

2019

Educating Staff on the Family Caregiver Needs of Brain Injury Patients

Carrie Maloney Robertshaw
Walden University

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Walden University

College of Health Sciences

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Carrie Robertshaw

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Walden University

2019

Abstract

Educating Staff on the Family Caregiver Needs of Brain Injury Patients

by

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MSN, Sonoma State University, 2011

BSN, University of Hawaii at Manoa, 2005

Project Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Nursing Practice

Walden University

August 2019

Abstract

Acute rehabilitation hospitals assist brain injury patients and families who face a life-changing event to achieve greater independence and quality of life. During the acute rehabilitation phase of recovery, care is focused on the patient; however, there is a nationwide movement to implement patient- and family-centered care because caregivers experience grief and uncertainty about how to care for their loved one during hospitalization and upon discharge. The purpose of this staff education project was to educate rehabilitation staff on how to identify and to meet the needs of family members of brain injury patients in an acute rehabilitation center in the western United States. The patient- and family-centered care theoretical framework and Knowles's theory of adult learning supported the development and implementation of the educational program. The project site stakeholders identified educational opportunities to assist staff to meet caregiver needs and improve outcomes. Thirty-two staff including registered nurses, licensed vocational nurses, patient care technicians, and nurse managers, received education for the support of caregivers for patients with brain injuries. The program was evaluated using a 5-point Likert type questionnaire. After receiving the education all participants agreed or strongly agreed that content increased their knowledge, skills, and confidence in caring for family caregivers of brain injury patients. Implications of this project for social change include the potential to improve patient outcomes through caregiver knowledge and skills to provide care to patients with brain injury.

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Dedication

I am dedicating this project and the culminating achievement of receiving my doctorate in nursing practice to my husband David, children Teanna, Kyra, and Logan, and my mom. Many weekends and evenings they supported me to spend time on homework, papers, posting and this project. They have been my champions, I could not have done this without your love and support!

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Section 1: Nature of the Project

Introduction

In the United States, an average of 2.5 million traumatic brain injuries (TBIs) occur every year, which includes 1.1 million emergency department visits, 235,000 hospitalizations, and 50,000 deaths (Kreitzer, Kurowski, & Bakas, 2018). The prevalence of long-term disability because of TBI has been estimated at 5.3 million in the United States (Ma, Chan, & Carruthers, 2014). About 43% of patients discharged with TBI after hospitalization develop TBI-related long-term disability (Ma et al., 2014), as aftereffects from a brain injury often continue beyond the acute recovery phase. The effects of brain injury contributing to long-term disability are broad, as brain injury can cause cognitive, affective, functional, and motor deficits (Kreitzer et al., 2018). These patients often do not fully recover and return to their pre-injury physical and psychological state and can experience significant personality changes, which can present a challenge for their families.

Family members are often at the patient's bedside during inpatient rehabilitation and play a significant role in the patient's recovery and transition back into the community following rehabilitation (Petersen & Sanders, 2015). This is a time for nurses and other members of the care team to identify the family members' needs, which can enable the family to better care for their loved one during the acute rehabilitation process and beyond (Cameron & Gignac, 2008; Goldfarb, Bibas, Bartlett, Jones, & Khan, 2017). However, nurses are often unaware of the needs of family caregivers, as the primary focus is on caring for the patient and not for the family unit. Having a better

understanding of these needs can guide the development of strategies so that acute rehabilitation nurses have a more evidence-informed approach to supporting brain injury patient caregivers and in preparing families for the transition to the caregiving role following discharge (Creasy, Lutz, Young, & Stacciarini, 2015; Petersen & Sanders, 2015). Therefore, I developed a staff education project to inform nurses on supporting families of patients with brain injury.

Problem Statement

Over the last few decades, rehabilitation programs have placed greater emphasis on engaging families in the patient's plan of care and recovery. Research has shown that family caregivers are often emotionally and physically overwhelmed and not equipped to provide caregiving to an injured loved one (Kreutzer, Marwitz, Sima & Godwin, 2015). For instance, high rates of psychological distress have been shown among brain injury patients' family members. Families are often coping with shock, fear, uncertainty, grief, and learning the role of caregiver while juggling home, work, and family and financial responsibilities (Catlin, Ford, & Maloney, 2016). Though nurses and staff receive training on how to support patients, they often do not receive education on how to support family members at the bedside (Petersen & Sanders, 2015). But studies have shown that when family caregivers receive support at the bedside, there is an improvement in problem solving, self-efficacy, mood, coping, and caregiver relations (Neimeier, Kreutzer, Marwitz, & Sima, 2018). Nurses have been shown to make a positive impact on the caregiver's perception of receiving emotional support and the acquisition of skills needed to help care for the patient at the bedside and after discharge.

Helping staff better understand how to meet the needs of family members at the bedside may promote a more healing experience, improve resiliency, and help families better cope.

The site where this Doctorate of Nursing Practice (DNP) project was implemented is an acute rehabilitation hospital providing care to patients who have suffered brain injury as well as spinal cord injury, stroke, and other conditions requiring acute rehabilitation. The rehabilitation site offers classes and support groups to patients and families of stroke and spinal cord injury survivors during the hospitalization; however, there are no formal support or education programs offered to the brain injury population at this facility. Additionally, it has been identified that a gap exists between the needs of family caregivers of brain injury patients and the knowledge and ability of nurses to identify and meet those needs. The goal of this project was to introduce education to the staff on how family caregivers experience the diagnosis after having a loved one survive a brain injury, and the family strain, emotional distress, social isolation, and caregiver burden they suffer as a result. Additionally, the education included evidence-based strategies on how to provide emotional, educational, and skill acquisition to build confidence and competency as a caregiver.

Purpose

Family caregivers have an important role in the recovery and rehabilitation of individuals suffering a brain injury. But studies have shown that the neurobehavioral changes in a patient's way of relating and personality place a burden on the caregiver, as they find themselves in an unfamiliar role and experiencing loss, grief, depression, and

anxiety due to an uncertain future (Niemeier et al., 2018). Though there has been multidisciplinary interest in better understanding and meeting the needs of caregivers of brain injury patients, there are no formal training programs to educate staff on family caregivers' needs or how to meet these needs at the acute rehabilitation hospital where this project was implemented. The project site is part of a large integrated health care system, serving as a center of excellence for acute rehabilitation for 21 hospitals. There is an organizational commitment to the provision of patient- and family-centered care and a recognition by local and regional leadership that there is opportunity to better meet the needs of the acute brain injury patients and their caregivers. There is an opportunity for staff to positively impact the experience of family caregivers during the phase of acute rehabilitation (Camicia, Lutz, Markoff, & Catlin, 2018; Catlin et al., 2015). Thus, the purpose of this staff education project was to educate the acute rehabilitation staff on how to better understand, identify, and meet the needs of family members of brain injury patients. The practice-focused question was "Will a staff education project focused on providing education on how to meet the needs of family caregivers increase staff knowledge, skills, and confidence in caring for family members?"

Nature of the Doctoral Project

The nature of this DNP project was to develop an educational module on the needs of caregivers of brain injury patients and to provide educational materials and strategies to help frontline staff better meet these needs. Evidence-based guidelines were presented on how to have a positive impact on caregivers' experience at the bedside and the perception that their needs have been met. The benefit is to empower staff to be able

to know how to meet the needs of family caregivers while attending to the acute needs of the patient, with care reflecting a more patient- and family-centered approach. I evaluated the presentation through a post in-service survey and reviewed the data to determine if the staff's knowledge and belief they can better meet the needs of family caregivers improved.

