners to identify when caregivers are experiencing burden and burnout. For informal caregivers of patients who experience burden and burnout to have a meaningful and positive clinical implication (Ata & Doğan, 2018), healthcare professionals need to be critical of informal caregivers' burden and burnout evidence; greater healthcare professional training on this is advocated (Van Durme et al., 2012).

A supportive proactive environment is necessary to help improve the quality of life for informal caregivers, and nurse practitioners are more likely to be in the forefront to help them if placed in a supportive practice environment. Providing information and emphasizing the need for teamwork and collaboration with various disciplines, especially between physicians and nurses, is an important factor in creating a supportive environment. The results from this project will make a significant contribution to nursing practice by providing evidence-based information to guide nurse practitioners as they identify informal caregivers who experience burden and burnout.

Local Background and Context

Nurse practitioners are particularly well positioned across the continuum of care to identify burden and burnout among informal caregivers and provide counseling and support as a form of intervention to alleviate burden and burnout (Yang et al., 2019). As such, nurse practitioners are expected to understand and identify burden and burnout experienced by informal caregivers of patients in their daily routine clinical practice. An educational program can be part of continuing staff education in a clinical setting with the purpose of improving patient care and maintaining sustainability posteducation. The success of this project was demonstrated by an increase in nurse practitioners' knowledge of identifying burden and burnout among informal caregivers.

Search Strategy

After a comprehensive review of current literature, several data bases including the Cumulative Index to Nursing and Allied Health Literature (CINAHL) plus with full text, Nursing and Health data bases, Medline with full text, Ovid, Pub Med, and Google Scholar among other databases were accessed for relevant evidence-based strategies to help identify burden and burnout of informal caregivers. The following search terms were used: *informal caregiving, burden and burnout, evidence-based approach to burden and burnout, burden and burnout education, staff education on burden and burnout.* Other key terms included *informal caregivers, staff knowledge of burden and burnout,* and *how to identify burden and burnout,* as well as a combination of these search terms. An extensive search was conducted in these databases. Peer reviewed journals published within the last 5 years is another specific search that was done. The pre- and post-test served as the basis for the educational framework of the program by nurse practitioners with informal caregivers.

Demographics of Informal Caregiving

In the US, informal caregiving is integral to its long-term care system (Pristavec, 2019) with an estimated 43.5 million adults in the United States providing unpaid care to an adult or child in the past 12 months (National Alliance for Caregiving, 2015) with the prevalence rate for adult caregivers ranging from 12%-19% (Musich et al., 2017). Another study revealed that approximately 16.6% or 39.8 million adults were 18 years of age and older (Tang et al., 2019). With the rate of increase in informal caregiving, and in a situation where informal caregivers are mainly women and adult children, they are vulnerable to experiencing burden and burnout and as such may need specialized support and counseling that addresses their unique sources of burden (Pérez-Fuentes et al., 2017).

Financial Implications of Informal Caregiving

Informal caregivers spend an estimated value of 37 billion hours of unpaid care equating an estimated value of $470 billion (Happ, 2017). In the United States, informal caregiving could save the government and institutions about $257 billion yearly. As such it is imperative to ensure that informal caregivers have a better quality of life. Informal caregivers could be inspired by personal satisfaction, sense of accomplishment and emotional fulfillment in taking care of a loved family member. They could also develop new skills and close relationships with recipients, feeling of companionship, fulfillment, and personal growth (Pristavec, 2019). On the other hand, caregivers could be equally physically, psychologically, and financially draining and results in experiencing burden. Caregiving can therefore be multi-faceted, including positive appraisal (benefits) and negative (burden) [Kent et al., 2019]. This project will look at educating nurse practitioners on how to identify burden and burnout experienced by long term informal caregivers.

Benefits of Caregiving

Informal caregiving fills an important gap in enhancing the psychological well-being and physical health of the elderly and the young suffering from disability and limited functioning as caregiver-reported quality of life is associated with recipient-reported quality of life (Pristavec, 2019). When informal caregivers are well supported in the community, it can off-set the difficulties they face. The benefits include provision of higher quality of care and better functional recovery and community re-integration of the individual with disability (Melo et al., 2017). This non-remunerated care task is essential as it enables patients to remain with their families for a longer period of time thereby decreasing economic and social costs (Herron & Rosenberg, 2017). Additionally, it improves the bond between the informal caregiver and the patient because it increases self-gratification in the caregiver as they provide much needed services for their loved one. Often the increased health and well-being of the patient is noted and recognized by the patient's family and community, which makes the caregiver feel appreciated. These informal caregivers who carry out the instructions of healthcare providers are the hem of the healthcare system. Without this much needed assistance, our healthcare system would be broken because patients are being released and sent home earlier, while still needing care due to co-morbidities. Because it is more expensive to provide the care in the hospital, insurance companies are not covering the needed timeframe of recovery.

Challenges of Caregiving

Caregiving for the ill has emerged as an important public health issue. They belong to a heterogenous group with a varying style of coping and needs (Sinha et al., 2017). They continually provide care such as bathing, dressing, eating, taking medications and going to toilet 24 hours a day every day of the year to support them (Jaracz et al., 2015). Caregivers tend to lose their jobs as they are unable to work outside the home and limit social relationships with friends. When caregivers embraces all these responsibilities of the patient, they may develop feelings such as anger, displeasure, loss, stigma, fear, insignificance, shame, guilt, despair, uncertainty, anxiety about the future, stress and depression (Kruithof et al., 2016). Caregivers tend to become chronically ill from diseases such as back pains, insomnia, hypertension, and diabetes. Most often, they do not have time to see their own providers; caring for loved ones with illnesses such as dementia, cancer, and physical and mental disabilities creates a challenge and takes a huge toll on the caregiver. Often, caregivers are the only family members who are willing or left with all the responsibility of taking care of the family member. Their lives revolve around the person of whom they are providing care.

