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Caregiver Review of Nonpharmacological Interventions for Behavioral Symptoms Associated With Dementia

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2019

Abstract

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MSN, Seattle University, 2011

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

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Abstract

Alzheimer’s disease (AD) is the most common form of dementia and affects an individual’s overall cognitive function, including orientation, memory, and executive function. Most AD patients in the United States reside in residential care facilities or private homes under the care of individuals with little education on the challenges of the AD patient. Among the challenges faced by caregivers are behavioral and psychological symptoms related to dementia (BPSD). Education has been shown to improve caregivers’ treatment of BPSD in AD patients and to improve caregiver retention. The purpose of this project was to develop an evidence-based education module guided by Kolcaba’s comfort theory that could be provided to home care nurses who provide care for AD patients with BPSD. A 5-point, 15-item, Likert-scale evaluation survey was developed and administered to a panel of 5 professional content experts who reviewed and scored the educational module for clarity, usability, and applicability. The mean score of 4.6 indicated that the expert panel found the education module to meet the expected standards for use with AD caregivers. Recommendations from the panel of experts were to proceed with the caregiver education module as planned. Implementation of the module may lead to positive social change through the provision of education to caregivers on care of patients with AD and caregiver self-care.

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Dedication

This is dedicated to my ever loving and supportive family who have been my beacon of hope and foundation for emotional sustenance and perseverance: my husband and light of my life, Jason; Mom (Arlene); Dad (Grover); my brother, Kevin; and, most importantly, the little girl whom I strive to make proud, as she is the source of my inspiration, reason for my immortality, my legacy, my little miracle: Ari.

Acknowledgments

The road to getting to this beautiful endpoint was far from easy; the journey was challenging and unpredictable. With providence, I was able to make it to my destination.

I would have not been able to accomplish this ultimate academic goal without the unwavering love and support of my husband, Jason. When I felt defeated after the 20th edit, he was the one who encouraged me to continue pushing through. He was the calm that I needed when anxiety took over my desire to complete yet another academic task. In every way, I am thankful to have such a light in my life. I would also like to thank my daughter, Ari. It is because of her that I continue to work full-time and strive to complete this doctoral program simultaneously. She was, is, and always will be my rainbow at the end of the storm. I want to always be a role model for her. My hope is that in completing my doctoral degree, I have taught her how to become an overcomer, and that, through grit and perseverance, she can dominate any goals and aspirations.

Academically, I would like to give my utmost gratitude to Dr. Janice Long. She always encouraged me to aim for excellence and challenged my way of thinking to make me be a better writer and scholar, while still encasing me with unshakable support, positivity, and encouragement. Her honest advice and constructive feedback helped me go above and beyond the minimum standards. Her genuine kindness and emotional support were often my anchors in seeing my academic endeavors come to fruition.

Last but not least, I thank my Lord and Savior, Jesus Christ, for it was through Him that I completed this journey. He was the voice in my heart who lifted my soul during times of self-doubt, and to Him I give thanks and praises.

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Section 1: Nature of the Project

Introduction

Alzheimer's disease (AD) is the most common form of dementia that affects an individual's overall cognitive function, including orientation, memory, language, calculation, insight, judgment, and executive function (Alzheimer's Association, 2017). AD is categorized as a neurodegenerative disorder that progresses gradually over time and is characterized by the significant deterioration of cognition (Kales et al., 2017). Research also shows that the disease impairs the individual's occupational and/or social functioning (Cerejeira, Lagarto, & Mukaetova-Ladinska, 2012). Despite ongoing scientific and medical efforts to find a cure, AD continues to be a major concern for the medical community (Surr et al., 2017). According to the Alzheimer's Association (2017), approximately 5.5 million Americans are living with AD today. One in 10 individuals over the age of 65 has AD (Alzheimer's Association, 2017). These numbers are estimated to triple by 2050 due to an aging baby boomer demographic (Alzheimer's Association, 2017).

Presently, 70% of individuals with dementia in the United States reside in residential care facilities (RCF). Having to transition from a homelife to a new resident one without deliberately choosing to do so presents challenges for many individuals (Vernooji-Dassen et al., 2010). According to Press and Alexander (2017), the implementation of interventions that are focused on facilitating the use of nonpharmacological interventions (NPHI) can improve the patient's quality of life and mend functionalities within the milieu of existing deficits (Press & Alexander, 2017). As an example, having care providers in the home who understand the care needs of AD patients can improve care and reduce functional deficits often experienced by the AD patient.

Among the challenges faced by caregivers of AD patients are behavioral and psychological symptoms related to dementia (BPSD; Yahya, Chandra, Singh Anand, & Garg 2015). BPSD can trigger challenges and distress caregivers working in adult family homes (AFHs). Resentment, frustration, and diminished psychological health have been associated with caregivers caring for patients in such settings (Kuo et al., 2016). According to the U.S. Department of Health and Human Services (2014), caregivers who are stressed due to their client's BPSD are more inclined to administer antipsychotic medications to manage behavioral challenges. To prevent the inappropriate use of pharmacological interventions, caregivers need broader dementia training and education that specifically covers nonpharmacological interventions.

As research shows, there is a need for capable and willing professional caregivers to ensure the safety and quality of care for individuals with AD. The focus of this project was on developing an evidence-based education program that will be provided to a local AD home care agency where it can be implemented after completion of this Doctor of Nursing Practice (DNP) project. The educational program may promote positive social change for the agency's caregivers and patients by increasing caregivers' knowledge of caring of patients with AD and of self-care. Section 1 of this project includes the problem statement, the purpose, nature of the project, significance, and a summary.

Problem Statement

According to Burke and Orlowski (2015) caregivers in the AFH setting need adequate dementia education and training. Jeon et al. (2012) found that dementia care personnel had minimal dementia knowledge, thus increasing their risks of being exposed to behavioral disturbances such as BPSD, including physical and verbal aggression (see also Yahya et al. 2015). The field of professional caregiving in the United States is made up primarily of individuals who speak English as their second language, who require ongoing training and education, but are limited in resources (Surr et al., 2017). The primary concern of this project was the development of evidence-based education that could be provided by a dementia-specialized AFH agency to successfully transfer clinical information from a dementia training course to caregivers in AFHs.

In Washington State caregivers are required to receive ongoing training in dementia, yet there are minimum annual requirements to continue practicing as a professional caregiver in AFHs. According to the Washington State Department of Social and Health Services (2018), caregivers are required to complete courses that focus on dementia and mental health, in addition to a separate 12-hour continuing education. Such a requirement is consistent with other U.S. states' enforcement for dementia training as part of a policy objective (Burke & Orlowski, 2015). The National Certification Board of Alzheimer Care (NCBAC) and the National Association of Health Care Assistants (NAHCA) have collaborated to ensure the appropriate delivery of care for individuals with AD (Bowers, 2015). Despite Washington State's Department of Social and Health

Services’ (n.d.) requirement for dementia training, there remains a gap in knowledge when caring for vulnerable patients with Alzheimer’s disease (Jeon et al, 2012).

Some caregivers continue to demonstrate a lack of skill and information in caring for patients with AD in the AFH setting (Chenoweth et al., 2009). One factor is the limited ability of caregivers to obtain knowledge regarding what causes an individual to present behavioral disturbances (i.e., agitation and aggression; Jeon, 2012). In addition, most professional caregivers have few opportunities to acquire information on therapeutic approaches to aid the patient (Jeon, 2012).

Caregivers can greatly benefit from more training when caring for patients with AD (Press & Alexander, 2017). According to the Alzheimer’s Association (2017), AD care can pose an overwhelming burden for caregivers in comparison to providing care for individuals without dementia. Caregivers who lack understanding and knowledge of AD and who may not be familiar with the required care needed to tend to patients with AD can contribute to the mismanagement of one of the most vulnerable populations in healthcare (Miranda-Castillo et al., 2013).

Current guidelines recommend the consideration and implementation of nonpharmacological interventions as the first-line treatment for dementia-related behavior problems (Cohen-Mansfield, Jensen, Resnick, & Norris, 2011). An education module for caregivers may showcase NPHI options that caregivers can implement when approached with a patient exhibiting behaviors. Music therapy, art therapy, kinetic therapy, reminiscence, reorientation, and validation are forms of NPHI that can help address and redirect patients presenting with behavioral challenges (Grasel, Wiltfang, & Kornhuber, 2003).

In summary, a lack of knowledge of AD may affect how caregivers care for their patients. If a patient presents with behavioral symptoms, caregivers can implement NPHI, which include behavioral, emotional, cognitive, and stimulation-oriented approaches. In so doing, care becomes more patient-centered and therefore aids in the improvement of cognitive skills and behavior (Vernooji-Dessan et al., 2012). In contrast, caregivers who are untrained on how to treat a patient who is exhibiting signs of sundowning may resort to the unnecessary use of an antipsychotic agent (Kirkham et al., 2017). Currently, there is a disconnect between the transferability of knowledge obtained from dementia training courses to the workplace. Providing an education module to AFH agency staff who can then deliver the education to AFH caregivers is therefore a needed intervention to help facilitate the use of NPHI and to improve quality of care.

Purpose

The purpose of this project was to develop an AD caregiver evidence-based education module that addresses the general and NPHI care of the AD patient who experiences BPSD. The goal included improving health for the AD patient and reducing the use of pharmacologic agents in the care of patients with BPSD. The practice focused question for this project was, Will the development of an education module focused on nonpharmacological interventions for treatment of behavioral symptoms associated with Alzheimer’s disease be an effective means of providing education to Alzheimer disease patient caregivers’ in the adult family home?

After researching and developing the evidence-based module for AD caregivers, I submitted the program for evaluation by an expert committee to determine the quality and content of the education program for use by AD caregivers. After completing the DNP program, I will provide the education module to the agency for implementation. I anticipate that the module will then be used by the supervising caregivers as a teaching device to prepare AD caregivers for care of AD patients, particularly those experiencing BPSD secondary to AD.

I incorporated the psychosocial needs of patients into the education module. Psychosocial needs pertains to the individual's emotional, social, mental, and behavioral well-being (Cheprasov, 2017). The implementation of the education module to address the psychosocial needs of the patient may lead to improvement in the patient's care and well-being.