Significance

The Institute for Patient- and Family-Centered Care (2018), as well as the Institute for Healthcare Improvement (Balik, Conway, Zipperer, & Watson, 2011), advocate the importance of treating the whole family and placing the patient and family at the center of all decisions and empowering them to partner in their care. Caring for family as well as the patient can improve outcomes and impact resource allocation and the cost of health care, as family caregivers are better equipped to provide quality care to their loved one (Balik et al., 2011; Institute for Patient- and Family-Centered Care, 2018). Consequently, patient- and family-centered care has become central to how health care is delivered, and there is recognition that patients are not separate from their social networks. The ability of families to adapt to a loved one's illness, to cope with the stressors, and to have their needs met has been shown to impact the patient's health and recovery (Bamm & Rosenbaum, 2008).

This DNP project is significant because it can have an impact on how the needs of family members are identified and addressed and provide evidence to guide a more family-centered approach to care. Not only is this project significant in improving caregiver support and the experience, but it also could have an impact on the patient's

progress in rehabilitation, outcomes, and quality of life after discharge, as the effects of moderate to severe brain injury patients often persist long after the event (Lehto, Kylmä & Åstedt-Kurki, 2019). Therefore, this DNP project can impact positive social change. Caring for family members is part of holistic care, and helping nurses and staff have interactions that support family members and educate and empower caregivers to feel capable and hopeful can support high-quality outcomes when patients reintegrate back into the community. This project can also support the reputation of this acute rehabilitation hospital as a leader in providing patient- and family-centered care and the successful discharge of brain injury patients back to the community. This staff education project will help support nursing practice to have greater knowledge and sensitivity to the values inherent in patient- and family-centered care and can have a positive social impact as patients and caregivers move back into the community.

Summary

The importance of supporting family caregivers in a patient- and family-centered approach to care is increasingly recognized. Supporting the needs of family members at the bedside can enable them to better care for their loved ones during the acute rehabilitation process and beyond. Frontline staff provide support at the bedside, yet nurses are often unaware of the family's needs or how to meet these needs while focusing on caring for the patient. However, studies have shown that caregivers of brain injury patients during rehabilitation can benefit from interventions and approaches that target their unique needs (Neimeier et al., 2018). The goal of this project was to educate and empower frontline staff to have the knowledge and skills necessary to meet the

emotional, physical, and educational needs of family caregivers, improving the rehabilitation and recovery of brain injury patients and the quality of life for the patient and family after discharge.

Section 2: Background and Context

Introduction

Approximately 43% of patients discharged with TBI after hospitalization develop TBI-related long-term disability (Ma et al., 2014). Brain injury can cause cognitive, affective, functional, and motor deficits, and these patients often do not fully recover and return to their pre-injury abilities and personality, which significantly affects families (Duff, 2006). Family members are often at the patient's bedside during inpatient rehabilitation and play a significant role in the patient's recovery and transition back into the community following rehabilitation (Peterson & Sanders, 2015). Beyond discharge, the process of recovery and rehabilitation is a lifelong prospect and can strain caregivers (Gan, Gargaro, Brandys, Gerber, & Boschen, 2010). Supporting the needs of family members can help equip the family to support their loved ones during the acute rehabilitation process and beyond (Cameron & Gignac, 2008; Goldfarb et al., 2017). However, there is little training for frontline staff on how to best support family members during this period of recovery. The aim of this DNP project was to create and present an evidence-based education module reviewing the support needs of family caregivers following a brain injury and strategies to meet these needs during the patient's acute rehabilitation. In Section 2, I discuss the application of Knowles's (1996) conceptual model of adult learning and the theory of patient- and family-centered care used to support this project. Additionally, I discuss the relevance to nursing practice, role of the DNP student, and the local background and context.

Concepts, Models, and Theories

When designing a project, it is important that an appropriate theory and conceptual model provide a framework for assessing, implementing, and evaluating the project interventions and outcomes (Meleis, 2010). For this project, the theory of patient- and family-centered care was foundational to both content development and how education is presented to help the participants connect the importance of their role in providing care, which is aligned with this principle. The conceptual model supporting how the in-service was delivered relied on Knowles's (1996) theory of adult learning.

Theory

Patient- and family-centered care has become central to health care delivery, and health care organizations recognize that the patient is not separate from their social networks. The ability of families to adapt and cope to a loved one's illness and meet their needs impacts the patient's health and recovery (Bamm & Rosenbaum, 2008). The patient- and family-centered care theory provides a framework to guide the health care team to provide care that recognizes the importance of family. The four tenets that guide patient- and family-centered care are respect and dignity, information sharing, participation, and collaboration (Orkin et al., 2014). According to Bamm and Rosenbaum (2018) and Orkin et al. (2014), the features of family-centered practices include:

- Families are considered experts in what supports them.
- Families are invaluable partners with the health care team to support the patient.
- Families are central and a primary source of strength and support.

- When families are healthy, patients have better outcomes.

The entire family is subject to stress and change when a loved one suffers from a brain injury. Using the family-centered theory provides a framework to gain deeper understanding of the needs of caregivers during the acute phase of recovery from brain injury and to develop a more empowering and collaborative relationship among patients, families, and health care professionals (Catlin et al., 2015; Orkin et al., 2014).

Integrating family-centered theory into this project supports the application of behaviors and interventions, which can result in greater fulfillment of family support needs at the bedside. Family-centered care has been shown to improve engagement of the family, participation in care, and outcomes during and after rehabilitation, yet clinical staff often do not understand how to operationalize this holistic approach to care (Davidson, 2009). This project supports the staff's ability to integrate family-centered care into practice and can result in improved adaptation, coping, and well-being for family caregivers.

Conceptual Model

Malcom Knowles was an American educator who is known for his development of the adult learning theory based on the principle of andragogy, which he defines as the “art and science of helping adults learn” (Knowles, 1996, p. 59). Knowles (1996) viewed adult learning as an internal process where the learner assumes responsibility for the learning. This approach is appropriate for this project because the purpose was to integrate knowledge and skills with previous experiences in contrast to a pedagogical approach where the teacher is more facilitator and the process more interactive (Billings

& Halstead, 2009). The andragogical model is based on six assumptions and factors influencing adult learning and embodies concepts such as readiness and motivation to learn, self-direction, ability to apply learning, and access to previous experiences to create context. Figure 1 shows Knowles' five assumptions of adult learners.

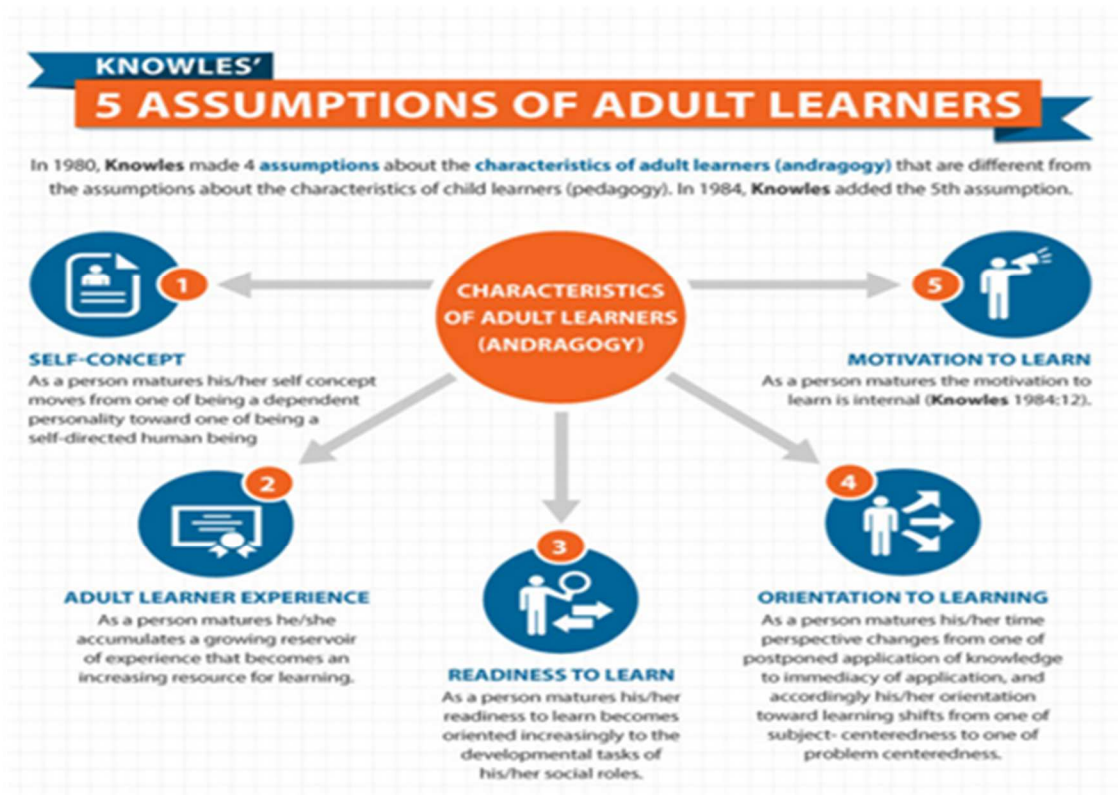


Figure 1. Knowles' five assumptions of adult learning. Adapted from "Leveraging Adult Learning Theory with Online Modules," by R. Halpern and C. Tucker, 2015.