Benefits of Education

Some of the major challenges in implementation of evidence-based practice in the healthcare setting arise from limitations to staff education. There is a reason to believe that the nursing staff of the clinical faces have limitations to adhering to evidence-based guidelines especially in areas of new studies. These limitations include inadequate knowledge of how to use various tools as an ongoing study and changing model to assist primary care clinics in using the best practice method of care delivery.

Burden and burnout experienced by informal caregivers result in negative health outcomes for both the patient being provided care and the caregiver. As such, educating nurse practitioners on identifying burden and burnout experienced by informal caregivers is crucial. With the rise in informal caregivers in the United States, it is important to explore intervention measures such as educating nurse practitioners that could help ease the burden and burnout experienced by informal caregivers. Education and training have been associated with improving staff knowledge of evidence-based practices. The context applicable to the problem of identifying burden and burnout experienced by informal caregivers will no doubt provide optimal care for both patients and their informal caregivers.

Role of the DNP Student

It is obvious that one of the issues in our healthcare system in terms of positive care outcomes, especially for patients with long term illnesses, lies on the type of care provided. Because informal care is the primary care provided at home, this informal caregiving helps the patient to be healthier, therefore strengthening the healthcare system. There is little recent literature on taking care of informal care givers who experience burden and burnout while providing care, as such education and awareness is paramount. Intervention strategies need to be implemented and DNP students/nurse practitioners are in a better position to accomplish this goal. DNP graduates are designed to translate the knowledge gained into practice for the benefit of their patient and the society.

As a nurse practitioner and a member of a nursing professional organization, I utilized the organizational structure to educate and train other nurse practitioners on how to identify burden and burnout experienced by informal caregivers while carrying out their daily routine within the clinical setting. My belief was that staff education will fill the educational gap in the clinical nursing education by providing knowledge of evidence-based practice guidelines to help nurse practitioners identify burden and burnout experienced by informal caregivers.

Role of Project Team

This project required a multidisciplinary team approach. The project team consisted of the organization’s president, my current preceptor, and two additional stakeholders who are practicing nurse practitioners. Each of the members provided a prospective on the caregiver possibly different from other healthcare members. Team members were contacted via email and asked to establish the content validity of the educational program, the pretest and the posttest (Polit & Beck, 2006). This team approach maintained open communication, share ideas and contribute from the development of the program to implementation and evaluation**.**

Summary

Nurse practitioners have an advanced knowledge in nursing practice. They have been identified as the ones who can identify burden and burnout experienced by informal caregivers. To alleviate burden and burnout experienced by informal caregivers, this project will educate nurse practitioners within an organizational setting on how use various methods to identify burden and burnout. Section 3 will focus on collection and analysis of evidence.

Section 3: Collection and Analysis of Evidence

Introduction

An increase in the aged population and long-term chronic diseases has led to an increase in the number of people providing informal caregiving to loved ones (Griffiths et al., 2018). The amount of time informal caregivers dedicate to providing care could result in burden and burnout. Efforts should be made to ensure that informal caregivers have a better quality of life while providing care to loved ones. The purpose of this project was to provide relevant information and intervention strategies on alleviating burden and burnout experienced by informal caregivers. This included ways to provide healthcare facilities with plans to ensure that informal caregivers who bring in patients for regular routine checkups are not experiencing burden and burnout. In this project, I attempted to gain new knowledge on whether educating nurse practitioners will increase their knowledge of the concept of burden and burnout among informal caregivers (Shim et al., 2012). The project included testing the knowledge of nurse practitioners before educational interventions, presenting relevant literature and educational materials on burden and burnout, returning demonstration of learned information, and retesting.

Practice-Focused Question

The purpose of this project was to determine if an educational intervention on the signs and symptoms of caregiver burden and burnout among informal caregivers of patients with chronic diseases increases knowledge among nurse practitioners working in primary care settings. This project has the potential to increase nurse practitioners' knowledge on how to identify burden and burnout experienced by informal caregivers by conventional didactic teaching methods with the hope that providers will implement the knowledge and identify those caregivers suffering from burden and burnout and implement strategies to improve caregiver outcomes. The results of this project will be relevant to policy making and in nursing clinical practice. The results will also close the gap between education and the workplace in relation to burden and burnout of informal caregivers (Muraraneza & Mtshali, 2018).

These questions guided the educational program: What is the appropriate evidence-based content to include in the educational program aimed at identifying burden and burnout experienced by informal caregivers? What knowledge have nurse practitioners gained on how to identify burden and burnout pre- and posteducation? What challenges would nurse practitioners experience during implementation in various clinics? What challenges are nurse practitioners likely to report identifying burden and burnout experienced by informal caregivers?

Sources of Evidence

The practice-focused question addressed an identified gap in nursing practice with the implementation of a staff education on informal caregiver burden and burnout, which has the potential to improve patient and organizational outcomes. The evidence identified for use in the educational program was reviewed by the stakeholders for evaluation. Once created, the program, the pretest, and the posttest were reviewed for content validity using Polit and Beck criteria (2006). Once content validity was established, the educational intervention was delivered to the participants. The evidence was collected through a pretest and posttest as a means of identifying burden and burnout in informal caregivers. Collection and analysis of data were used to determine if there was an increase in education among the nurse practitioners.

Evidence Generated for the Doctoral Project

A comprehensive review of current scholarly literature provided a solid understanding of the current state of the science, the significance of the problem, evidence-based interventions to address the problem, and evidence-based approaches to evaluate the proposed project. A literature search was performed using the Walden University library databases, including the Cumulative Index to Nursing and Allied Health Literature, ProQuest, Cochrane Library, PubMed, Elton Steven Company (EBSCO), and Google Scholar. Stakeholders evaluated the program and agreed on the self-study educational module and the pretest and posttest.

Participants

Participants for this DNP project were recruited from a professional group located in the south-central region of the United States. The inclusion criteria for participants in this project was that they were currently practicing registered nurse practitioners in a primary care setting and held membership in the professional organization. The participants were free not to participate in the project and to withdraw from the project at any time. The participants were not compensated for their participation in the project and the participants were asked to evaluate the self-study module as part of the project.