Nature of the Doctoral Project

When living at home is no longer possible for patients with AD, and the individual requires around-the-clock supervision, an AFH may be the best alternative (Rauch, 2013). This form of care is often beneficial to the residents due to immediate access to a caregiver. Caregivers may benefit from training when caring for patients with AD. According to the Alzheimer's Association (2017), there is a wide range of skill levels needed when caring for individuals with AD. Some caregivers are well trained, as evidenced by their confident disposition when caring for the patient with AD and by their positive approach to negotiating the challenges of patient care. Such caregivers naturally ease patients by setting a positive mood for the distressed individual (Rauch, 2013). Their caregiving practices may encompass the use of NPHI techniques, such as being able to respond to the patient with affection and recognizing the power of distraction and redirection when the patient presents with the behavioral and psychological symptoms that may arise with AD (Family Caregiver Alliance, 2016). Alternatively, it is not uncommon to come across caregivers who lack psychosocial techniques, recoil under pressure, become frustrated, and continue to urge the completion of a task despite the patient's earnest efforts to do otherwise (De Vera, 2015). Caregivers often have minimal resources to advance their skill sets to learn how to react in certain situations. Therefore, if there is a deficiency in providing ongoing caregiver support and training, then patient care may also be inadvertently affected (De Vera, 2015).

The nature of this project was to develop a program of education complete with a means for evaluation after implementation. The program of education included evidence from the literature on nonpharmacological interventions for patients with AD and was designed for presentation to caregivers caring for patients with dementia. To determine outcomes, I created a module based on the NICE-SCIE Guideline (2007). The National Institute for Health and Care Excellence and Social Care Institute for Excellence developed the guideline to provide support and structure for individuals caring for patients with dementia. Incorporating the NICE-SCIE Guideline in the module was consistent with my broader goal of ensuring that nonpharmacological interventions improve care outcomes and minimizing the use of pharmacological interventions within the adult family home settings.

The education module underwent an expert advisory panel review. The purpose of the review was to formally assess and evaluate the module for clarity, usability, and applicability. Implementation phase will occur after I graduate from the DNP Program.

Significance

The development and dissemination of an education module that focuses on addressing the psychological needs of patients with AD who are residing in AFHs may be a safe and effective means of improving a caregiver's ability to provide quality and evidence-based care for patients with AD. This education module illustrates my commitment to educating professional caregivers to improve their knowledge of AD and to understand the significant role NPHI have in their patients' care. The primary goal was to increase the caregiver's ability to provide effective care during times of psychological distress caused by behavioral symptoms secondary to dementia. Such strategies include multi-sensory stimulation, reminiscing therapy, and distraction and redirection techniques (National Collaborating Centre for Mental Health, 2007).

It is important to mention that since the education module will be presented in AFHs, it is plausible that the caregiver may encounter a patient with acute BPSD secondary to dementia. BPSD, also known as neuropsychiatric symptoms, include uncontrollable irritability, aggression, agitation, aberrant motor behavior, anxiety, depression, disinhibition, delusions, hallucinations, and changes to appetite and sleep (Cerejeira et al., 2012). Such situations can be learning opportunities that both the medical provider who is teaching the education module and the caregiver can address together.

Potential Implications for Positive Change

The need for a professional caregiver's education module that specifically addresses how caregivers can provide NPHI for patients challenged by behavioral symptoms is of high importance. There are currently 5 million Americans who are diagnosed with AD; by 2050, this number is projected to increase by 11 million (Alzheimer's Association, 2017). AD is the leading cause of dementia that impinges on an individual's cognitive abilities (Burke & Orlowski, 2015). The progression of this disease can exhibit differently from one individual to the next (Alzheimer's Association, 2017); therefore the psychosocial care provided for each affected person should be tailored and specific to their own respective needs and clinical presentation. If professional caregivers are better equipped on how to address obstreperous behaviors, then a positive social change may result for both patients and the caregivers.

Professional caregivers who complete this education module may experience an added sense of self-efficacy by improving competency in their knowledge of AD and the potential effects the disease may have on the patients for whom they are caring. Improvement in caregiver knowledge may in turn generate role satisfaction and minimize caregiver burden and stress (Surr, 2017). As a result, patients will receive a more person-centered approach to their care, thereby experiencing optimal care that supports their current strengths, abilities, cognitive function (Cadieux 2013).

Potential Contributions to Nursing Care

The National Institute on Aging and the Alzheimer's Association assembled a task force in 2011 to develop criteria to determine the difference between mild cognitive impairment (MCI) and AD, as approaches to care are determined in the initial phase of properly identifying the ailment at hand (Albert et al., 2011). These two organizations deemed it imperative to clearly find the demarcation between normal cognition and MCI and between MCI and dementia; in so doing, they wanted to identify the clinical knowledge that was integral in identifying such distinctions (Albert et al., 2011). The workgroup convened to address the growing numbers of individuals diagnosed with AD.

The National Collaborating Centre for Mental Health (2007) formulated a multifaceted and comprehensive guideline for caregivers in the health industry to bring about change in how professional caregivers address the clinical needs of their patients. The clinical guideline addressed the effectiveness of caregiving training (National Collaborating Centre for Mental Health (2007). The authors of the guideline noted that even brief training programs have reported a significant improvement in caregiver ability to manage difficult behaviors associated with AD (National Collaborating Centre for Mental Health, 2007).

Furthermore, memory assessments and services with a coinciding tailored care plan for patients exhibiting behavioral and psychological symptoms of dementia (BPSD) were discussed in the guideline. A vital and reflective aspect of the abovementioned guideline also discussed the enhancement of care staff training, whereby professional caregivers, in addition to clinic managers, have access to ongoing training for developing their skills. Such principles in caring for patients with a neurodegenerative disease is one of importance, hence the implementation of The NICE-SCIE Guideline is fundamental in supporting not only patients with dementia but also their caregivers (National Collaborating Centre for Mental Health, 2007).

In a study conducted by Zientz et al. (2007) it was supported that more training that emphasized the direct care of patients with dementia was greatly needed. Specifically, educating professional caregivers about the disease process of Alzheimer's disease, in addition to providing strategies designed to improve the caregiver's communication effectiveness and the enhancements of their caregiving skills were discussed. The implementation of this education module will potentially facilitate a stronger and clearer way of communicating with individuals affected by Alzheimer's disease.

Summary

AD is the leading cause of dementia that impinges on an individual's cognitive abilities. AD's progression can exhibit differently from one individual to the next (Miranda-Castillo, 2013). Therefore, the care provided for each affected person should be tailored and specific to their own respective needs and clinical presentation.

The need for competent and well-trained professional caregivers who tend to the daily needs for patients with AD is vital. This doctoral project focused on the production and dissemination of an evidence-based education module, in which caregivers are trained on nonpharmacological interventions to manage behavioral symptoms related to dementia. Increasing caregiver knowledge about AD and NPHI can positively impact the care provided for the patients with AD. The application of such education module will only bring about improvement in the patient’s quality of life (Cheprasov, 2017).

Section 2: Background and Context

Introduction

The need for competent and well-trained professional caregivers who provide care for patients with AD is readily apparent. Yet, caregivers in AFHs who care for patients with AD lack an ongoing training program to prepare them to deliver the specialty care that is needed (Jeon et al., 2012). The implementation of an education module that expands caregiver knowledge and skill sets may contribute to the improvement of the quality of care provided. The purpose of this project was to develop an AD caregiver education module that would be evaluated by an expert committee to determine the quality and value of the education program for professional caregivers. Once the module was reviewed by the expert panel, it was edited to meet the recommendations of the expert clinicians. The module is now ready to be provided to the supervising caregivers and adult family home providers who will then, it is expected, integrate the module into practice and begin the training of caregivers. Section 2 of this project includes discussion of the concepts, models and theories in the project; the project's relevance to nursing; the local background and context, and the role of the DNP student. The section concludes with a summary of key points.

Concepts, Models, and Theories

Conceptual frameworks help facilitate the management of dementia care. Volicer and Hurley (2003) noted that conceptual frameworks are beneficial to caregivers as they can provide guidance in detecting triggers to behavioral symptoms, discerning the meanings of behaviors, and formulating ways on how to react and manage dementia-related behaviors.

Kolcaba’s (2010) comfort theory (CT) was the guiding framework I used in developing the caregiver education module and identifying research methodologies. I produced an evaluation tool using comfort theory, and a carefully selected expert panel evaluated the module using the tool. Anonymous staff questionnaires and reviews of partner organizations’ unidentifiable patient and operational records (Walden University, n.d.) were also used to obtain evidence for this culminating project.

I adopted Kolcaba’s (2010) CT in the hope that it would improve the care of patients with AD. An approach based on CT may help a patient with AD feel more at ease within the AFH. Caregivers who understand CT and its applications may be better prepared to treat the psychosocial needs of their patients with AD (see Figure 1).