In addition to developing the conceptual model on the assumptions of adult learners, Knowles (1996) also suggested the four principles of andragogy, which describe the principles applied to adult learning (see Figure 2). Knowles describes the impact of experiences on learning, the engagement of the learner, the relevance that the education

has on the learner's life (or practice in this context), and that learning is problem not context centered (Billings & Halstead, 2009).

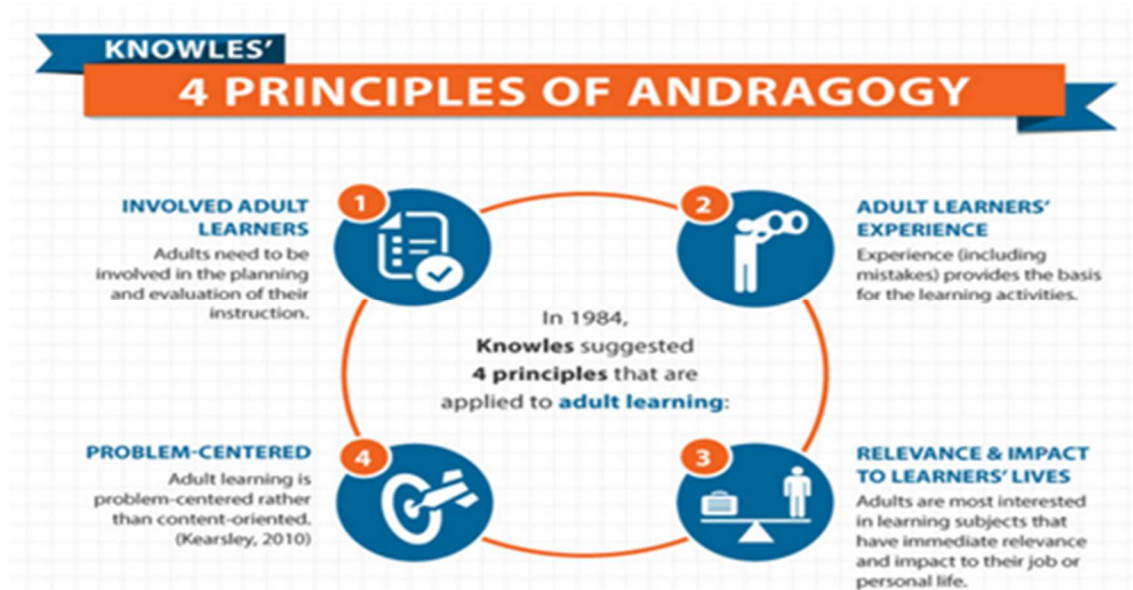


Figure 2. Knowles' four principles of andragogy. Adapted from "Leveraging Adult Learning Theory with Online Modules," by R. Halpern and C. Tucker, 2015.

For this project, Knowles's (1996) conceptual model of adult learning provided a framework to develop content that is relevant to the staff's practice, is interactive, and engages the participants to share their experiences and observations around brain injury patients' family caregiver needs. The goal was to translate the information and theoretical foundations presented in the educational module into practice and to help staff better meet caregiver needs and adopt behaviors that have been shown by the literature to be comforting and supportive.

Definition of Terms

Caregiver: Anyone who aides someone else who is, in some degree, incapacitated and needs help (Family Caregiver Alliance, 2009).

Family: Family is defined by the patient or their surrogates. They are individuals of significance who provide support to the patient (Davidson et al., 2017).

Family-centered care: Family-centered care takes into consideration the family's needs and values and embodies a partnership between patients, families, and providers (Oates, Weston, & Jordon, 2000).

Traumatic brain injury: An alteration in brain function, or other evidence of brain pathology, caused by an external force (Menon, Schwab, Wright, & Maas, 2010).

Acute rehabilitation: Acute rehabilitation is for individuals who require more intensive rehabilitation following an injury, illness, or event that impaired their functioning. Acute rehabilitation occurs in the hospital setting, requiring 24-hour nursing care. Therapy is provided 5 to 7 days a week for at least 3 hours per day. Regular meetings with the multidisciplinary team take place weekly, and care is coordinated by a case manager (Association of Rehabilitation Nursing, 2013)

Relevance to Nursing Practice

Studies have shown that nurses often do not receive formal education on the needs that family members have while a loved one is hospitalized. Although nurses understand the concept of patient- and family-centered care and the importance of supporting family caregivers, there is a gap in nurses' knowledge of what family needs are or how best to provide care and support to assist in meeting those needs (Catlin et al., 2015). The concept of caring science is taught in nursing education because caring is essential to nursing (Watson, 1999), which provides nursing students with a general overview of caring science, so that they will be able to care for the individual as a holistic

being and support the emotional, psychological, spiritual, and physical needs of patients. Although organizations are increasingly focused on the importance that nurses adopt caring behaviors, there is little evidence that tools and training are provided to develop skills to better connect with family members and to provide emotional support (Lehto et al., 2019).

There has been over three decades of research on the impact having a loved one injured or ill has on family caregivers. Family caregivers experience financial and family strain, burnout, emotional distress, and decreased quality of life (Goldfarb et al., 2017). Thus, there have been numerous studies and systematic reviews done to better understand the experiences and needs of family members of brain injury patients and how medical providers and care team members interpret and respond to these needs. Nurses should be able to create an atmosphere that supports the patient's and family's sense of well-being and conveys a feeling of being well cared for.

Impact of Brain Injury on Family Members

Most research on how critical injury and illness impacts family caregivers during the acute phase has been done in the pediatric and ICU settings. However, there is a body of research on the impact brain injury has on family members. Research has demonstrated that a diagnosis of brain injury impacts the family system and that caregivers struggle with psychological effects such as depression, anxiety, and physical difficulties (Kreutzer et al., 2015; Petersen & Sanders, 2015). In addition, researchers have shown that family caregivers suffer significant stress related to role changes and responsibilities to manage the difficult neurobehavioral and physical change in survivors,

both in the immediate and in the long term (Gan & Ballantyne, 2016; Kreutzer et al., 2015). The neurobehavioral consequences on the survivor's way of relating and personality have been shown to create significant emotional distress on family members, as survivors can become unpredictable, impulsive, and difficult to manage. The literature demonstrates that these burdens take a toll on the physical and emotional health of those caring for the brain injury survivor, with over one-third suffering depressive symptoms and worsening quality of life over time. This is important, as impaired caregiver status and burden has been correlated with global disability after a severe brain injury (Kreutzer et al., 2018).