Procedures

Following IRB approval, a committee of four clinical experts (the president of the professional organization, my preceptor, and two other clinical experts who are licensed nurse practitioners) reviewed and established the content validity of the self-study module, the pretest, and the posttest. Following the consent of the professional group’s leadership and approval of the program by the experts, an introductory secure email was distributed to the organization’s membership explaining the purpose of the project and a link to the pretest, self-study educational intervention, and posttest in SurveyMonkey. By clicking the link, the individual was directed to SurveyMonkey. The link in SurveyMonkey opened by describing the project and obtaining voluntary permission to participate.

Participants were asked to click “ok” if they agreed to participate. After agreeing to participate, the individuals began the pretest by (a) creating a unique identifier; (b) answering five demographic questions in order to describe the sample; (c) answering nine pretest questions regarding informal caregiver burden and burnout and (d) answering two Likert-scale questions asking the participants to rank their confidence level in identifying informal caregiver burden and burnout. Once the pretest was completed and submitted, the participants were asked to review a Power Point presentation embedded in SurveyMonkey regarding informal caregiver burden and burnout. Following the presentation, there was a link to the posttest in which the participants, using their unique identifiers, were asked to complete. The posttest consisted of 9 questions regarding informal caregiver burden and burnout, 2 Likert-scale questions regarding the participant’s confidence level of identifying caregiver burden and burnout, and one question regarding the satisfaction of the educational experience. The anticipated time to complete the pretest was 5 to 10 minutes; the educational program, 20 to 25 minutes; and the posttest, 5 to 10 minutes. Descriptive statistics were used to describe the sample and inferential statistics were used to determine if there was a difference in knowledge following the educational intervention.

IRB Protection

It is vital to preserve the integrity of the results of the questionnaire as well as the participants. Human rights and ethical considerations were protected for the duration of the study. The ethical approval to use the study instruments was obtained from the institutional review board's (IRB) approval for National Organization of Nigerian Nurse Practitioners USA. Letters of confidentiality was distributed to the organization members to remind them not to share any information received from caregivers without proper consent.

This project was aimed at improving quality of life for informal caregivers. During this study, was possible to survey nurse practitioners who have been trained and family caregivers identified with burden and burnout, which might cause personal distress to caregivers or lead to stigmatization. However, personal identifiers were anonymized to prevent this and counseling provided for participants who were identified with burden and burnout. Ethical approval was obtained from the ethical review committee. Participation in the project was voluntary. Participants were informed of the purpose of the study and their right to withdraw without penalty at any time. To keep anonymity, the questionnaires did not include any information regarding the participants' identity. Return of completed questionnaires by nurse practitioners was considered as a signed agreement to participate in this study. After receiving the questionnaires by the participants, they were coded by the individual's unique identifier and kept in a secure place; no one had access to the data except the student.

Analysis and Synthesis

The participants of the educational intervention used a unique identifier in order to match the pre-test to the posttest in order to determine if there was a difference in scores between the pre and posttest which will serve as a proxy for increased knowledge. The data from the pre-test was matched with the data from the posttest and entered into an Excel spreadsheet and transferred into SPSS. Descriptive statistics were used to describe the sample and inferential statistics were used to determine if there is a difference in pretest and posttest scores regarding knowledge and confidence in assessing caregiver burden and burnout.

Summary

This section addresses the overall approach and rational of the project. The aim of the project was for nurse practitioners to be able to identify burden and burnout experienced by informal caregivers. Information and awareness including skill acquisition is the best way for nurse practitioners to help improve the quality of life of informal caregivers. The next step will include evaluating the effectiveness of the program through findings from the pre and post questionnaires. The final step involves result interpretation and application in the local clinical setting.

Section 4: Findings and Recommendations

Introduction

Substantial and accumulating evidence consistently indicate that informal caregivers provide the vast majority of support and direct care to elders and individuals with chronic diseases (Lee & Singh, 2010). In 2015, an estimated 17.7 million people in the United States were informal caregivers. Despite the positive rewards of caring for another individual, caregiving adversely affects the functioning of the caregiver in all domains of well-being (Edwards et al., 2020). Research has demonstrated that informal caregivers are not adequately prepared for the burden of caregiving, including unmet needs in training for medical/nursing tasks, coping with caregiving, and coordinating care for their loved ones (Lee & Singh, 2010). Nursing interventions that tailor education, communication, and training to the needs of the caregiver, including assessment of appropriate timing, frequency, and modality, are essential (Kent et al., 2019).

Nurse practitioners play a major role in supporting caregivers throughout the care continuum. Additionally, nurse practitioners use evidence-based practice through diagnoses and treatment decision-making, symptoms management survivorship, advanced care planning, and end-of-life care (Moon et al., 2017). The local problem addressed by this DNP project was the need to increase knowledge of nurse practitioners to identify burden and burnout experienced by informal caregivers. The gap in practice was lack of sufficient nursing knowledge regarding burden and burnout and how to identify burden and burnout experienced by informal caregivers. The practice-focused question for this project was: Does a staff education program increase knowledge of nurse practitioners about burden and burnout experienced by informal caregivers?

The purpose of the project was to determine if an educational intervention based on the signs and symptoms of caregiver burden and burnout among informal caregivers of patients with chronic diseases increases knowledge among nurse practitioners working in primary care settings. The project involved testing the knowledge of nurse practitioners on informal caregivers' burden and burnout before the educational intervention, presenting relevant literature or education material on burden and burnout, and retesting. Guided by the information obtained from the most recent literature and feedback from the project stakeholders, a staff education program addressing burden and burnout experienced by informal caregivers and how to identify them was developed in a PowerPoint presentation and sent by email to 107 nurse practitioners. The pretest knowledge survey consisting of 12 questions (Appendix A), the PowerPoint presentation, and the posttest knowledge survey were designed on Survey Monkey. The pretest and posttest knowledge surveys were the same.