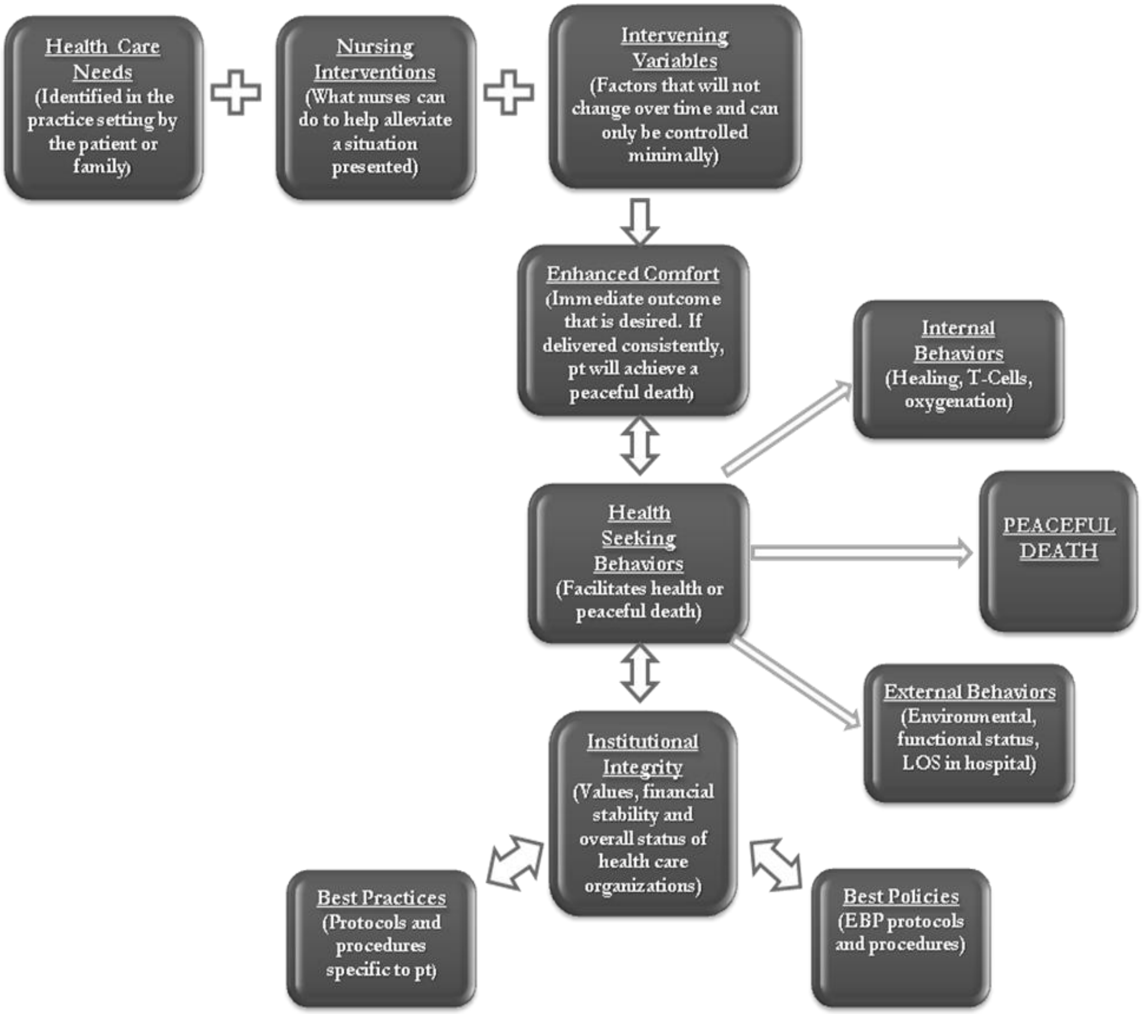

Figure 1. Concept map of Kolcaba's comfort theory (Kolcaba, 2010).

In order to properly adopt CT into practice, the entire staff need to be knowledgeable of the value of empathy and comfort for patients with AD. The education module utilized CT as a guideline. In developing the module, I wanted to transform underperforming caregivers into effective staff members who can provide quality care to their patients.

Successful integration of Kolcaba's (2010) CT into practice requires utilizing its key components. Kolcaba's CT places the practice of providing comfort at the forefront of the individual’s care. According to Kolcaba, comfort is achieved when relief, ease, and transcendence are met in the context of physical, psychospiritual, psychosocial, and environmental needs of a patient. *Relief* is addressed when a patient’s needs are met, *ease* is when the patient has reached a sense of calm and contentment, and *transcendence* is accomplished when the individual is able to rise above his or her challenges (Kolcaba, 2010). By utilizing CT as an approach to practice, I was able to holistically address the comfort needs of each patient by producing an education module that improved their caregivers’ understanding of nonpharmacological interventions. NPHIs address the individual’s physical, psychospiritual, psychosocial, sociocultural, and environmental needs (Press & Alexander, 2017). When each component is successfully taught to caregivers in the AFHs, the caregiving ability of caregivers may be improved.

Integration of this new approach within AFHs required an expert panel to evaluate the components of the education module. The expert panel made recommendations to improve the program before its implementation. The module, when implemented, may bring about a positive change for caregivers and exemplify a practice that adopts the comfort interventions and displays a growth in nurture for the betterment of the individual’s care (Novak, Kolcaba, Steiner, & Dowd, 2001).

Relevance to Nursing Practice

Implementing an education module designed to provide in-home training for caregivers in AFHs hold considerable relevance for nursing practice. The successful implementation of an education module for professional caregivers will provide staff education on NPHI to help manage behavior symptoms associated with AD and may improve the quality of care given to patients with AD (Peeters et al., 2010). The successful production and implementation of this education module has the potential to improve the quality of patient care. This will be achieved through properly assessing each caregiver’s unique and individualized needs in acquiring holistic knowledge of evidence-based care practices and their current understanding of NPHI.

Education and training potentiate improvement, as the caregiver will have more information to draw upon when making an informed decision. Fostering opportunities to acquire new knowledge is what can theoretically allow caregivers to reach new levels of performance. Educating and supporting professional caregivers in attaining their peak performance will be a helpful contribution to the allied health system (Dassen-Vernooji et al., 2010). This is especially so given that many aspects of professional caregiving are continuing to grow in knowledge, perspective, and deliverance of care for the vulnerable patient demographic of patients with AD.

Local Background and Context

In Washington State, caregivers are required to receive ongoing training in dementia (Burke & Orlowski, 2015). However, despite Washington State’s Department of Social and Health Services’ (n.d.) requirement for dementia training, there remains a great need for clinical preparedness for professional caregivers caring for patients with AD. Current research suggests that interventions to improve the overall care outcomes of professional caregivers vary from one program to the next (Reinhard et al., 2008). The primary issue that occurs is that, although similar programs defined as modules designed to improve caregiver effectiveness through staff training have been attempted, evaluations of these programs have been hampered by the use of small convenience samples and a lack of comparison groups to strongly quantify the soundness of such programs (Reinhard et al., 2008). The previous attempts have minimal considerations to the knowledgebase, skill-sets, personalities, and dispositions of the caregivers receiving ongoing training, as well as other confounding variables that may affect caregiving abilities (Reinhard et al., 2008). Such conditions affect the caregiver’s ability to implement non-pharmacological interventions to help alleviate symptoms and also influence how emotional support and the delivery of direct care are performed.

Furthermore, clinicians and researchers alike continue to implement similar programs that focus on the improvement of the psychosocial care of patients with dementia. According to Dassen-Vernooji et al. (2010), there are astoundingly positive results and benefits for the patients when their caregivers undergo a dementia training. Specifically, there is a clear indication of improved quality of care. The primary recommendation emphasized by Dassen-Vernooji et al. (2010) is that individuals desiring to implement such a program should consider a tailored and flexible schema that seeks to address the caregiver’s weakness and is adjustable to fit the needs of each caregiver.

The local context of my practice setting consists of a wide variety of adult family homes with a diverse group of caregivers. For the DNP project, I developed an education module specifically for adult family homes. The adult family home provider and supervising caregivers will teach and implement the education module as a tool to improve care for patients exhibiting behavioral symptoms due to AD. Across these locations, I have seen on a consistent basis a lack of understanding of the specifics of

Alzheimer’s disease, as well as frequent inabilities to treat patients with non-pharmacological methods. Difficult patients were given an anti-psychotic regimen as a simple and immediate solution, when a psychosocial technique could have been used without the use of medication. With an increase in staff education, there is the potential for caregivers to be better equipped with techniques outside of pharmacology that can successfully treat patients.

Role of the DNP Student

Nurses who pursue further education in acquiring a DNP degree are ready to implement a positive change in the art and science of nursing (Zaccagnini & White, 2012). Such DNP students have a profound role in scholarship, as they are the ones who are most prepared to contribute in the advancement of their field. These are scholars who are ready to make a great impact in our society for the betterment of mankind (Walden University, 2011).

Doctorate level scholars can provide an array of skillsets within the nursing and medical fields. Specifically, being able to utilize current evidence-based practices and procedures and being able to implement such knowledge within the clinical setting (AACN, 2006). Furthermore, policy development to address gaps in knowledge is integral in the role of a DNP-prepared nurse (Robert & Pape, 2011).

Doctorate level nurses must have a commitment to impact their field in a positive manner. According to Thoun (2009), scholarship is not only the process of inquiry, but rather the product of the journey. Moving forward, a DNP-prepared learner has the ability to mentor and educate future nurses and help shape the prospect of such an astute field.

For this doctoral project, I was responsible for ensuring the success of its development by analyzing the literature for current evidence-based practice guidelines related to the use of NPHI interventions to manage behavior associated with AD. I then used the evidence I identified from the literature and developed an AD caregiver education module. In doing so, professional caregivers now have strategies to improve quality of care for patients experiencing behavior symptoms associated with AD. Moreover, the education module was tailored for caregivers, and thus will provide continuing education and support for the care staff. Lastly, I was responsible for data collection from the panel of experts for this DNP project. I will also be responsible for the future implementation of the education module after graduation with my DNP.

What motivated me to pursue this doctoral project stems from my current experiences and observations as a home-based primary care provider for home-bound and frail elderly residing in adult family homes. Furthermore, despite ongoing advocacies for patients with Alzheimer’s disease, there is a loud and boisterous calling within me to partake in the move to improve how patients with AD are cared for in adult family homes. Furthermore, prior to becoming a registered nurse and subsequently an advanced registered nurse practitioner, I provided ancillary care for patients with dementia as a nursing assistant, thus allowing me to have multiple perspectives on the importance of such a program and service.

I was inspired and determined to complete this doctoral project as family members within my kin have been affected by AD and other dementias. However, in knowing this, there is a potential bias since my drive to complete this project had the possibility to be emotionally driven.

Summary

Kolcaba's (2010) CT was the theoretical underpinning of the education module, which was designed to train caregivers who care for patients with AD. *Relief, ease,* and *transcendence* were key components that were addressed in order to treat the patient's physical, psychospiritual, sociocultural, and environmental needs using NPHI. Similar programs have been tried in the past, but these programs have failed to take into consideration the array of confounding variables that differ between caregivers. This program was designed to address those variables.

The education module is relevant to nursing because it is a training program aimed to improve the allied health team's knowledge, perspective, and deliverance of care. The education module also corresponds to the role of a DNP, which is to contribute to the advancement of their field, as well as addressing gaps in knowledge. In the next section, I will discuss the collection and analysis of evidence, the practice-focused question, the sources of evidence, analysis and synthesis, and a summary.