Family Support Needs during Hospitalization

There have been a variety of studies on the needs of patients' family members; however, there has not always been agreement between nurses in understanding the family members' needs and those identified by the family members (Bowman, Rose, & Kresevic, 1998). This gap has led to those in the health care community seeking to better understand what the specific needs are of family members and how those family members would like their needs met. More recent studies have found that the highest-ranking need of family caregivers is the need to have clear, realistic information on status, prognosis, and treatment, and to be engaged in the plan, often feeling as if they do not have enough information to make informed decisions or plan for the future (Clissett, Porock, Harwood, & Gladman, 2013; Nufer & Spichiger, 2011). In addition to feeling involved and informed, Al-Mutair, Plummer, O'Brien, and Clerehan (2013) summarized 30 articles related to family caregiver needs and found that religion and culture have a

significant impact on support needs of family members. The need for emotional support and to feel valued and cared for are universal human needs (Yagil, Luria, Admi, Moshe-Eilon, & Linn, 2010). Gan et al. (2010) indicated that family caregivers of brain injury survivors experience isolation, both socially and emotionally.

Catlin et al. (2015) and Camicia et al. (2017) each conducted triangulated mixed methodology studies evaluating the needs of family members of oncology and stroke survivors, one of which I participated in and co-authored. The findings indicated the importance of meeting the practical needs of family members, such as physical comfort, the provision of food, a place for respite within the hospital setting, and the ability to attend to personal hygiene needs. These results suggest the value of doing more research to find ways to adapt the hospital environment to provide greater comfort and support and the importance of recognizing the practical needs of family caregivers who often remain at the hospital for extended periods of time. This is particularly relevant to the acute rehabilitation setting, where family members are encouraged to stay to have more time to participate in family training and to learn how to provide care for their loved one. Other practical worries family members often experience is related to issues such as financial, employment, and home safety concerns (Catlin et al., 2015; Gan et al., 2010).

Impact on Caregiver Well-being and Outcomes

Quality of life and the capacity to care for individuals with brain injury has been shown to be adversely affected by unmet caregiver needs (Kreutzer et al., 2018).

Literature suggests that caregiver needs, and wellbeing are correlated with post-brain injury recovery trajectories (Neimeier et al., 2018). There have been studies that have

shown that when caregiver support needs are met, there is improved problem solving, self-efficacy, adaptation, and coping. Not surprisingly, caregivers who feel the medical care team supported their needs also have increased satisfaction with care (Gan et al., 2010). More research, however, is needed to establish the efficacy of intervention programs aimed at meeting the complex needs of family caregivers.

DNP Project Relevance to Practice

This DNP project is relevant to nursing practice in that it provides a framework, method, and content to train nurses on how to provide more family-centered care. Frontline staff have the greatest opportunity to provide support, as they interact most with family caregivers. The staff training module provided education on the principles of caring behaviors and ways to interact with family members in a supportive way. The training module included interventions that individual staff can use to support families, as well as unit-based interventions. The model was not solely didactic; a facilitative model was used inviting participant stories and insights to support a more meaningful educational session as nurses related the content to their experience and expertise. This type of training approach to help staff learn about family needs and gain skills and strategies to better meet those needs, can be spread to other acute care settings.

Local Background and Content

Acute rehabilitation is an inpatient program designed to provide care for individuals who have suffered a stroke, spinal cord injury, brain injury, trauma, or other debilitating or neurological conditions that meet admission criteria. Acute rehabilitation provides 24-hour nursing care, daily physician supervision, and direction of an intensive

program consisting of at least three hours a day of physical, occupational, or speech therapy. The multidisciplinary team consists of case managers, social workers, neurophysiologists, and recreational therapists, in addition to the core treatment team. The goal is to help the patient achieve maximum functional gains and successfully transition back to the community. In this setting, the family is an integral part of the program. The family is part of the team, and much of the focus during rehabilitation is to support and educate the family caregivers to successfully care for their loved one when they return to the community. Caregiver education begins upon admission, and a successful transition home depends on the caregiver's ability to support and care for the patient throughout rehabilitation and upon discharge.

The setting for this project was a 48-bed inpatient acute rehabilitation unit, which is part of a large, non-profit, integrated health care system consisting of 21 hospitals in the western United States. This facility is designated a center of excellence, as it is the only acute rehabilitation hospital for the health care system serving all 21 medical centers. In 2018, 1,104 patients received care, 71 had a primary diagnosis of traumatic brain injury, and 74 had a diagnosis of non-traumatic brain injury, with an overall average length of stay of 14.3 days (Facility patient demographic data). The project site has a staff of 85 registered nurses (RNs), 12 licensed vocational nurses (LVNs), 28 patient care technicians (PCTs), and eight nurse managers (NMs). Newly hired staff receive a 6 to 8 day orientation and participate in annual skills day. Most of the education provided is focused on understanding the organizational policies, standards, and practices; workflows; and clinical aspects of care.

Understanding the need to engage and educate family throughout the length of stay is reinforced, as family participation in the rehabilitation process is recognized as critical to the success in the program. Nurses engage family to participate in care and learn the skills and strategies needed to confidently and competently care for their loved one at home. The staff recognize that family members are often deeply distressed and demonstrate the strain of the burden of suddenly being a caregiver of someone who has suffered a brain injury resulting in significant cognitive and physical deficits. Social workers are available to provide emotional support and guidance on navigating issues around qualification of services and financial issues. Case managers work closely with family members to prepare the patient and family to be safely discharged home. However, the needs for emotional, spiritual, and physical comfort; clear communication; and understanding the brain injury sequelae and prognosis often go unmet. While some nurses have expertise on how to support the unique needs of family caregivers of brain injury patients, many do not have the skills or knowledge to navigate the complex demands of caring for both patient and family.

The leadership team, consisting of the director of operations, chief of neuropsychology, and NM, identified this project to bridge the gap and to support frontline staff to better meet the needs of caregivers and potentially improve outcomes for patients. My previous leadership role in the department afforded me the trust and buy-in of the team and credibility among the staff, as I have some expertise in the field of rehabilitation nursing. The mission of the organization is to ensure that the highest quality and exceptional care experience is provided to all members. Additionally, the concept of

patient- and family-centered care is a formal component of the care delivery model that guides how care is delivered. Efficiency, outcome data, and care experience are important indicators of quality, and these publicly-reported metrics help inform where opportunities for improvement in care delivery exist.

In the project setting, the results reported by Med Tel, an independent vendor who collects follow-up data after discharge from the hospital, show that brain injury survivors have lower satisfaction scores than other acute rehabilitation patient populations. Most of brain injury survivors (86.3%) live with family after discharge, meaning that most of time, family assume the role of caregiver. Local leadership and the multidisciplinary brain injury program team assert that when families are better able to participate in the rehabilitation process and can adapt and cope with the challenges associated with brain injury, outcomes improve.

Role of the DNP Student

The DNP program prepares nurses to lead in a complex health care environment. The DNP essentials and core competencies provide a roadmap for the DNP student and working to achieve an elevated level of competency in these elements has been a focus in this project.

My interest in this project stems from two sources. Over the years, I have identified the impact that a loved one's acute illness has on family member and how this impacts the patient's recovery and the health and wellbeing of the family unit. A passion grew to look closely at what patient- and family-centered care represents and, specifically, how we care for family. I previously worked in acute rehabilitation in a

leadership role for five years and found that family caregivers of brain injury patients suffered deep distress, as brain injury can result in permanent personality and behavior changes, which induce a sense of loss and grief not found in other acute rehabilitation patient populations. There was less programmatic support for the caregivers of brain injury patients, and nurses struggled with knowing how to support the family while also managing these complex patients. The hospital leadership identified that a staff education module centered on identifying the support needs of family caregivers of brain injury survivors, interventions that support those needs, and how to incorporate a patient- and family-centered approach to care can help bridge the gap between family caregiver's needs being fulfilled. My knowledge and expertise in the acute rehabilitation setting, along with my previous research on family caregiver needs, provides the necessary skills to develop educational content on this topic.