Sources of evidence for this project were obtained from a comprehensive review of current scholarly literature that provided awareness of the problem of burden and burnout experienced by informal caregivers. Also provided was the significance of the problem, evidence-based interventions to address the problem, and evidence-based approaches to evaluate the proposed project (Fencl & Matthews, 2017). A literature search was performed using the Walden University library databases, including the Cumulative Index to Nursing and Allied Health Literature (CNAHL), PubMed, Elton Stevens Company (EBSCO) and Google Scholar. The results of the project-developed pretest and posttest knowledge questionnaire were designed on Survey Monkey. The purpose was to measure the educational intervention's ability to increase nurse practitioners' knowledge regarding identifying burden and burnout experienced by informal caregivers.

Findings and Implications

An introductory email was sent to 117 nurse practitioners who are members of a local professional organization. The nurse practitioners were asked to complete the pretest, read through the PowerPoint slides, then complete the posttest using the links sent to their email addresses. All data were collected on Survey Monkey and analyzed using SPSS Version 27.

A total of 103 individuals (N = 103) were recruited and agreed to participate in the educational intervention for an 88% response rate. The average age of the individuals was 43.03 years of age (SD = 5.59) with a range of 33 to 59 years. Most of the participants (n = 94) were women with 100% (n = 103) of the sample reporting being African American. Prior to the educational intervention, the participants were asked to complete a pretest assessment of nine questions surrounding informal caregiver burden and burnout. The average pretest score was 6.19 (SD = 1.50) with a range of 1 to 9 points. Following the intervention, the participants were asked to complete a posttest. The average posttest score was 8.84 (SD = 0.48) with a range of 6 to 9 points. Using a dependent t-test, there was a statistically significant difference between the pretest and the posttest (t = –17.06, $p < 0.001$), indicating an increase in knowledge.

Following the nine questions, the participants were then asked to rate two additional questions using a Likert scale of 1 to 5 with 1 = *very unlikely* and 5 = *very likely*. First, the participants were asked about their willingness to apply the Zarit Burden Scale to their practice. The average pretest ranking score was 3.98 (SD = 1.11) with a range of 1 to 5. The average posttest ranking score was 4.50 (SD = 0.52) with a range of 3 to 5. Using a dependent t-test, there was a statistically significant difference between the pretest and the posttest ranking ($t = –4.25$, $p < 0.001$).

Second, the participants were asked to rate the impact of the Zarit Burden Scale on identifying burden and burnout in informal caregivers. The average pretest ranking score was 3.91 (SD = 0.37) with a range of 3 to 5. The average posttest ranking score was 4.00 (SD = 0.00). Using a dependent t-test, there was a statistically significant difference between the pretest and the posttest ranking ($t = –2.37$, $p < 0.05$). Table 1 shows the descriptive statistics and demographics of the pretest and posttest scores.

Table 1

Demographic Descriptive Statistics and Pretest and Posttest Scores

	N	Frequency (%)	Mean (SD)	Range
Gender				
Male	9	9%		
Female	94	91%		
Race				
African American	103	100%		
Age	103		43.0 (5.59)	33.0 to 59.0
Pretest scores	103		6.19 (1.50)	1.0 to 9.0
Posttest scores	103		8.84 (0.48)	6.0 to 9.0
Apply pretest	103		3.98 (1.11)	1.0 to 5.0
Apply posttest	103		4.50 (0.52)	3.0 to 5.0
Impact pretest	103		3.91 (0.37)	3.0 to 5.0
Impact posttest	103		4.0 (0.00)	4.0 to 4.0

Implications

The results of the paired t-tests indicated that the staff education increased the nurse practitioners’ knowledge on how to identify burden and burnout experienced by informal caregivers. Moreover, the results demonstrated that the nurse practitioners recognized the impact their learning will have on the populations they serve and the nurse practitioners’ willingness to apply the knowledge to their clinical practice. Given this, this educational program has demonstrated one of the essential roles of this project, which is the translation of research evidence into practice. Through this education program, the nurse practitioners are equipped with the necessary knowledge to identify burden and burnout experienced by informal caregivers and are willing to apply their knowledge in their professional practice with the hope of maximizing care for those caregivers experiencing burden and burnout.

Research has suggested that the use of new, more efficient interventions to help informal caregivers who experience burden and burnout tend to lead to the identification of those caregivers experiencing burden and burnout (Herron & Rosenberg, 2017). The findings generated from this project contribute to the existing scientific foundation for nurse practitioners’ education as an ideal intervention to increase knowledge of burden and burnout. The nurse practitioners can use this knowledge to identify burden and burnout experienced by informal caregivers with the hope of improving health outcomes among this population. This result also aligned with DNP Essential VIII described as advanced nursing practice as it builds new knowledge within the nursing discipline.

The implications resulting from this project include increased knowledge of burden and burnout and increased clinical skills, self-confidence, and willingness to educate other nurse practitioners to assess for informal caregivers experiencing burden and burnout while caring for loved ones. For the community, the implications are improved knowledge of burden and burnout, improved quality of life, and decreased institutionalization. For the institution, the implications resulting from my findings include increased knowledge for nurse practitioners and informal caregivers who may not know they are experiencing burden and burnout while taking care of loved ones, improved staff knowledge, and improved quality of life for informal caregivers and patients.

The potential implication for this project for positive social change is that the project will encourage nurse practitioners to engage in educational intervention that will improve their knowledge of burden and burnout, leading to nurse practitioners' ability to identify burden and burnout experienced by informal caregivers especially when they bring in their loved ones with chronic diseases for check-ups. Providing education on burden and burnout to nurse practitioners to increase their knowledge has the potential to identify burden and burnout experienced by informal caregivers, improve quality of life, provide respite services, and improve the health of the population as a whole.