Section 3: Collection and Analysis of Evidence

Introduction

The need for competent and well-trained professional caregivers who provide care for patients with AD is imperative. Yet, caregivers in AFHs who care for patients with AD lack an ongoing training program to prepare them to deliver the specialty care that is needed (Jeon et al., 2012). The implementation of an education module that expands caregiver knowledge and skill sets may contribute to the improvement of the quality of care provided. The purpose of this project was to develop an evidence-based education module for AD caregivers that addresses the general and NPHI care of the AD patient who experiences BPSD. The goal included improving health for the AD patient and reducing the use of pharmacologic agents used in the care of patients with BPSD.

An expert panel reviewed the evidence-based AD education program to ensure that the program provided the general and NPHI content needed for caregivers in the AFH. Now that the module has been reviewed by the expert panel, it is ready to be provided to the adult family home providers and supervising caregivers at the project site who will then, disseminate the module and train their caregivers, with the end goal of caregivers implementing and integrating the information received from the module into their practice. Section 3 of this project includes the practice-focused question, source of evidence, analysis and synthesis, and a summary.

Practice-Focused Question

The practice-focused question was, Will the development of an education module focused on nonpharmacological interventions for treatment of behavioral symptoms associated with Alzheimer’s disease be an effective means of providing education to Alzheimer disease patient caregivers in the adult family home?

The project provides a means to educate caregivers about evidence-based guidelines regarding the disease process of AD and how caregivers can improve their delivery of care by having the knowledge of NPHI to manage obstreperous behaviors. The specific focus of project education is on the emotional, social, mental, and behavioral well-being of the individual (see Cheprasov, 2017). A panel comprised of experts in the fields of geriatrics and neurology, in addition to advanced registered nurse practitioners who provide care for patients with AD, provided critiques of the module to ensure clinical reliability, accuracy, prevalence, and applicability.

Sources of Evidence

Two sources of evidence were needed for this project. The first source of evidence was a literature review which provided the evidence used for developing the education project. The second set of evidence resulted from the expert panel review of the education program that was developed. The literature review provided the evidence to support the project. I analyzed scholarly peer-reviewed journals and evidence-based practice literature published within the past 5 years. To locate literature, I searched databases including CINAHL, PubMed, Cochrane, PsycINFO, and Medline. Searched terms included *nonpharmacological interventions*, *dementia training*, *professional caregiver*, *adult family home*, *behavioral symptoms*, and *dementia management.* Researchers have found the use of evidence-based literature to facilitate better care outcomes for patients with dementia (Reinhard et al., 2008).

Expert Panel

The expert advisory panel was comprised of five professional content experts who are currently practicing clinicians in the field of geriatrics. The five content experts included two nurse practitioners who are board-certified as adult-gerontological nurse practitioners, with one of them also specializing in geriatric psychiatry and mental health. An internal medicine physician and two other nurse delegators who work solely in AFH and care for patients with dementia completed the panel of experts. The content experts received an invitation via e-mail to participate as volunteers in the evaluation of the education module. I distributed invitations to the advanced registered nurse practitioners, internal medicine physician, and nurse delegators who all work closely with patients who have been diagnosed with AD. All five invitees replied affirmatively to the initial e-mail. The content experts were asked to complete the survey anonymously after reviewing the education program (see Appendix B).

Analysis and Synthesis

To ensure that this professional caregiver's education module was of sound and comprehensible quality, it was imperative to present information in an easy-to-read format. Medical concepts and vernacular can be multifarious and ambiguous. Therefore, in this section I will describe the procedures to address the practice-focused question, including the readability of the content and evaluation of the education module.

Procedures

Approval by Walden University's Institutional Review Board allowed for the education module to be developed using evidence-based data from the literature review to guide development. The associate medical director of the project site also approved the proposed DNP project and served as a resource for this project. The education module includes pretests designed to demonstrate understanding of the disease, as well as the caregiver's individual traits and emotions regarding their job. The education module including the pre- and posttests were provided to the panel for review of the clarity, usability, and applicability of the education module using a 5-point Likert scale, where 1 = *strongly disagree*, 2 = *disagree*, 3 = *neutral*, 4 = *agree*, and 5 = *strongly agree.* After the panel made their recommendations for approval or modifications, I made the necessary edits to the respective document and had the panel recheck for completeness of the edits. The expert panel results were then compiled into the final education module.

Instrument for Measuring Readability

I intended for the questionnaires and materials within the education module to be easily understandable irrespective of background and/or reading level. To guarantee that this goal was achieved, I considered readability assessment tools to ensure that the information being conveyed, or questions being asked to the caregivers, did not exceed eight-grade reading comprehension. To analyze the questions asked in the caregiver questionnaire (see Appendix A), the Flesch-Kincaid readability test tool (1995) was utilized. The core metrics for this tool include the lengthiness of words being used, in addition to the sentences written. If one were to obtain a high score, this would inversely imply that the writing sample provided is of lower grade level. The average U.S. adult has a reading comprehension level that falls between the seventh and nine grade (Benjamin, 2012).

Evaluation Survey

An evaluation survey assisted in the overall consideration of the education module’s scope, purpose, stakeholder involvement, rigor of development, clarity of the presentation, and applicability. Furthermore, a set of questions that were previously constructed prior to the expert panel review was utilized by the experts to evaluate, dissect, and analyze the overall clarity, usability, and applicability of the module.

I provided questions with an accompanying legend to help clarify the Likert-type scale’s numerical values to the expert panel. The questions were as follows:

1. The overall objective(s) of this education module is (are) specifically understood.
2. The health question(s) covered by this education module is (are) described.
3. The population to whom the education module is meant to apply is described.
4. The views and preferences of the professional caregivers have been sought.
5. The target users of this education module are clearly defined.
6. The health benefits and potential risks have been considered in formulating the recommendations.
7. The link between recommendations and supporting evidence is notable in this education module.
8. The information provided in this education module is accurate.
9. This information encompassed within this education module is reliable.
10. This education module is specific and clear.

11. There were different options to manage certain conditions that may arise when working with a patient with Alzheimer’s disease.
12. Care recommendations are easily identifiable.
13. This education module provides advice and/or tools on how apply what has been reviewed into practice.
14. The education module allows for improved patient awareness and understanding.
15. The education module clearly identifies when the home-based primary care provider will review how the caregiver is doing in applying what they have learned through this module.

I analyzed and synthesized the results conveyed in the expert panel survey (Appendix B) using qualitative methods. The results provided were interpreted analytically and were considered in the finalized version of the module.

Summary

The production of an education module was formulated to address gaps in knowledge in the caregiving community to improve the quality of care that is being delivered for patients with Alzheimer’s disease residing in an AFH. Behaviors related to AD are common in AFHs; current guidelines recommend NPHIs as first line in managing BPSD, however pharmacological interventions continue to be the primary option pursued by caregivers (Cohen-Mansfield et al., 2011). In order to ensure that this module was of comprehensible quality, the schema was constructed so that the information being conveyed could be discerned by an individual with a reading comprehension of an 8th grader. Readability was evaluated using the Flesch-Kincaid Grade Level and Flesch-Kincaid Reading Ease method available through Microsoft Word. The Flesch-Kincaid Grade Level and Flesch-Kincaid Reading Ease was utilized as readability indices to ensure that materials met each reading comprehensibility criteria. Lastly, using a Likert-type scale for which 1 = *strongly disagree*, 2 = *disagree*, 3 = *neutral*, 4 = *agree*, and 5 = *strongly agree* was utilized by the expert panel to assess the quality and value of the education program. Once the program was evaluated by the expert panel and module alterations were made, the program (complete with the education and evaluation materials) will then be presented to the professional caregivers in the agency for use in teaching caregivers in the AFHs.

Section 4: Findings and Recommendations

Introduction

The primary focus of this project was on developing an evidence-based education module for AFH providers who would then use the education module to teach nonpharmacological interventions for dementia care to professional caregivers. Through completion of the education module it is hoped that the professional caregivers will improve in their care of patients with dementia. The project objectives were to (a) develop an education module as a resource for the professional caregivers to ensure their understanding of the nonpharmacological management of behavioral and psychological symptoms related to dementia and (b) invite a panel of experts to evaluate the clarity, usability, and applicability of the module.

Findings and Implications

After obtaining the Institutional Review Board approval number (01-17-19-0503585), I invited five professional content experts to participate in the review of the education module's clarity, usability, and applicability. The expert advisory panel comprised of five currently practicing clinicians who are geriatric specialists and dementia experts. Two were advanced registered nurse practitioners (ARNPs); one specialized in geriatric psychiatric/mental health and the other in adult-gerontological medicine. An internal medicine physician specializing in neurodegenerative diseases, and two Washington State nurse delegators who provide care for frail/home-bound geriatric patients in the adult family home setting, also participated in the expert advisory panel review.

I provided each expert advisory panel member a participant packet, which included a consent form, written instructions, the education module PowerPoint Presentation (see Appendix C), and the Content Expert Evaluation Survey (Project Evaluation; see Appendix B). The participants reviewed and evaluated the education module independently in their setting of choice. Evaluation was anticipated to last between 30-45 minutes. After the initial evaluation process was done, each participant completed the Content Expert Evaluation Survey (Project Evaluation). No panel member names or identifiers were included on the survey. To ensure anonymity of the evaluator, each expert placed their review in a folder without names or numbers to safeguard personal identifiers.

There were 15 items on the Content Expert Evaluation Survey (Project Evaluation; see Appendix B), with all 15 measures using a 5-point Likert scale. Table 1 represents the amalgamated responses of each participants’ results.