For the development of the DNP staff education project, Knowles (1996) principles of adult learning provided the framework to support an education program presentation that will allow participants to draw upon their own experiences with families of brain injury survivors and relate the educational content to their practice. I presented the evidence on how caregivers experience having a loved one suffer a brain injury, caregiver needs identified through previous studies, and strategies to meet those needs and behaviors to help family caregivers feel more supported while in acute rehabilitation. I threaded the use of examples and anecdotes throughout the presentation to help staff better relate to the topic, assisting the learner to grasp complex ideas and to help identify and connect in a concrete way with the material being taught.

Summary

Family caregivers have a key role in the recovery and rehabilitation of individuals suffering a brain injury. Studies have shown that there is tremendous burden on the caregiver as they find themselves in an unfamiliar role, experiencing loss, grief, depression, and anxiety due to an uncertain future. Frontline staff have a unique opportunity to provide support to family caregivers, which allows for better coping and for the caregiver to be better prepared to care for their loved one. It is important to provide nurses with the education and skills needed to identify and meet the needs of family caregivers. This project aimed to apply the adult learning model, emphasizing the theory of patient- and family-centered care to provide meaningful education, which will result in meeting the needs of family caregivers and promoting a more healing environment for the family to support the patient.

Section 3: Collection and Analysis of Evidence

Introduction

Evidence has shown that family caregivers of brain injury patients are often emotionally and physically overwhelmed following the injury, and they experience a high rate of distress as they struggle to adjust to their new role as caregiver (Kreutzer et al., 2015). Family caregiver support and participation during the acute rehabilitation phase plays a key role in the patient's recovery and ability to transition safely back to the community. Providing a patient- and family-centered approach to care and recognizing the needs of family caregivers can impact quality of life, the experiences family have after a devastating brain injury, and potentially the outcome of the patient's recovery. Nurses can identify and meet the needs of family members at the bedside; however, nurses and staff more often receive training on how to support patients rather than family members at the bedside (Petersen & Sanders, 2015).

The aim of this DNP project was to create and present an evidence-based education module reviewing the support needs of family caregivers following a brain injury and presenting strategies to meet these needs during the patient's acute rehabilitation. In Section 2, I reviewed the local background and context of the issue related to supporting caregiver needs, my role as the DNP student, and the theoretical underpinnings supporting the objectives and focus of the educational module. In this section, I will discuss the population and sampling, ethical considerations, project methods, and analysis.

Practice-Focused Question

The purpose of this staff education project was to provide education to the acute rehabilitation staff at the project site on how to identify and support the needs of family members of brain injury patients in acute rehabilitation. Another aim was educating staff on how to demonstrate behaviors that are supportive and align with a model of care that is patient- and family-centered. This DNP project addressed the practice-focused question “Will an education project teaching staff how to identify and meet the support needs of family caregivers of brain injury patients increase staff knowledge, skills, and confidence in providing a family-centered approach to care?”

Sources of Evidence

To address the practice-focused question and better understand the needs of patients’ family members, I conducted a systematic review of the peer-reviewed literature from 2008 to 2019 using computerized databases that includes PubMed, CINAHL, ProQuest, EBSCO, and Google Scholar. I reviewed the literature with respect to consequences associated with brain injury, the impact brain injury has on family members, support needs of family caregivers, nurses’ experiences with supporting family needs, and caring behaviors and supportive interventions, which was summarized in Section 2. Keywords for inclusion were *brain injury*, *patient- and family-centered care*, *adult education theory*, *acute rehabilitation*, *family caregiver support needs*, and *caring behaviors nursing*. I reviewed full-text, peer-reviewed articles and examined the articles’ strength and weaknesses, background, and potential author bias in addition to evaluating the works for credibility, quality, and relevance.

Evidence Generated for the Doctoral Project

Participants

The expert panel consisted of key stakeholders who worked at the project site. Each member of the panel was included in evaluating the educational content and objectives and assessed for relevance to the practice setting. Feedback was incorporated into the proposed presentation. Members of the expert panel included the chief of neuropsychology who has a PhD in neuro psychology and over 25 years' experience in rehabilitation medicine and neuropsychology. He has conducted extensive research in the field of brain injury and concussion medicine. Additionally, the panel included the NM, who has over 10 years' experience working in the acute rehabilitation setting as is a certified rehabilitation RN, and an assistant NM who has over 15 years working in acute rehabilitation and has been a member of the brain injury program team at the practice site for over 4 years.

I invited staff members from the rehabilitation hospital to participate, and they included RNs, LVNs, PCTs, and NMs who worked on all shifts. Although participants were invited to participate on their day off, staff who participated worked on the day of the in-service. The educational backgrounds of the staff ranged from a high school education to a master's degree. Participation by the expert panel and staff was voluntary, and participants could opt out of participating at any time.

Project Method

Knowles's (1996) adult learning theory guided the project, relying on an andrological orientation in which the staff were actively involved in their learning using

their experiences and knowledge to process information about the experiences and needs of family members (Billings & Halstead, 2009). It is important to match the instructional materials to the appropriate learning domains. For this project, the educational content targeted both cognitive and affective domains of learning. Specific facts about brain injury sequela and its impact on family caregivers, along with evidence-based approaches that staff can integrate into their practice to meet the support needs at the bedside, were coupled with stories to connect the presentation to staff's attitudes and values.

The educational module was presented in a private conference room located on the rehabilitation unit. Three 30-minute in-services were completed to accommodate staff working on nights, days, and evening shift. The presentation included a PowerPoint presentation (see Appendix A), which allowed for approximately 20 minutes for the presentation of content and 10 minutes for questions and discussion. Participants were asked to complete an evaluation of the presentation through a Likert scale survey. I collected and analyzed the data using descriptive statistics with graphical representation of the results and a summative assessment.

Ethical Considerations

Ethical considerations were taken to ensure the protection of the participants prior to implementing the project, and they were evaluated and approved by Walden University's Institutional Review Board (IRB). The site agreement from Walden Staff Education Manual was signed by the partner site. Prior to the presentation, participants were given information about the topic and objectives of the educational program through a flyer (see Appendix B). Participants were advised that participation in the in-service

was voluntary, and I obtained consent for each participant using the consent form in the education manual. Participants were given instructions to contact the NM in the event of any questions or concerns. An anonymous program evaluation using a Likert scale was administered following the in-service and collected by the assistant NM (see Appendix C). Participants had the option to leave at any time during the in-service. No protected health information was discussed during the sessions. All data were de-identified and remained anonymous. Data will be held under lock and key for five years. Prior to the program initiation, staff were asked to participate, and educational objectives were provided.

Analysis and Synthesis

Evaluation is an important process to assess if the learning objectives of the education were met. This is critical in the health care environment due to the impact education and training can have on how care is delivered and the potential impact on patients and families (Bastable, 2014). The assistant NM collected the evaluations after each session. All personal information was de-identified and answers remained anonymous. A Likert type survey was used to evaluate program content and relevance to the nurse. The scale has a range of 1 to 5, with 1 indicating *strongly disagree* and 5 indicating *strongly agree*. There is an open-ended question asking for additional feedback or recommendations. Data were categorized on an Excel spreadsheet, and descriptive statistics were used to evaluate the efficacy of the teaching. The evaluation assessed if the participants gained knowledge relating to the family caregiver needs of brain injury patients, if they learned specific strategies on how to model caring behaviors to identify

and support needs of family members, and if they felt more confident in their ability to support the family at the bedside.

Summary

I conducted an evidence-based educational program at the project site to promote more family-centered care and educate frontline staff with the knowledge and skills to support the needs of family members of brain injury patients at the bedside in an acute rehabilitation hospital. I offered the presentation to staff on all shifts. Confidentiality was maintained for the participants. I used statistical analysis for the evaluation data. The findings, implications to practice, and recommendations is discussed in Section 4.