Recommendations

The gap in practice was the lack of nursing knowledge of burden and burnout experienced by informal caregivers among nurse practitioners. An educational program was developed and implemented to help close this gap in practice. The posttest results indicate a significant increase in nurse practitioner's knowledge of burden and burnout. My recommendation is to include educational intervention strategies in the associations where nurse practitioners belong. Educational interventions should add to their continuing professional development, clinical skills and knowledge of burden and burnout. I recommend an update of the educational program with current evidence-based information on burden and burnout intermittently. In addition, I recommend designating an education coordinator within the organization who will ensure continuity among nurse practitioners.

Contribution of the Doctoral Project Team

The doctoral project team consisted of a multidisciplinary team of professionals with diverse backgrounds who came together to collaborate and ensure the successful development and implementation of the educational project. An overview of the relevant information and evidence on the project was presented to the team. The project team reviewed the evidence and actively contributed to all phases of the project and in the creation of the objectives and goals of the program. The team was devoted to their commitment. The team respected each other and maintained open communication with the organization to facilitate the success of the program.

The project team was involved in meaningful discussions to ensure the educational program was incorporated into the organization's daily patient care. My preceptor, as a member of the project team, was instrumental in the projects by making sure the educational intervention was understandable and aligned with the organization's vision and policy. Virtual meetings were held with the organization's administrative staff to ensure the educational intervention was included in annual learning requirements for the nurse practitioners. I plan to extend the educational intervention beyond DNP doctoral project that will continue to a long-lasting education for nurse practitioners. The future of the project will create a continuous learning opportunity for skill development and mastery of burden and burnout knowledge for nurse practitioners.

Strengths and Limitations of the Project

The major strength of the project was found in the enthusiasm and zeal of nurse practitioners who participated in the educational intervention. Additionally, the high response rate of the project (88%) added to the validity of the project. Further, the strong support from the organization’s leadership team and stakeholders to develop and implement the project added additional strength. For example, the expert panelist recommendations and evaluation of the educational intervention content and use of Zarit Burden Scale guideline to identify burden and burnout. As such, the project led to increase in knowledge of nurse practitioners on burden and burnout experienced by informal caregivers.

Despite these strengths, there were some limitations to the project. First, the nurses that were targeted for the project were recruited from a convenience sample of NPs belonging to a single professional organization, thus the results may not be generalizable to other professional organizations. Additionally, the demographics of the sample demonstrate that the responding nurse practitioners were all African Americans; hence, the findings may not generalize to other populations of nurse practitioners. Another limitation of this project is that the analysis was completed using the average pretest score and the average post-test score. While one can conclude that the intervention may be responsible for the improvement in scores, there may be other explanations for why the posttest scores may have changed. Last, the time frame of three weeks for data collection may have been challenging for some of the participants, and as a result, did not choose to participate in the project. It is recommended for further projects addressing similar topics and using similar methods is to replicate the project using diverse ethnic groups of nurse practitioners to ensure generalization of the project findings.

Summary

Burden and burnout have been identified as a public health issue and has resulted in negative health-related consequences. Since burden and burnout experienced by informal caregivers reduces the quality of life both for the care giver and the recipient, nurse practitioners who have advanced nursing skills need to be educated on identifying burden and burnout. The findings of the project were substantiated; the nurse practitioners were so focused on patient-centered care that they did not consider the caregivers as indirect patients who might also need care based upon the burden and burnout associated with caregiving. Rightfully so, the practitioners did not possess the adequate knowledge of identifying burden and burnout experienced by informal caregivers. This DNP project reflects the need to improve the knowledge on how to identify burden and burnout, to improve the quality of life of informal caregivers. An overall analysis of the educational intervention program indicates increased knowledge of burden and burnout of nurse practitioners. Educational intervention for the nurse practitioners to improve knowledge of burden and burnout has the potential to improve health outcomes, thus promoting and improving social change.

Section 5: Dissemination Plan

Introduction

The findings of this educational intervention will be disseminated through PowerPoint presentations to nursing organizations in my area. Other plans to disseminate my project after graduation include journal publications (such as the *American Journal of Nursing* and the *Journal of Nurse Practitioners*). As a nurse practitioner, I plan to reach out to other nurse practitioners in various organizations for publication and dissemination of my project. The dissemination of the findings is expected to assist nurse practitioners to improve clinical practice by identifying burden and burnout experienced by informal caregivers as a public health issue.

Analysis of Self

The DNP journey involves rigorous processes and commitment. As a nurse practitioner, I was able to use my experience, knowledge, skills, and expertise to translate research into evidence while working with my project. My goal was to educate providers on the importance of identifying burden and burnout with the hope that the education would be implemented into practice and improve the quality of life of informal caregivers who experience burden and burnout. I have been able to acquire the necessary skills and knowledge regarding ethical matters. I have responded critically and effectively to ethical matters affecting informal caregivers, patients they care for, and healthcare through the application of evidence-based decision making to solve ethical problems. I used collaborative skills and effective communication with the organization stakeholders and project team while working on my project.

As a scholar, I believe that the role of the DNP is the translation of current evidence into practice. Through my project, I was able to demonstrate how the evidence (an increase in knowledge) can translate and change practice and improve health outcomes. Part of being a DNP demands leadership and the ability to think strategically and engage stakeholders in improving care delivery. I demonstrated strong leadership skills during the development and implementation of my project as I engaged with my stakeholders and my committee. This has broadened my participatory horizon and carved a pathway for future leadership opportunities. I am convinced that the efforts, time, resources, and energy expended will assist with my continued professional development in being a leader as part of meaningful change and improvement.

Developing and designing my project was a challenging undertaking. As the project manager, I was able to develop my leadership skills as I learned to balance time commitments, provide direction, organize and implement my work, and at times, advocate for those who were part of my team and my project. I realized the importance of effective communication and multitasking abilities. I was able to validate that I can achieve anything I set out to accomplish with determination and perseverance. With this project, I have a sense of pride and fulfillment knowing that the findings will serve as a contribution to improving the quality of life of informal caregivers who are experiencing burden and burnout.