Table 1

Expert Panel Participant Results (N = 5): Rate Items

Questions	1-SD	2-D	3-N	4-A	5-SA	Mean
1. The overall objective(s) of this education module is (are) specifically understood.				1	4	4.8
2. The health question(s) covered by this education module is (are) described.				2	3	4.6
3. The population to whom the education module is meant to apply is described.					5	5.0
4. The views and preferences of the professional caregivers have been sought.				1	4	4.8
5. The target users of this education module are clearly defined.					5	5.0
6. The health benefits and risks have been considered in creating the recommendations.					5	5.0
7. The link between recommendations and supporting evidence is notable in this module.				2	3	4.6
8. The information provided in this education module is accurate.					5	5.0
9. This information encompassed within this education module is reliable.					5	5.0
10. This education module is specific and clear.					5	5.0
11. There were different options presented on how to manage certain conditions that may arise when working with a patient with Alzheimer's Disease.				2	3	4.6
12. Care recommendations are easily identifiable.				1	4	4.8
13. This education module provides advice and/or tools on how to apply what has been reviewed into practice.					5	5.0
14. The education module allows for improved patient awareness and understanding.					5	5.0
15. The education module clearly identifies when the home-based primary care provider will review how the caregiver is doing in applying what they have learned.					5	5.0

Note. SD = strongly disagree; D = disagree; N = neutral; A = agree; SA = strongly agree.

Discussion of Findings

The Content Expert Evaluation Survey included 15 measures. The mean scores showed that the initial module was accepted positively with a mean score of 4.6 to 5.0, the highest possible score on the scale. Item numbers that did not reflect the highest possible score of 5 included Questions 1, 2, 4, 7, 11, and 12, which were acceptable, however. These questions encompassed (1) understandability of overall objectives, (2) health questions covered within the module, (4) consideration for the caregiver’s views and preferences, (7) being able to link recommendations and supporting evidence, (11) providing options on how to manage certain conditions or triggers when working with a patient who has Alzheimer’s disease, and (12) care recommendations. If the expert indicated “agree” or “strongly agree” no change to the content was needed.

Four out of the five clinicians felt that the overall objective of the module was understandable, whereas one participant chose “agree.” Three clinicians felt that health question(s) covered by the education module were described well, whereas two clinicians opted for “agree.” All five participants expressed that the population to whom the education module is targeted was described sufficiently. Four experts inclined to strongly agree that views and preferences of the professional caregivers were considered, whereas one participant “agreed” to this criterium. Five out of five experts felt strongly about the target users of this education module being clearly defined, and that health benefits and risks were discussed sufficiently. For the measure representing the link between recommendations and supporting evidence, three experts deemed that this was discussed strongly, whereas two experts indicated that this could be improved. All experts strongly agreed that the information provided in the module was accurate, reliable, specific, and clear. Three experts chose “strongly agree,” and two opted for “agree” for different options provided in managing certain conditions or exacerbated symptoms related to AD. Four experts chose “strongly agree,” and one expert selected “agree” regarding the identifiability of care recommendations. Five out of five experts selected “strongly agree” that the education module provided advice and/or tools on how to apply what has been reviewed into practice, that it allows for improved patient awareness and understanding, and that it is clearly identified when the home-based primary care provider will review each caregiver’s application of what they have learned from the education module.

Implications for Use

The education module was developed specifically for professional caregivers who provide daily care for patients with AD. The community setting in which the module will be implemented is adult family homes that house one to six patients at any given time. Adult family home providers and organization leads would receive the education module, master its contents, and utilize the information provided to train their care staff. The education module focuses on nonpharmacological interventions, as researched to be effective by the NICE-SCIE Guideline to address behavioral and psychological symptoms secondary to dementia (National Collaborating Centre for Mental Health, 2007).

Implications for Social Change

The education module has potential to contribute to a positive social change. Since there is currently 5 million Americans who are presently diagnosed with

Alzheimer’s disease, and an 11 million more individuals are anticipated to develop this condition by 2050, the education module puts effort into improving how we manage secondary symptoms seen in neurodegenerative conditions. Professional caregivers will benefit from ongoing training as they may acquire a sense of self-efficacy, improvement in knowledge, role satisfaction, and abate caregiver burden (Surr, 2017). With the education module, the expert panel have resounded that if caregivers are better equipped with dementia care, specifically in applying NPHI, then a positive social change can result for both patients and caregivers.

Recommendations

The proposed solution that will potentially address the gap in knowledge when caring for vulnerable adults with Alzheimer’s disease includes the implementation of an education module, which will be taught to caregivers in adult family homes. The education module is titled: Caregiver Review of Nonpharmacological Interventions for Behavioral Symptoms Associated with Dementia (Appendix C).

Setting

As a home-based primary care provider, I oversee adult family homes in the Northwestern U.S. The term adult family home (AFH) falls under the spectrum of residential care facilities. In a Washington State AFH, one can expect between one to six residents. AFHs are funded both privately and by state and are owned and operated by an “AFH provider.” AFH providers have licenses that vary from NAC, LPN, RN, ARNP, and even physicians. Of which majority of these homes are owned by Nursing Assistants. In order to own an AFH as a nursing assistant, individuals must meet certain requirements set out by their respective state. Who provides direct patient care are the professional caregivers who are Nursing Assistants (NAC) and Health Care Assistants (HCA). The education module would in turn be presented to the caregivers by the AFH providers or facility lead.

Implementation of Solutions

The adult family home provider or facility lead, who will be referred to as the "instructor" for the purpose of this DNP project, will provide the biannual training to their caregivers in the adult family home. The implementation process will be comprised of the following:

1. The instructor will provide the caregiver a copy of the Caregiver Questionnaire (Education Module) (Appendix A), which will be completed by the caregiver to determine baseline knowledge skills pertaining to dementia and Alzheimer's disease.
2. The instructor will collect and review each questionnaire and use the information obtained to aid in their training.
3. The education module titled: Caregiver Review of Nonpharmacological Interventions for Behavioral Symptoms Associated with Dementia (Appendix C), will be presented by the instructor. All questions will be reserved for the end of the presentation to ensure fluidity of the demonstration.
4. Questions and answers segment between presenter and caregiver will conclude the training.

5. The presenter will then disseminate the Caregiver Questionnaire (Education Module) (Appendix A) to review and consider. The gaps in knowledge seen within the second questionnaire can be utilized as a discussion piece between the AFH provider and the caregiver. The AFH provider may also approach me for guidance on how to enhance the caregiver's learning experience.

Strength and Limitations of the Project

As with any doctoral project, there are project strengths and limitations that must be discussed.

Strengths of the Project

The strength of this DNP project stems from its design and construction. Clinical information about BPSD are plentiful and resources to find evidence-based information was uncomplicated. Research expanding beyond the United States was also abundant. This DNP project aimed to develop an education module that was organically evidence-based, with the sole commitment to better inform, equip, and prepare professional caregivers in caring for patients challenged by dementia. According to Oliveira et al. (2015), the education module's primary focus on nonpharmacological interventions will be able to provide positive results in improving dementia care and that such interventions are significantly effective.

Limitations of the Project

Project limitations or outcomes unforeseen during this process included the small number of participants who volunteered to partake in evaluating the module. Secondly, the implementation phase has not been tried and tested. Hence, it is plausible that despite the careful consideration for the information being taught to caregivers, the information may further confuse the caregiving process. Implementation phase will occur once the DNP program is completed.

Recommendations

Future projects addressing similar topics and using comparable methodologies should consider continuing the implementation phase of the education module. What is limited in this DNP project is the theoretical assumptions that the module may potentially improve dementia care. Implementation will not be pursued until the DNP degree is obtained. A recommendation would be to consider an organizational and systems leadership skill, which would include the enactment of this education module with a post-implementation evaluation. If time allows, modifications to the education module would be ideal.

Section 5: Dissemination Plan

This DNP project was developed as an education module that can be implemented by site leaders to improve knowledge for their providers and professional caregivers and provide evidence-based care for patients with dementia. I plan to disseminate the education module produced in fulfilling this project after I graduate from the DNP program. I am driven to disseminate findings in the community I serve as a home-based primary care provider specializing in dementia. Numerous adult family homes in one county in a Northwestern U.S. state will receive the module as a tool to ensure that professional caregivers are current and up-to-date in the care of patients with dementia who have BPSD. The education module can be incorporated within each care plan for patients who have been properly diagnosed with AD with BPSD. I also plan to present the education module at annual conferences (i.e., Alzheimer's Association Washington State Chapter Discovery Conference and the Adult Family Home Council of Washington State Fall Conference).

Analysis of Self

Throughout my journey in obtaining my DNP degree, I have developed a deeper appreciation for all scholars who have paved the way for current and future medical practitioners. As an advanced registered nurse practitioner and as a lifelong scholar, I am equipped to understand and dissect evidence-based information. Being able to utilize such a skill will improve my practice and help me to provide superior care for the patients whom I have the privilege of serving. Throughout the production of this education module, I have been fortunate to meet inspiring people who also want to contribute in the improvement of dementia care. There have been difficult times, multiple denials, and endless modifications to this DNP project. However, with the unwavering kindness, patience, and support of my chair, Dr. Janice Long, I was able to complete this final step in my education.

As for a long-term professional goal, I would like to teach. I have willfully committed myself in the field of geriatrics and worked tirelessly to master my skills with the objective to excel academically and professionally. I started as a nursing assistant, then became a registered nurse, then obtained a Master of Science in Nursing degree to become an advanced registered nurse practitioner. I would like to utilize the wisdom I have gained to teach future nurses and medical practitioners about the art of gerontology, with emphasis in dementia care. I am optimistic about the education module I have produced and look forward to disseminating the final product to adult family homes whose caregivers may benefit from the education they receive. Foreseeing the horizon, teaching and public speaking are part of my long-term professional goals.

In this journey, what I found most challenging about completing the rigor of a DNP program was time management. Being able to manage the requirements needed of me professionally, personally, and academically expanded my focus, direction, and health in astounding ways. Through these years however, I have learned to appreciate my own strengths and courage. The main insight that I gained on this scholarly journey that I would like to share with future DNP scholars is to have faith in your abilities and to really lean on those who have supported you from the commencement of your academic journey.

Summary

The need for competent and well-prepared dementia caregivers in the AFH setting is imperative as 70% of individuals who reside in residential care facilities have dementia (Vernooji-Dassen et al., 2010). In developing this education module, I hope to contribute to the improvement of caregiver knowledge and effectiveness in caring for patients challenged by BPSD. Becoming comfortable with NPHI may prevent the inappropriate use of pharmacological interventions that can potentiate adverse effects to the individual.