Section 4: Findings and Recommendations

Introduction

Supporting the needs of family members of brain injury patients can enable them to better care for their loved ones during the acute rehabilitation process and beyond. Frontline staff have the greatest opportunity to provide support at the bedside; yet often, nurses are unaware of the family's needs or how to meet these needs while also focusing on caring for the patient (Niemeier et al., 2018). Leadership at the project site identified a need to provide more support to family caregivers of brain injury patients and staff needed additional training on how to navigate the complex demands of caring for both patient and family. Prior to the project implementation, there was no formal education process for staff to gain the knowledge and skills necessary to support the emotional and physical needs of the family. The practice-focused question asked if a staff education project focused on providing education on how to meet the needs of family caregivers would increase staff knowledge, skills, and confidence in caring for family members.

I conducted a comprehensive review of the evidence using computerized databases, including PubMed, CINAHL, ProQuest, EBSCO and Google Scholar databases from 2009 to 2019 to gain better understanding of the needs of patient's family members. I reviewed the literature with respect to sequela associated with brain injury, the impact brain injury has on family members, support needs of family caregivers, nurses' experiences with supporting family needs, and caring behaviors and supportive interventions. The comprehensive literature review assisted in the development of the educational content and teaching approach based on Knowles (1996) adult learning

theory grounded in the framework of patient- and family-centered care. The project was approved by the Walden University IRB (Approval Number: 04-03-19-0457780), and an IRB waiver was received from the project site. The staff education activity was held on May 14, 2019 at three different times to accommodate staff who worked night, evening, and day shifts. In Section 4, I will discuss the evaluation results, implications, recommendations, and strengths and limitations.

Participants

Participants for the educational program and survey questionnaire included RNs, LVNs, PCTs and NMs (see Table 1).

Table 1

Participant Roles

Role	<i>n</i>	%
RN	18	56.0
LVN	4	12.5
PCT	6	19.0
NM	4	12.5
Total	32	100.0

Method

The presentation included a PowerPoint and interactive discussion, with participants sharing challenges and successful strategies of helping family caregivers feel less anxious, hopeful, informed, and able to care for their loved one. The sessions lasted approximately 30 minutes for the night and evening shifts and 40 minutes for the day shift and was followed by the administration of an anonymous survey, which was collected by the assistant NM and returned to me after the in-services were complete.

Participant Program Evaluation and Implications

Each participant answered a 5-point Likert-type questionnaire ($N = 32$) to rate the program content. The Likert scale ranged from *strongly disagree* to *strongly agree*. The responses are categorized based on role—RN, LVN, PCT, and NM—and are presented in Tables 2 to 8. Overall participant responses are presented in Table 9. Comments from Question 8 are grouped into themes and incorporated into recommendations.

Question 1 through Question 7

According to the total participant ($N = 32$) responses, 94% agreed or strongly agreed to the statement of having a better understanding of the consequences of brain injury (see Table 2). Fifty percent of the NMs rated this statement as neutral, indicating that the program did not further their knowledge of the sequelae related to brain injury. Additionally, only 88% of RNs agreed with this statement. This may be because RNs receive ongoing training on brain injury patients and the impact on cognitive, social, emotional, and functional domains of patients.

Table 2

Responses to Question 1

Role	<i>n</i>	Strongly disagree		Disagree		Neutral		Agree		Strongly agree	
		<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
RN	18							16	88	2	11
LVN	4							4	100		
PCT	6							3	50	3	50
NM	4					2	50	1	25	1	25

The data in Table 3 demonstrate that 100% of participants agreed that following the in-service they have more insight on how brain injury impacts family members. This

is an important precursor to meeting the support needs of family caregivers. Eighty-three percent of PCTs rated this statement as strongly agree, and 94% of RNs rated this statement as agree. This may indicate that PCTs who have less training and education on how family members experience a health crisis found content related to the impact a brain injury has on the family system the most helpful. Additionally, the responses indicate the framing of the program around the conceptual model of patient- and family-centered care helped reinforce the need to engage and support the family.

Table 3

Responses to Question 2

Role	<i>n</i>	Strongly disagree		Disagree		Neutral		Agree		Strongly agree	
		<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
RN	18							1	6	17	94
LVN	4							4	100		
PCT	6							1	7	5	83
NM	4							4	100		

With respect to Question 3, all but one participant (an NM) felt they had gained more knowledge of the support needs of family caregivers following the in-service (see Table 4). For Question 4, similar to Question 3, 100% of RNs, LVNs, and PCTs, and 75% of NMs strongly agreed they learned skills to support family members of brain injury patients. One NM agreed with this statement (see Table 5). The sections of the program that these statements evaluate are related to the evidence presented on caregiver needs at the bedside (i.e., physical, skills acquisition, and emotional and communication needs) as well as what to do to better meet those needs.

Table 4

Responses to Question 3

Role	<i>n</i>	Strongly disagree		Disagree		Neutral		Agree		Strongly agree	
		<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
RN	18									18	100
LVN	4									4	100
PCT	6									6	100
NM	4							1	25	3	75

Table 5

Responses to Question 4

Role	<i>n</i>	Strongly disagree		Disagree		Neutral		Agree		Strongly agree	
		<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
RN	18									18	100
LVN	4									4	100
PCT	6									6	100
NM	4							1	25	3	75

The data in Table 6 indicate that 100% of the participants strongly agreed that they learned strategies to provide more patient- and family-center care. All respondents strongly agreed that they learned how to better identify and meet the needs of family caregivers (see Table 7). This indicated that the program was successful in helping staff learn ways to identify the needs of family caregivers, as the literature showed that caregivers often do not articulate their needs because the focus is on the patient. Table 8 demonstrates that 100% of participants strongly agreed that they have more confidence to identify and meet the needs of family members of brain injury patients. This statement indicates that participants acquired more knowledge and skills to better identify and meet the needs of family caregivers of brain injury patients because of the presentation.

Table 6

Responses to Question 5

Role	<i>n</i>	Strongly disagree		Disagree		Neutral		Agree		Strongly agree	
		<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
RN	18									18	100
LVN	4									4	100
PCT	6									6	100
NM	4									4	100

Table 7

Responses to Question 6

Role	<i>n</i>	Strongly disagree		Disagree		Neutral		Agree		Strongly agree	
		<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
RN	18									18	100
LVN	4									4	100
PCT	6									6	100
NM	4									4	100

Table 8

Responses to Question 7

Role	<i>n</i>	Strongly disagree		Disagree		Neutral		Agree		Strongly agree	
		<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
RN	18									18	100
LVN	4									4	100
PCT	6									6	100
NM	4									4	100

Table 9 summarizes the responses to the Likert type questionnaire using a 5-point scale on a continuum of strongly disagree to strongly agree. Question 2 through Question 7 were answered as agree to strongly agree by 100% of the participants. Question 1 was

answered as agree to strongly agree by 94% of participants, with two participants answering neutral. Most participants answered that they had a better understanding of the consequences of brain injury after participating in the educational program. All participants answered that they agreed or strongly agreed to Questions 2 through Question 7, indicating that following the educational in-service, they had more insight on how brain injury impacts family caregivers, had more knowledge of the support needs and skills to meet the needs of family caregivers, learned strategies to provide more patient- and family-centered care, and had greater confidence in identifying and meeting the needs of family members of brain injury patients.

Table 9

Summary of Responses for Questions 1 Through 7

Question	<i>n</i>	Strongly disagree		Disagree		Neutral		Agree		Strongly agree	
		<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Q1	32					2	6	20	63	10	31
Q2	32							6	19	26	81
Q3	32							1	3	31	97
Q4	32							1	3	31	97
Q5	32									32	100
Q6	32									32	100
Q7	32									32	100

Question 8

I used descriptive thematic analysis for Question 8, an open-ended question asking for program comments and recommendations. Nineteen of the 32 participants wrote comments in the free-text area. I read all comments and identified themes. I did not include some comments, such as “this was a really helpful presentation,” in the thematic

analysis. Two general themes emerged: usefulness of specific ideas to support families and importance of patient- and family-centered care.

Usefulness of specific ideas to support families. Several comments were favorable regarding the discussion around specific ideas and interventions that could be utilized to provide support. One respondent stated,

I don't necessarily think to ask about the basic needs of the family members who are staying by the bedside, such as offering toiletries and use of the refrigerator to store food. I will be much more conscious to ask how I can support them.