Summary

The increase in the elderly population and chronic diseases in the United States is alarming. This has led to an increase in informal caregivers. The long hours spent by informal caregivers providing care to elderly people or family with long-term chronic diseases has led to burden and burnout. Nurse practitioners with their advanced nursing care play a major role in identifying burden and burnout experienced by informal caregivers. Nurse practitioners lacked knowledge on identifying burden and burnout experienced by informal caregivers. This project was developed and implemented to increase knowledge of identifying and addressing burden and burnout among informal caregivers. Pretest and posttest questions were used to determine what was already known by nurse practitioners and what information was lacking. These test results showed an increase in knowledge among nurse practitioners resulting from the educational intervention. New knowledge can be used by other organizations with similar problems to improve practice and nursing knowledge.

References

Abreu, M., Silva, A. L., Costa, N., & Abreu, W. (2015). Psychoeducational programs for informal caregivers of dependent older adults: Barriers to participation. *Procedia - Social and Behavioral Sciences*, *171*, 629–634. https://doi.org/10.1016/j.sbspro.2015.01.170

Alnazly, E. K. (2018). The impact of an educational intervention in caregiving outcomes in Jordanian caregivers of patients receiving hemodialysis: A single group pre-and post-test. *International Journal of Nursing Sciences*, *5*(2), 144–150. https://doi.org/10.1016/j.ijnss.2018.03.007

Ata, E. E., & Doğan, S. (2018). The effect of a brief cognitive behavioural stress management program on mental status, coping with stress, attitude, and caregiver burden while caring for schizophrenic patients. *Archives of Psychiatric Nursing*, (1), 112–119. https://doi.org/10.1016/j.apnu.2017.10.004

Beccaria, L., Kek, M. Y. C. A., & Huijser, H. (2018). Exploring nursing educators' use of theory and methods in search for evidence-based credibility in nursing education. *Nurse Education Today*, *65*, 60–66. https://doi.org/10.1016/j.nedt.2018.02.032

Bernock, D. (2019). What does "do unto others" mean in the bible? *Christianity.com.* https://www.christianity.com/wiki/bible/what-does-do-unto-others-mean-in-the-bible.html

Bom, J., Bakx, P., Schut, F., & van Doorslaer, E. (2019). Health effects of caring for and about parents and spouses. *The Journal of the Economics of Ageing*, *14*, 100196. https://doi.org/10.1016/j.jeoa.2019.100196

Cheng, H. Y., Chair, S. Y., & Chau, J. P. C. (2018). Effectiveness of a strength-oriented psychoeducation on caregiving competence, problem-solving abilities, psychosocial outcomes and physical health among family caregiver of stroke survivors: A randomized controlled trial. *International Journal of Nursing Studies*, *87*, 84–93. https://doi.org/10.1016/j.ijnurstu.2018.07.005

Farina, N., Page, T. E., Daley, S., Brown, A., Bowling, A., Basset, T., Livingston, G., Knapp, M., Murray, J., & Banerjee, S. (2017). Factors associated with the quality of life of family careers of people with dementia: A systematic review. *Alzheimer's & Dementia*, *13*(5), 572–581. https://doi.org/10.1016/j.jalz.2016.12.010

Family Caregiver Alliance. (2020). *45 Facts on family caregivers from research in 2011*. https://www.caregiver.org/45-facts-family-caregivers-research-2011

Garcés, J., Carretero, S., Ródenas, F., & Alemán, C. (2010a). A review of programs to alleviate the burden of informal caregivers of dependent persons. *Archives of Gerontology and Geriatrics*, *50*(3), 254–259. https://doi.org/10.1016/j.archger.2009.04.012

Garcés, J., Carretero, S., Ródenas, F., & Alemán, C. (2010b). A review of programs to alleviate the burden of informal caregivers of dependent persons. *Archives of Gerontology and Geriatrics*, *50*(3), 254–259. https://doi.org/10.1016/j.archger.2009.04.012

Giddens, J. F., Lauzon-Clabo, L., Morton, P. G., Jeffries, P., McQuade-Jones, B., & Ryan, S. (2014). Re-envisioning clinical education for nurse practitioner programs: Themes from a national leaders' dialogue. *Journal of Professional Nursing*, *30*(3), 273–278. https://doi.org/10.1016/j.profnurs.2014.03.002

Graham, P., Zerbi, G., Norcross, W., Montross-Thomas, L., Lobbestael, L., & Davidson, J. (2019). Testing of a caregiver support team. *Explore*, *15*(1), 19–26. https://doi.org/10.1016/j.explore.2018.07.004

Griffiths, A. W., Wood, A. M., & Tai, S. (2018). The prospective role of defeat and entrapment in caregiver burden and depression amongst formal caregivers. *Personality and Individual Differences, 120*, 24–31. https://doi.org/10.1016/j.paid.2017.08.026

Hagedoorn, E. I., Keers, J. C., Jaarsma, T., van der Schans, C. P., Luttik, M. L. A., & Paans, W. (2019). The association of collaboration between family caregivers and nurses in the hospital and their preparedness for caregiving at home. *Geriatric Nursing, 41*(4), 373–380. https://doi.org/10.1016/j.gerinurse.2019.02.004

Happ, M. B. (2017). Family caregiving: Updates from the field. *Geriatric Nursing, 38*(1), 78–79. https://doi.org/10.1016/j.gerinurse.2016.12.005

Herron, R. V., & Rosenberg, M. W. (2017). “Not there yet”: Examining community support from the perspective of people with dementia and their partners in care. *Social Science & Medicine*, *173*, 81–87. https://doi.org/10.1016/j.socscimed.2016.11.041

Im, E.-O., & Lee, Y. (2018). Transcultural nursing: Current trends in theoretical works. *Asian Nursing Research*, *12*(3), 157–165. https://doi.org/10.1016/j.anr.2018.08.006