When caring for patients, members of the medical community must always remain current and up-to-date in their knowledge and respective skill sets to ensure quality and competent care for the patients whom they have vowed to serve. This DNP project allowed for the development of an evidence-based education module that is expected to be used as a teaching tool for AFH providers to successfully transfer clinical information to their respective caregivers to improve care outcomes for patients with dementia or AD. Clinicians have a responsibility to always find gaps in care and to saturate those disparities with current, unarchaic knowledge; exhibit compassion for one another; and practice a level of commitment that upholds the best care possible. I developed this education module to fulfill these commitments.

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Appendix A: Caregiver Questionnaire (Education Module)

1. I feel well-informed about the disease process of Alzheimer's Disease.						
1 Strongly Disagree	2 Disagree	3 Somewhat Disagree	4 Neither Agree or Disagree	5 Somewhat Agree	6 Agree	7 Strongly Agree

2. I know what "non-pharmacological interventions" means.						
1 Strongly Disagree	2 Disagree	3 Somewhat Disagree	4 Neither Agree or Disagree	5 Somewhat Agree	6 Agree	7 Strongly Agree

3. I have the abilities to effectively calm a patient who is experiencing "sundowning."						
1 Strongly Disagree	2 Disagree	3 Somewhat Disagree	4 Neither Agree or Disagree	5 Somewhat Agree	6 Agree	7 Strongly Agree

4. I know what "sundowning" means.						
1 Strongly Disagree	2 Disagree	3 Somewhat Disagree	4 Neither Agree or Disagree	5 Somewhat Agree	6 Agree	7 Strongly Agree

5. If a patient becomes combative during care, I would feel comfortable on what to do next.						
1 Strongly Disagree	2 Disagree	3 Somewhat Disagree	4 Neither Agree or Disagree	5 Somewhat Agree	6 Agree	7 Strongly Agree

<table>
<tr><td colspan="7">6. If I have questions about a patient with Alzheimer’s Disease, I have resources that I can depend on.</td></tr>
<tr><td>1
Strongly Disagree</td><td>2
Disagree</td><td>3
Somewhat Disagree</td><td>4
Neither Agree or Disagree</td><td>5
Somewhat Agree</td><td>6
Agree</td><td>7
Strongly Agree</td></tr>
</table>

<table>
<tr><td colspan="7">7. Sometimes I become frustrated with my patients.</td></tr>
<tr><td>1
Strongly Disagree</td><td>2
Disagree</td><td>3
Somewhat Disagree</td><td>4
Neither Agree or Disagree</td><td>5
Somewhat Agree</td><td>6
Agree</td><td>7
Strongly Agree</td></tr>
</table>

<table>
<tr><td colspan="7">8. I am up-to-date with current evidence-based practice caregiving techniques.</td></tr>
<tr><td>1
Strongly Disagree</td><td>2
Disagree</td><td>3
Somewhat Disagree</td><td>4
Neither Agree or Disagree</td><td>5
Somewhat Agree</td><td>6
Agree</td><td>7
Strongly Agree</td></tr>
</table>

<table>
<tr><td colspan="7">9. I care for the well-being of my patients.</td></tr>
<tr><td>1
Strongly Disagree</td><td>2
Disagree</td><td>3
Somewhat Disagree</td><td>4
Neither Agree or Disagree</td><td>5
Somewhat Agree</td><td>6
Agree</td><td>7
Strongly Agree</td></tr>
</table>

<table>
<tr><td colspan="7">10. I am eager to learn more about evidence-based care to improve my understanding of my patients and for the care I provide.</td></tr>
<tr><td>1
Strongly Disagree</td><td>2
Disagree</td><td>3
Somewhat Disagree</td><td>4
Neither Agree or Disagree</td><td>5
Somewhat Agree</td><td>6
Agree</td><td>7
Strongly Agree</td></tr>
</table>

Appendix B: Content Expert Evaluation Survey (Project Evaluation)

Rating Scale

Each item will be rated on the following 5-point scale as shown below:

1 Strongly Disagree	**2 Disagree**	**3 Neutral**	**4 Agree**	**5 Strongly Agree**

Scope and Purpose

1. The overall objective(s) of this education module is (are) specifically understood.				
1 Strongly Disagree	2 Disagree	3 Neutral	4 Agree	5 Strongly Agree

2. The health question(s) covered by this education module is (are) described.				
1 Strongly Disagree	2 Disagree	3 Neutral	4 Agree	5 Strongly Agree

3. The population to whom the education module is meant to apply is described.				
1 Strongly Disagree	2 Disagree	3 Neutral	4 Agree	5 Strongly Agree

Stakeholder Involvement

4. The views and preferences of the professional caregivers have been sought.				
1 Strongly Disagree	2 Disagree	3 Neutral	4 Agree	5 Strongly Agree

5. The target users of this education module are clearly defined.				
1 Strongly Disagree	2 Disagree	3 Neutral	4 Agree	5 Strongly Agree

Rigor of Development

6. The health benefits and risks have been considered in creating the recommendations.				
1 Strongly Disagree	2 Disagree	3 Neutral	4 Agree	5 Strongly Agree

7. The link between recommendations and supporting evidence is notable in this module.				
1 Strongly Disagree	2 Disagree	3 Neutral	4 Agree	5 Strongly Agree

8. The information provided in this education module is accurate.				
1 Strongly Disagree	2 Disagree	3 Neutral	4 Agree	5 Strongly Agree

9. This information encompassed within this education module is reliable.				
1 Strongly Disagree	2 Disagree	3 Neutral	4 Agree	5 Strongly Agree

Clarity of the Presentation

10. This education module is specific and clear.				
1 Strongly Disagree	2 Disagree	3 Neutral	4 Agree	5 Strongly Agree

11. There were different options presented on how to manage certain conditions that may arise when working with a patient with Alzheimer's Disease.				
1 Strongly Disagree	2 Disagree	3 Neutral	4 Agree	5 Strongly Agree

12. Care recommendations are easily identifiable.				
1 Strongly Disagree	2 Disagree	3 Neutral	4 Agree	5 Strongly Agree

Applicability

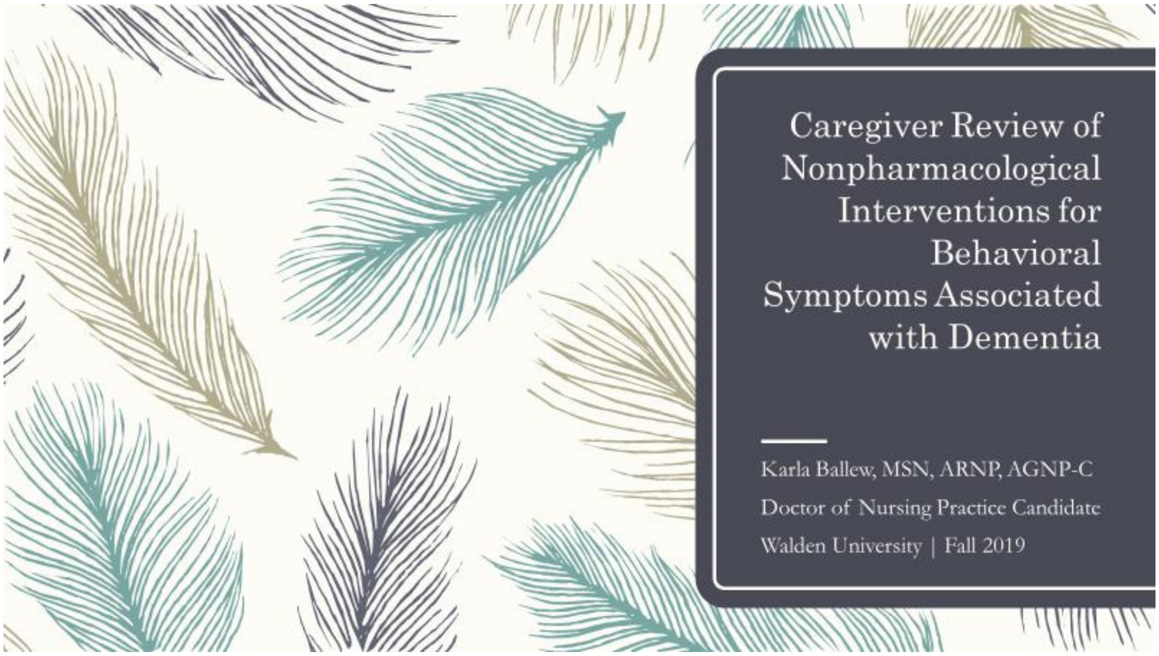
13. This education module provides advice and/or tools on how to apply what has been reviewed into practice.				
1 Strongly Disagree	2 Disagree	3 Neutral	4 Agree	5 Strongly Agree

14. The education module allows for improved patient awareness and understanding.				
1 Strongly Disagree	2 Disagree	3 Neutral	4 Agree	5 Strongly Agree

15. The education module clearly identifies when the home-based primary care provider will review how the caregiver is doing in applying what they have learned.				
1 Strongly Disagree	2 Disagree	3 Neutral	4 Agree	5 Strongly Agree