Another respondent wrote, "This should be taught to all staff, particularly new rehab nurses." One participant remarked,

This is so important, I have seen time and time again when you do things like tend to the physical comfort needs or communicate well about what to expect and explain what you're doing, anxiety goes down and family members learn better.

One participant replied, "Communication is critical to improving the rehabilitation progress of our patients. Using the care board, updating the family on progress towards goals is really important to the family."

Importance of patient- and family-centered care. Some participants provided feedback on the importance of patient- and family-centered care. One participant commented, "I think it is good the emphasis on caring for the whole family, patients do better when family members are involved," Other comments included, "I liked hearing the stories about connecting with family members, this is a special aspect of working in rehab-we get really close to the family members because our patients stay a while," and

“This was a good reminder on just how devastating brain injury is to the family as a whole.”

Recommendations

The individual with a brain injury is part of a family system, and the whole system needs to be supported during the acute recovery phase (Gan et al., 2010). Frontline staff can do much to support the needs of family members while at their loved one’s bedside. The project’s focus to provide staff education came from the project site’s leadership assessment that opportunity existed to provide more patient- and family-centered care, specifically in the context of supporting the family caregivers of brain injury patients in the acute rehabilitation setting, which resulted in the creation of the educational module to bridge the knowledge gap. The data represented in the evaluation indicate the project successfully provided more knowledge and strategies to better identify and meet the caregiver needs of brain injury patients. One of the recommendations was to incorporate this training into the onboarding of new staff and provide education during annual skills day to reinforce the importance in supporting family caregivers and present the current state of evidence on the unique needs of family caregivers and specific actions staff can take to meet caregivers’ needs. Additionally, this training should be inclusive of other acute rehabilitation populations, such as stroke and spinal cord injury patients. Providing training to RNs, LVNs, PCTs, and management to better meet family caregiver needs not only improves the wellbeing of family members, it also can result in better patient outcomes and improved transition back to the community. Additionally, the integration of Knowles (1996) principles of andragogy should provide

the framework for staff education. Utilizing the principles of the adult learning experience and relevance to the learner was key to the success of the project, as staff members reflected and shared experiences where they had successfully found ways to support family caregivers and felt this made a difference in the patient's recovery. Participants' comments reflected that they learned tangible things that could be integrated into practice and that it was meaningful to incorporate principles of patient- and family-centered care.

Strengths and Limitations of the Project

This staff education project had several strengths. One of the primary strengths was the evaluation results, indicating there was consensus among the participants that as a result of the in-service, they gained knowledge and skills on how to better identify and meet family caregiver needs of brain injury patients and, as a result, felt more confident in providing patient- and family-centered care. The strength of the evidence found in the literature on which the curriculum was based was also a strength. Another strength lies in the support and buy-in of the rehab stakeholders who provided guidance on the educational opportunities and reviewed and approved the content prior to implementing the project.

One of the primary limitations of the project was the sample size, as only 32 of 133 staff members attended the educational sessions, which were offered on a single day. Additionally, the project was conducted in a single medical facility and cannot be generalizable to all staff. Results may vary based on a larger sample size. A final limitation is that a pre-test was not given prior to the in-service, which prevents an

analysis of the effectiveness of the educational program. It is recommended that future educational program presentations start with a pre-test to measure baseline knowledge prior to the program implementation.

Section 5: Dissemination Plan & Self-Evaluation

Introduction

The final phase of the DNP project is the dissemination of findings. It is important to disseminate evidence-based practice findings not only to the organizational stakeholders but to other health care professionals so that innovations for practice can be replicated or applied in other settings (Zaccagnini & White, 2011). Knowledge synthesis, translation, exchange, and spread is essential to the effort to strengthen health care, inform policy, and improve practice decisions based on current clinical evidence. In Section 5, I will discuss the venues I will be using to disseminate the findings of my project locally and within the broader nursing profession. Additionally, I will provide an assessment of myself as a practitioner, scholar, and project manager and how this experience impacted my current and long-term goals and role as a doctoral-prepared nurse.

Dissemination

The first step in disseminating my project findings is to provide an oral presentation at the facility's monthly leadership meeting. The rehabilitation hospital where the educational in-service was delivered is part of a larger hospital system, which includes other inpatient and outpatient departments. The audience will be the chief nursing officer, chief operating officer, director of education, department managers, and directors. The senior leadership is interested in hearing not only how the acute rehabilitation staff can better promote patient- and family-centered care by meeting the needs of family members of brain injury patients but also how this can be translated to

the rest of the hospital to support family members of other patient populations such as ICU, medical-surgical, and oncology. The hope is to provide a framework and content that can be used to educate frontline staff in these settings on how to better identify and support family needs at the bedside.

I also plan to create an educational poster that will be available in the reference conference room for staff not attending the in-service. A poster serves as a storyboard to share information in a concise way and provides a venue to disseminate findings to a broad audience. Posters are often used at professional conferences to share evidence-based practices and can be displayed at health care facilities. Posters can be helpful in educating the public and informing stakeholders about the findings from evidence-based efforts (Forsyth, Wright, Scherb, & Gaspar, 2010). The poster I create will contain a project summary, including the evaluation findings. This is important so that more staff have an opportunity to integrate the knowledge into their care of brain injury patients and their families.

Additionally, it is important to share evidence-based practices with the broader nursing community. One method is to present the topic through an abstract and poster presentation. Each year, the project site's organization sponsors a national nursing quality conference. At this conference, nurses from across the country working in both inpatient and outpatient settings share their research and projects. I will be writing an abstract and submitting a poster to disseminate the important work my project represents. The organization has placed increased focus on supporting families across the continuum and partnering with family caregivers to promote better patient outcomes. This project aligns

with the goal of providing patient- and family-centered care and can provide a roadmap to guide effort to create an effective staff education program helping frontline staff to become more sensitive and responsive to family caregiver needs.

Evaluation of Self

It is important to reflect on development and growth throughout the process of project creation, implementation, and evaluation. In this section, I will provide an evaluation of my progress during the project journey and how it has helped shape me as a nurse scholar, practitioner, and project leader. Developing skill and expertise in each of these areas allows DNP students to make a positive impact on clinical practice and patient outcomes.

The DNP student must have a strong understanding of how to interpret research and an ability to translate research-based evidence into practice. Part of the DNP scholar's role is integrating evidence into clinical practice and evaluating outcomes within the context of a complex health care delivery system (Buchholz et al., 2013). Throughout this project, I developed competency as a nurse scholar and developed the skills to evaluate the literature on the needs of family members of brain injury patients and the quality and interventions applied to meet the needs. I synthesized the evidence to support the development of a staff education program to the practice site needs in alignment with the organizational goals and practice environment. A nurse scholar must also be able to support and guide evidence-based health care, which requires evaluation of the clinical change, understanding strengths and limitations, and dissemination of the findings. To support my development as a scholar, I utilized descriptive statistics to

inform the analysis of the efficacy of the project. I found that developing a staff education module founded on Knowles's (1996) adult learning theory was helpful in creating an educational program that was meaningful to the target audience.

As a clinical doctorate, the DNP helps prepare nurses to advance the nursing profession and bridge evidence to practice through transformational leadership. To facilitate this, doctorate-prepared nurses are trained to lead this work in an increasingly complex health care delivery system (Zaccagnini & White 2011). Through this project, I was able to apply knowledge I learned throughout the program to collaborate with an interdisciplinary team to conduct a needs assessment and to design a project to meet the organizational goal to better support family caregivers. I worked closely with leadership and stakeholders to develop curriculum appropriate to the setting. As a project manager, I improved my leadership skills and ability to create a project that educated and empowered frontline staff in an acute rehabilitation setting. Through this process, I have gained experience in managing a project and leading translation of evidence to the clinical setting, which has given me skills and confidence as a nurse leader in my current role to impact care approaches and continuously improve and integrate evidence into clinical practice. The participants affirmed that the project provided information and tools they could easily integrate into their practice, aligning with their previous experiences and goals to provide care that considers the family caregivers' needs and roles in supporting patient progress during rehabilitation and beyond.