Jaracz, K., Grabowska-Fudala, B., Górna, K., Jaracz, J., Moczko, J., & Kozubski, W. (2015). Burden in caregivers of long-term stroke survivors: Prevalence and determinants at 6 months and 5 years after stroke. *Patient Education and Counseling*, *98*(8), 1011–1016. https://doi.org/10.1016/j.pec.2015.04.008

Kent, E. E., Mollica, M. A., Buckenmaier, S., & Wilder Smith, A. (2019). The characteristics of informal cancer caregivers in the United States. *Seminars in Oncology Nursing*, *35*(4), 328–332. https://doi.org/10.1016/j.soncn.2019.06.002

Kim, J. S., Kim, E. H., & An, M. (2016). Experience of dementia-related anxiety in middle-aged female caregivers for family members with dementia: A phenomenological study. *Asian Nursing Research*, *10*(2), 128–135. https://doi.org/10.1016/j.anr.2016.02.001

Kruithof, W. J., Post, M. W. M., van Mierlo, M. L., van den Bos, G. A. M., de Man-van Ginkel, J. M., & Visser-Meily, J. M. A. (2016). Caregiver burden and emotional problems in partners of stroke patients at two months and one-year post-stroke: Determinants and prediction. *Patient Education and Counseling*, *99*(10), 1632–1640. https://doi.org/10.1016/j.pec.2016.04.007

Lacey, R. E., McMunn, A., & Webb, E. A. (2018). Informal caregiving and metabolic markers in the UK household longitudinal study. *Maturitas*, *109*, 97–103. https://doi.org/10.1016/j.maturitas.2018.01.002

Lee, J., Sohn, B. K., Lee, H., Seong, S. J., Park, S., & Lee, J.-Y. (2018). Attachment style and filial obligation in the burden of caregivers of dementia patients. *Archives of Gerontology and Geriatrics*, *75*, 104–111. https://www.sciencedirect.com/science/article/abs/pii/S0167494317303382#!

Lefaiver, C. A. (2012). Evaluating research for evidence–based nursing practice. *Nursing Science Quarterly*, *25*(3), 289–290. https://doi.org/10.1177/0894318412447555

Lin, L.-P., & Lin, J.-D. (2013). Job burnout amongst the institutional caregivers working with individuals with intellectual and developmental disabilities: Utilization of the Chinese version of the Copenhagen burnout inventory survey. *Research in Autism Spectrum*

Disorders, *7*(6), 777–784. https://doi.org/10.1016/J.RASD.2013.03.004

Mackey, A., & Bassendowski, S. (2017). The history of evidence-based practice in nursing education and practice. *Journal of Professional Nursing*, *33*(1), 51–55. https://doi.org/10.1016/J.PROFNURS.2016.05.009

McEwen, M., & Wills, E. (2014). *Theoretical basis for nursing* (4th ed.). http://zu.edu.jo/UploadFile/Library/E_Books/Files/LibraryFile_171030_28.pdf

Melo, G., Maroco, J., Lima-Basto, M., & de Mendonça, A. (2017). Personality of the caregiver influences the use of strategies to deal with the behavior of persons with dementia. *Geriatric Nursing*, *38*(1), 63–69. https://doi.org/10.1016/j.gerinurse.2016.08.001

Muraraneza, C., & Mtshali, G. N. (2018). Implementation of competency-based curriculum in pre-service nursing education: Middle range theory. *International Journal of Africa Nursing Sciences*, *8*, 53–58. https://doi.org/10.1016/J.IJANS.2018.02.006

Musich, S., Wang, S. S., Kraemer, S., Hawkins, K., & Wicker, E. (2017). Caregivers for older adults: Prevalence, characteristics, and health care utilization and expenditures. *Geriatric Nursing*, *38*(1), 9–16. https://doi.org/10.1016/J.GERINURSE.2016.06.017

National Alliance for Caregiving. (2015). Caregiving in the U.S. 2015. https://www.caregiving.org/research/caregivingusa/

Otis-Green, S., & Juarez, G. (2012). Enhancing the social well-being of family caregivers. *Seminars in Oncology Nursing*, *28*(4), 246–255. https://doi.org/10.1016/J.SONCN.2012.09.007

Pérez-Fuentes, M. del C., Gázquez Linares, J. J., Ruiz Fernández, M. D., & Molero Jurado, M. del M. (2017). Inventory of overburden in Alzheimer’s patient family caregivers with no specialized training. *International Journal of Clinical and Health Psychology*, *17*(1), 56–64. https://doi.org/10.1016/J.IJCHP.2016.09.004

Pristavec, T. (2019). The caregiving dyad: Do caregivers' appraisals of caregiving matter for care recipients' health? *Archives of Gerontology and Geriatrics*, *82*, 50–60. https://doi.org/10.1016/J.ARCHGER.2019.01.020

Raggi, A., Tasca, D., Panerai, S., Neri, W., & Ferri, R. (2015). The burden of distress and related coping processes in family caregivers of patients with Alzheimer's disease living in the community. *Journal of the Neurological Sciences*, *358*(1–2), 77–81. https://doi.org/10.1016/J.JNS.2015.08.024

Roush, K., & Tesoro, M. (2018). An examination of the rigor and value of final scholarly projects completed by DNP nursing students. *Journal of Professional Nursing*. https://doi.org/10.1016/J.PROFNURS.2018.03.003

Schulz, R., & Czaja, S. J. (2018). Family caregiving: A vision for the future. *The American Journal of Geriatric Psychiatry*, *26*(3), 358–363. https://doi.org/10.1016/j.jagp.2017.06.023

Schumacher, G., & Risco, K. (2017). Competency-based nurse practitioner education: An overview for the preceptor. *The Journal for Nurse Practitioners*, *13*(9), 596–602. https://doi.org/10.1016/j.nurpra.2017.07.020

Sharda, E. A., Sutherby, C. G., Cavanaugh, D. L., Hughes, A. K., & Woodward, A. T. (2019). Parenting stress, well-being, and social support among kinship caregivers. *Children and Youth Services Review*, *99*, 74–80. https://doi.org/10.1016/J.CHILDYOUTH.2019.01.025