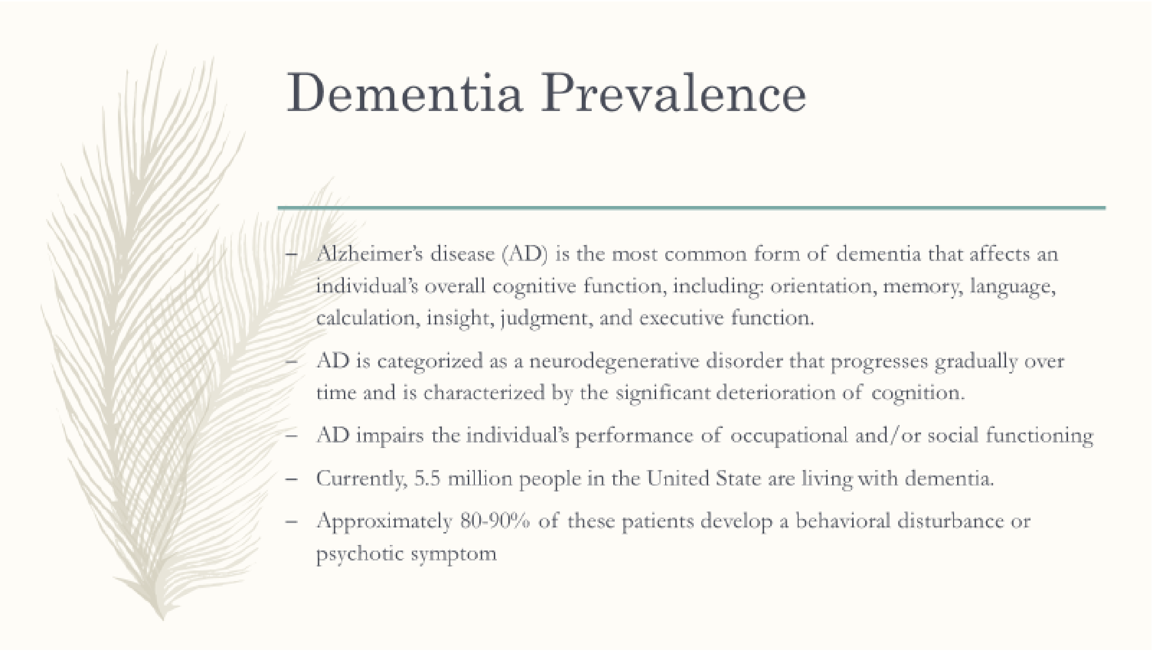
Appendix C: Education Module

Caregiver Review of Nonpharmacological Interventions for Behaviors Symptoms Associated with Dementia



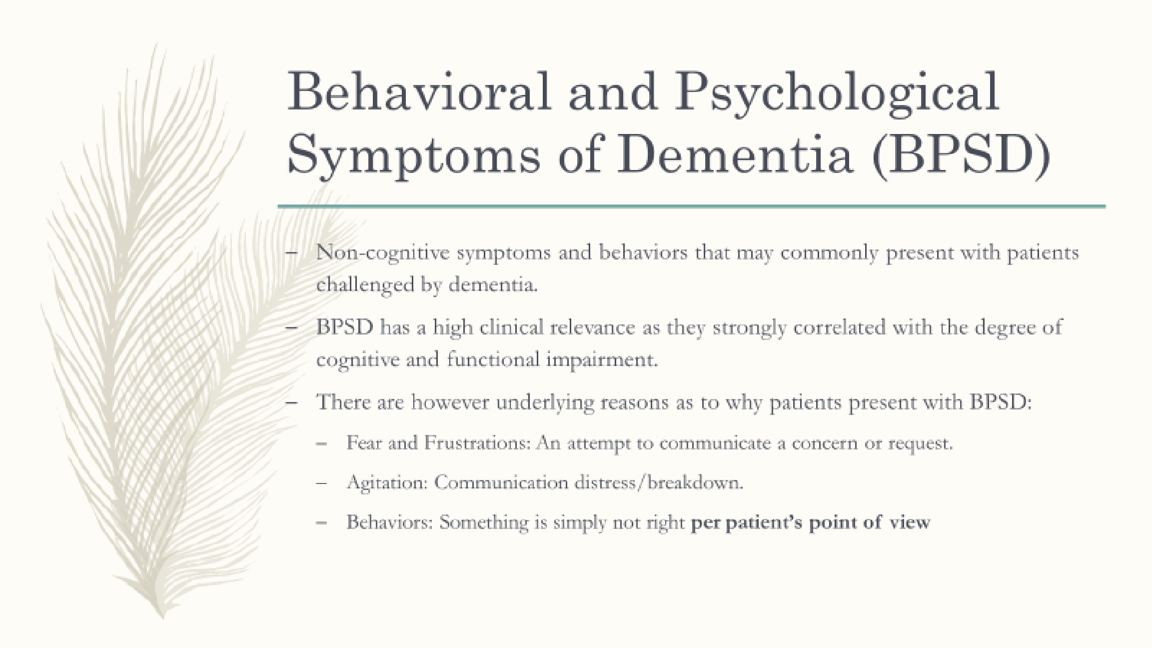
Caregiver Review of Nonpharmacological Interventions for Behavioral Symptoms Associated with Dementia

Karla Ballew, MSN, ARNP, AGNP-C
Doctor of Nursing Practice Candidate
Walden University | Fall 2019



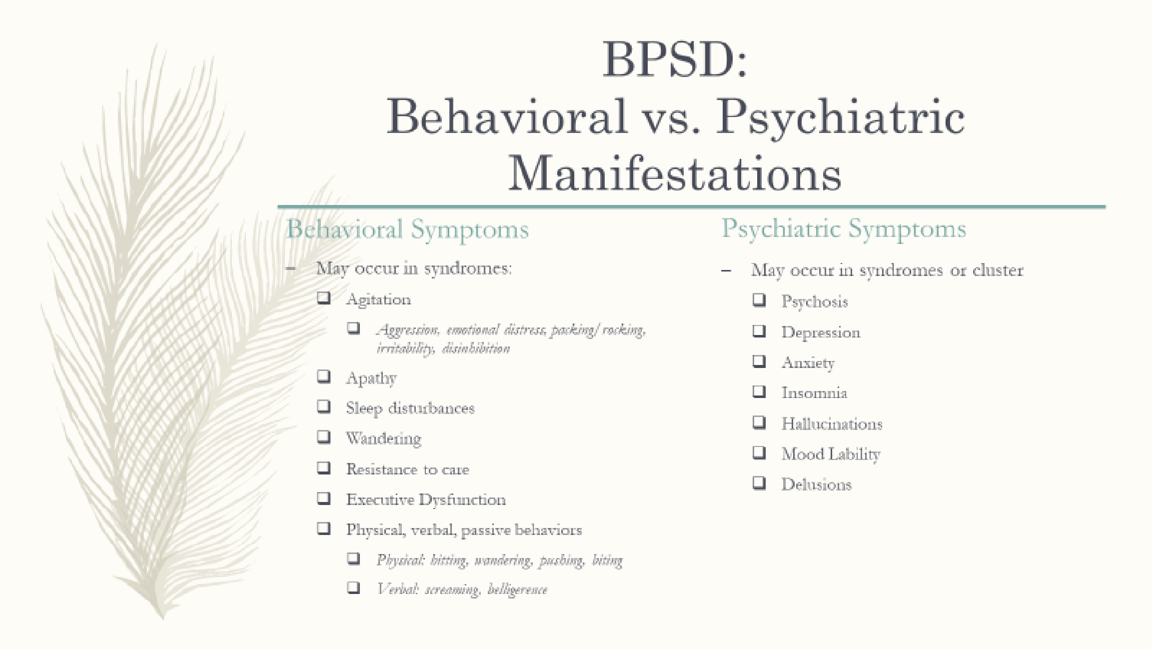
Dementia Prevalence

- Alzheimer's disease (AD) is the most common form of dementia that affects an individual's overall cognitive function, including: orientation, memory, language, calculation, insight, judgment, and executive function.
- AD is categorized as a neurodegenerative disorder that progresses gradually over time and is characterized by the significant deterioration of cognition.
- AD impairs the individual's performance of occupational and/or social functioning
- Currently, 5.5 million people in the United State are living with dementia.
- Approximately 80-90% of these patients develop a behavioral disturbance or psychotic symptom



Behavioral and Psychological Symptoms of Dementia (BPSD)

- Non-cognitive symptoms and behaviors that may commonly present with patients challenged by dementia.
- BPSD has a high clinical relevance as they strongly correlated with the degree of cognitive and functional impairment.
- There are however underlying reasons as to why patients present with BPSD:
  - Fear and Frustrations: An attempt to communicate a concern or request.
  - Agitation: Communication distress/breakdown.
  - Behaviors: Something is simply not right **per patient's point of view**



BPSD:
Behavioral vs. Psychiatric Manifestations

Behavioral Symptoms

- May occur in syndromes:
  - Agitation
    - *Aggression, emotional distress, packing/ rocking, irritability, disinhibition*
  - Apathy
  - Sleep disturbances
  - Wandering
  - Resistance to care
  - Executive Dysfunction
  - Physical, verbal, passive behaviors
    - *Physical: hitting, wandering, pushing, biting*
    - *Verbal: screaming, belligerence*

Psychiatric Symptoms

- May occur in syndromes or cluster
  - Psychosis
  - Depression
  - Anxiety
  - Insomnia
  - Hallucinations
  - Mood Lability
  - Delusions

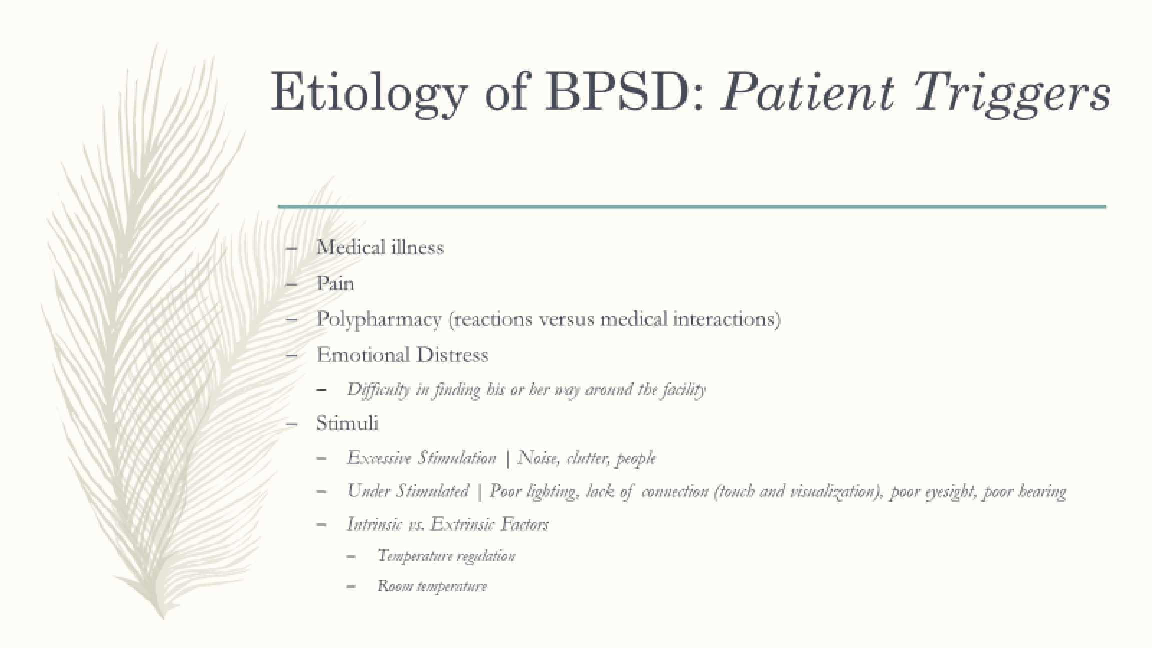
BPSD:
Temporal Manifestations

Mild to Moderate

- Depression
- Anxiety and Agitation
- Apathy
- Resistance to care
- Mood Lability