In Essential VIII of the DNP Essentials, outlined by the American Association of Colleges of Nursing (2006), the role as practitioner is highlighted and the need to

demonstrate refined assessment skills, applying biophysical, psychosocial, political, cultural, economic, and nursing science in the implementation evidence-based care to improve patient outcomes. Having experience as a practitioner who has worked with family caregivers of brain injury patients and a leader of staff who provide care in the clinical setting supported my development of a staff education project relevant to the staff and clinicians who deliver care.

Completing the capstone project was an exercise in persistence and required focus and the ability to adapt and draw on all I had learned in the program using my professional leadership experience. As I reflect on process, I have greater appreciation for each stage of the project and the importance of knowing how to evaluate the science and literature and how to use theory as a foundation for the development of a project that fits the practice setting, audience, and professional values. I learned how to design, implement, and evaluate a project aimed at improving outcomes through the translation of evidence to practice. My professional goal is to move into the role of chief nurse executive, where I can have broader influence on creating a culture of excellence, build effective teams through collaboration and servant leadership, and support practice based on the evidence. Completing this project has equipped me with the knowledge and skills to meet these goals.

Summary

Completing the capstone project provided me an opportunity to integrate and synthesize all the elements of what I learned in Walden's DNP program. It created an opportunity to develop, collaborate, and lead an evidence-based project. The skills I

learned through using a structured, methodical approach to the practice-focused question and theories to ground the project will serve me for the rest of my career.

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Appendix A: Staff Education PowerPoint Presentation

Supporting Family Members of Brain Injury Patients

DNP Staff Education Project

Carrie Maloney Robertshaw, MSN, RN, CRRN



OBJECTIVES

At the end of this presentation, you will have understanding of:

- The physical, emotional and cognitive changes that occur in individuals who suffer brain injury (BI)
- How BI impact family caregivers
- What approaches and interventions are helpful in supporting the needs of family caregivers
- Caring behaviors you can integrate into your practice to deliver patient and family-centered care

Broad Impact of Brain Injury

- Due to long-term impact considered a chronic condition
 - Cognitive changes
 - Physical impairment
 - Behavioral & personality changes
 - Social & vocational roles
 - Psychological & emotional impact





Cognitive Impairment

- Attention & concentration
- Memory
- Confusion
- Difficulty in word finding
- Reduction in speed of processing information
- Executive functions such as higher-order planning, initiating and directing, monitoring, problem solving, and inhibitory control
- Language functions
- Visuospatial processing

4



Physical Manifestations

- Seen an “invisible disability” due to lack of obvious physical signs of impairment
- Possible physical consequences
 - Challenges in managing ADLs
 - Full or partial paralysis
 - Weakness
 - Poor coordination
 - Sexual dysfunction
 - Changes in senses

5



Behavioral & Personality Changes

- One of the most devastating sequela for both patient and family
 - Impulsivity
 - Paranoia
 - Disinhibition
 - Non-cooperative/aggression
 - Lack of self-awareness
 - Egocentric (centered on self)

6

Psychological & Emotional Impact

- Depression
- Anxiety
- Emotional lability
- Anger
- Irritability
- Loss of confidence
- Apathy



7

Social, Family & Vocational Roles

- Often unable to resume leisure & social activities
- Loss of friendships and social isolation
- Dependence on caregivers, changes in roles
- Strain on family relationships, inability to connect in same way as prior to injury
- Often unable to return to work

8

Impact on Family Caregivers

- Loss and grief (ambiguous loss) due to changes in loved one and quality of relationship
- Mental health toll with increased depression and anxiety and lower quality of life
- Fear and uncertainty related to prognosis and future
- Coping with changes in role as caregiver
- Dealing with impact on issues such as finances, childrearing, job & home responsibilities
- Social isolation
- Lack of knowledge and skills to cope with the behavioral, cognitive and psychological changes due to BI



9

What are the support needs of family members?

- Clear communication and information on plan of care, what to expect
- Emotional and social support
- Physical comfort and physiological needs
- Caregiver training (skill building and knowledge)
- Information on community re-integration and financial/respice resources

10

Supporting Family Members: Communication

- Clear, honest information on what to expect during rehabilitation, prognosis, team goals
- Regular update of care board with plan of care, progress of rehabilitation, mobility and care needs
- Narrate care and explain BI sequel when arise



This document provides a comprehensive overview of the patient's current status, including a detailed history of the condition, a thorough physical examination, and a clear plan of care. It also outlines the goals of treatment and the expected outcomes, ensuring that all stakeholders are well-informed and aligned in their approach to the patient's care.

Physical & Environmental Needs

- Comforts such as a linen, pillow and a place to sleep is important
- Offer hygiene kit and use of showers
- Quiet location to rest, pray, meditate (consider meditation room, outside garden)
- Meal storage provision: consider offering meal to those who live far from hospital, store outside food in family kitchen
- Encourage use of family room with child-friendly activities, computers

12

Emotional and Social Support

- Involve social worker early
- Authentic listening: sit at eye level, eye contact
- Demonstrate concern in how *they* are doing, be present
- Encourage socialization with other caregivers of BI patients
- Provide information on community and national resources (respite care, support groups, national organizations such Brain Injury Association of American www.biausa.org; Family Caregiver Alliance <https://www.caregiver.org>)

13

Caregiver training and skills acquisition

- Coping skills, self-care, self-efficacy & problem solving
- Strategies on how to manage patient-specific behaviors and challenges i.e. re-direct, do not challenge
- Identify triggers of challenging behavior
- Stay calm & patient
- Simple directions, speak slowly
- Hands-on training managing physical deficits



14

Patient and Family Centered Care

- Families are considered experts in what supports them
- Families are invaluable partners with the health care team to support the patient
- Recognize that families are central and a primary source of strength and support



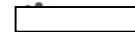
15

Questions and Discussion



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- Brain Injury Association of America www.biausa.org
- Family Caregiver Alliance <https://www.caregiver.org>



Appendix B: Promotional Flyer

**HOW CAN I SUPPORT THE FAMILY CAREGIVERS OF
BRAIN INJURY PATIENTS?**

**DNP STAFF EDUCATION PRESENTATION BY
CARRIE MALONEY ROBERTSHAW, RN, MSN, CRRN**



**Location: SCI Conference Rm
Date: xxx
Times: NOC shift: 7:30-8:30am
PM shift-2:00-3:00pm
Day shift: 3:30-4:30pm**

**Presentation will follow the
monthly staff meeting and will
last approximately 30 minutes.**

**Attendance is voluntary, you
will be asked to complete an
anonymous survey following
the in-service.**

Families of brain injury patients experience significant distress and grief when coping with brain injury and the long term impact on the patient and family unit. Supporting and engaging family members can improve outcomes and help patients transition safely. Learn about how family members experience and cope with brain injury and how you can better support their needs during rehabilitation.



Appendix C: Evaluation

▲ **Evaluation of Carrie Maloney Robertshaw's Presentation**

Please rate the following statements. Thank you for your feedback!

	Question	Strongly disagree	Disagree	Neutral	Agree	Strongly Agree
		1	2	3	4	5
1	I have a better understanding of the consequences of brain injury					
2	I have more insight on how brain injury impacts family members					
3	I have more knowledge on the support needs of family caregivers					
4	I learned skills I can use to support family members of brain injury patients					
5	I learned strategies on how to provide more patient and family-centered care					
6	I have learned how to better identify and meet the support needs of family members					
7	I feel more confident in identifying and meeting the needs of family members of brain injury patients					
8	Please provide any additional feedback or suggestions					

Please place a check mark next to your role/license in this facility.

RN _____ LVN _____ PCT _____ Nurse Manager _____