Shim, B., Barroso, J., & Davis, L. L. (2012). A comparative qualitative analysis of stories of spousal caregivers of people with dementia: Negative, ambivalent, and positive experiences. *International Journal of Nursing Studies*, *49*(2), 220–229. https://doi.org/10.1016/J.IJNURSTU.2011.09.003

Sinha, P., Desai, N. G., Prakash, O., Kushwaha, S., & Tripathi, C. B. (2017). Caregiver burden in Alzheimer-type dementia and psychosis: A comparative study from India. *Asian Journal of Psychiatry*, *26*, 86–91. https://doi.org/10.1016/J.AJP.2017.01.002

Tak, Y., Song, J., Woo, H., & An, J. (2019). Realist review: Understanding effectiveness of intervention programs for dementia caregivers. *Asian Nursing Research*, *13*(1), 11–19. https://doi.org/10.1016/J.ANR.2019.01.002

Tang, W., Friedman, D. B., Kannaley, K., Davis, R. E., Wilcox, S., Levkoff, S. E., Hunter, R. H., Gibson, A., Logsdon, R. G., Irmiter, C., & Belza, B. (2019). Experiences of caregivers by care recipient's health condition: A study of caregivers for Alzheimer's disease and related dementias versus other chronic conditions. *Geriatric nursing (New York, N.Y.)*, *40*(2), 181–184. https://doi.org/10.1016/j.gerinurse.2018.09.012

Toribio-Díaz, M. E., Medrano-Martínez, V., Moltó-Jordá, J. M., & Beltrán-Blasco, I. (2013). Characteristics of informal caregivers of patients with dementia in Alicante province. *Neurología (English Edition)*, *28*(2), 95–102. https://doi.org/10.1016/J.NRLENG.2012.03.012

Turten Kaymaz, T., & Ozdemir, L. (2017). Effects of aromatherapy on agitation and related caregiver burden in patients with moderate to severe dementia: A pilot study. *Geriatric Nursing*, *38*(3), 231–237. https://doi.org/10.1016/J.GERINURSE.2016.11.001

Van Durme, T., Macq, J., Jeanmart, C., & Gobert, M. (2012). Tools for measuring the impact of informal caregiving of the elderly: A literature review. *International Journal of Nursing Studies*, *49*(4), 490–504. https://doi.org/10.1016/J.IJNURSTU.2011.10.011

VanFosson, C. A., Jones, T. L., & Yoder, L. H. (2016). Unfinished nursing care: An important performance measure for nursing care systems. *Nursing Outlook*, *64*(2), 124–136. https://doi.org/10.1016/J.OUTLOOK.2015.12.010

Yang, K.-H., Jiang, Z.-X., Chavez, F., Wang, L.-H., & Yuan, C.-R. (2019). Effectiveness of a training program based on maker education for baccalaureate nursing students: A quasi-experimental study. *International Journal of Nursing Sciences*, *6*(1), 24–30. https://doi.org/10.1016/J.IJNSS.2018.11.006

Zhang, J., & Lee, D. T. F. (2017). Meaning in stroke family caregiving: A literature review. *Geriatric Nursing*, *38*(1), 48–56. https://doi.org/10.1016/j.gerinurse.2016.07.005

Appendix A: Education on Informal Caregivers

Identifying Burden and Burnout Experienced by Informal Caregivers

This pre- test aims to identify knowledge of nurse practitioners on burden and burnout experienced by informal caregivers. On providing education on how to identify burden and burnout experienced by informal caregivers, nurse practitioners will identify the impact of the educational tool in nursing practice.

DEMOGRAPHICS

ID number:

Gender

a. Male
b. Female

Age:

Ethnic Group

a. Black or African American
b. Asian
c. Hispanic or Latino
d. White.

Identifying Burden and Burnout Experienced by Informal Caregivers

This pre- test aims to identify knowledge of nurse practitioners on burden and burnout experienced by informal caregivers. On providing education on how to identify burden and burnout experienced by informal caregivers, nurse practitioners will identify the impact of the educational tool in nursing practice.

1. Informal caregivers are the backbone of the healthcare system in terms of taking care of their loved ones with long term chronic illness?
    a. True
    b. False
2. What minimum hours per week do you think informal caregivers spend taking care of their loved ones?
    a. 15+ hours
    b. 20+ hours
    c. 37+ hours
3. Do you think informal caregivers experience burden and burnout while providing care?
    a. Yes
    b. No
4. If yes, do you think burden and burnout experienced by informal caregivers is a public health issue to be addressed?
    a. Yes
    b. No
    c. Maybe
5. Do you think nurse practitioners have a role to play in alleviating burden and burnout experienced by informal caregivers?
    a. Yes
    b. No
    c. Maybe
6. Do you think education and training will expand awareness on how to identify and alleviate burden and burnout experienced by informal caregivers?
    a. Yes
    b. No
    c. Maybe

7. You will be educated on Zarit's Burden Scale. Do you think it is an effective tool to identify burden and burnout experienced by informal caregivers?
    a. Yes
    b. No
    c. Maybe
8. Do you think the Zarit's Burden Scale is easy to apply in your daily practice as a nurse practitioner?
    a. Yes
    b. No
    c. Maybe
9. On a scale of 1 to 5, where 1 is very unlikely and 5 is very likely, how likely are you to be willing to apply the Zarit Burden Scale in your daily practice as a nurse practitioner?
    a. Very likely
    b. Likely
    c. Neither likely nor unlikely
    d. Unlikely
    e. Very unlikely

10. How likely is the Zarit Burden Scale able to have an impact on identifying burden and burnout experienced by informal caregivers?
    a. Very likely
    b. Likely
    c. Neither likely nor unlikely
    d. Unlikely
    e. Very unlikely
11. Would you value the importance of gaining knowledge on how to identify burden and burnout experienced by informal caregivers?
    a. Yes
    b. No
    c. Maybe
    d.