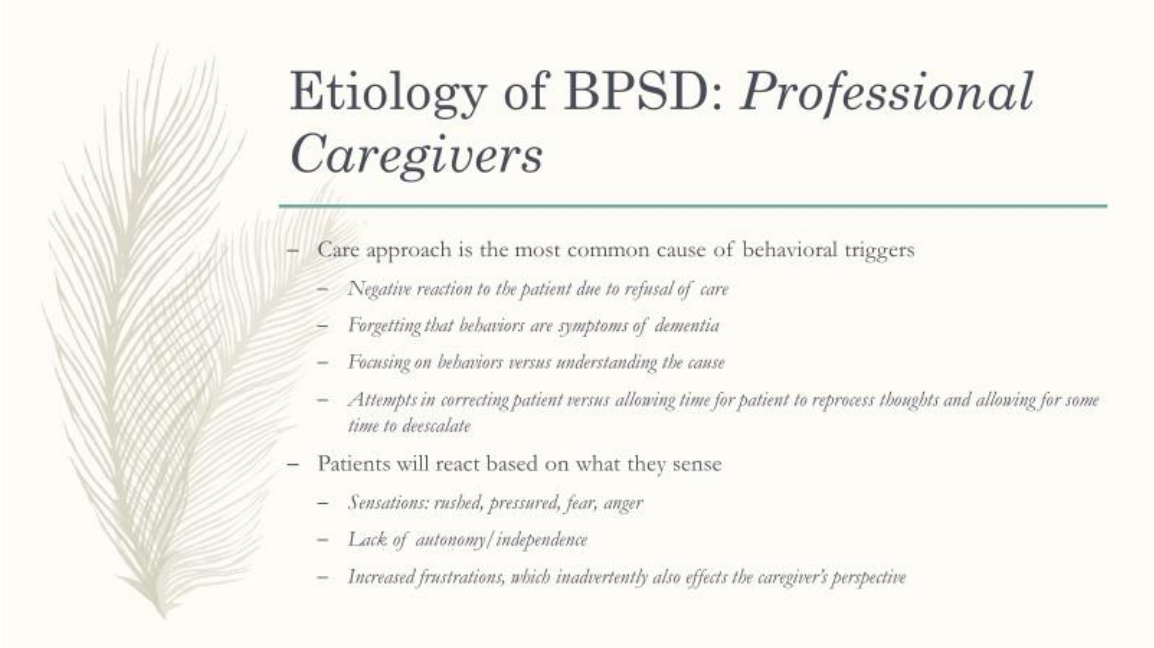
Moderate to Advance

- Psychosis
- Hallucinations
- Physical Combativeness/Verbal Beligerance
- Delusions
- Mood Lability



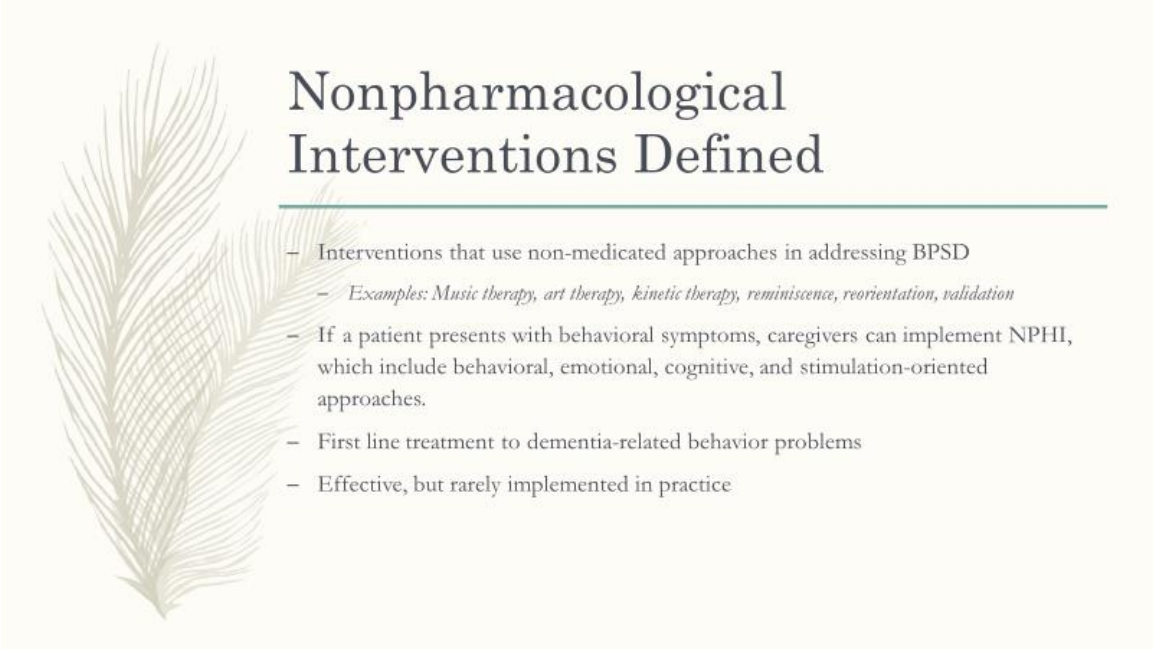
Etiology of BPSD: *Patient Triggers*

- Medical illness
- Pain
- Polypharmacy (reactions versus medical interactions)
- Emotional Distress
  - *Difficulty in finding his or her way around the facility*
- Stimuli
  - *Excessive Stimulation | Noise, clutter, people*
  - *Under Stimulated | Poor lighting, lack of connection (touch and visualization), poor eyesight, poor hearing*
  - *Intrinsic vs. Extrinsic Factors*
    - *Temperature regulation*
    - *Room temperature*



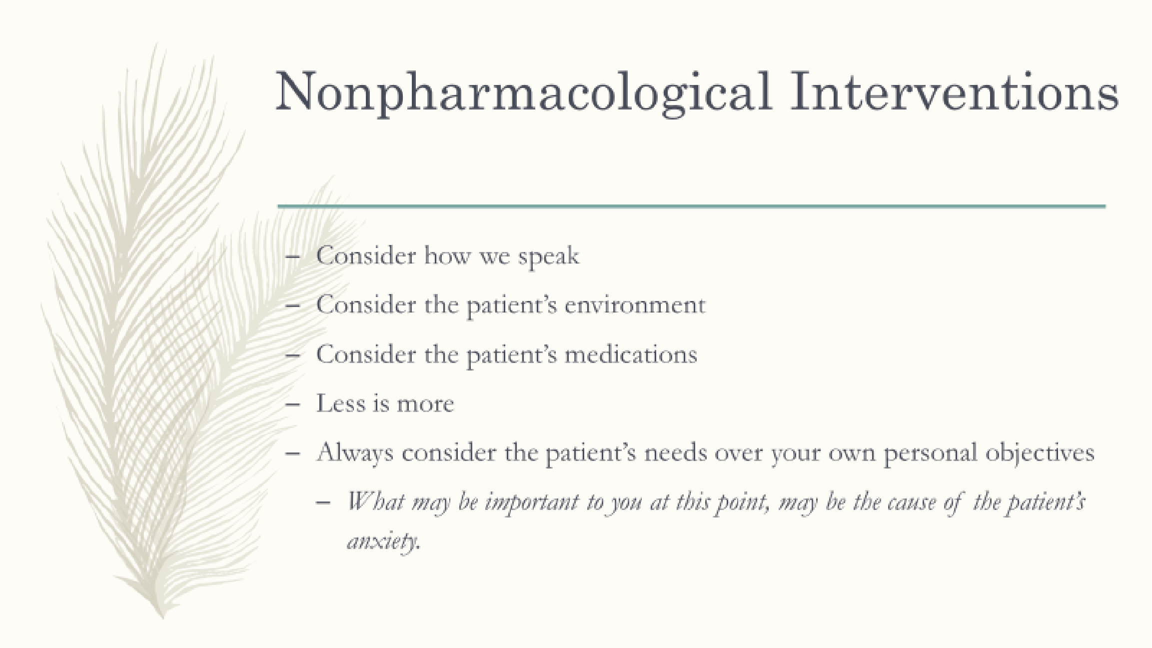
Etiology of BPSD: *Professional Caregivers*

- Care approach is the most common cause of behavioral triggers
  - *Negative reaction to the patient due to refusal of care*
  - *Forgetting that behaviors are symptoms of dementia*
  - *Focusing on behaviors versus understanding the cause*
  - *Attempts in correcting patient versus allowing time for patient to reprocess thoughts and allowing for some time to deescalate*
- Patients will react based on what they sense
  - *Sensations: rushed, pressured, fear, anger*
  - *Lack of autonomy/independence*
  - *Increased frustrations, which inadvertently also effects the caregiver's perspective*



Nonpharmacological Interventions Defined

- Interventions that use non-medicated approaches in addressing BPSD
  - *Examples: Music therapy, art therapy, kinetic therapy, reminiscence, reorientation, validation*
- If a patient presents with behavioral symptoms, caregivers can implement NPHI, which include behavioral, emotional, cognitive, and stimulation-oriented approaches.
- First line treatment to dementia-related behavior problems
- Effective, but rarely implemented in practice

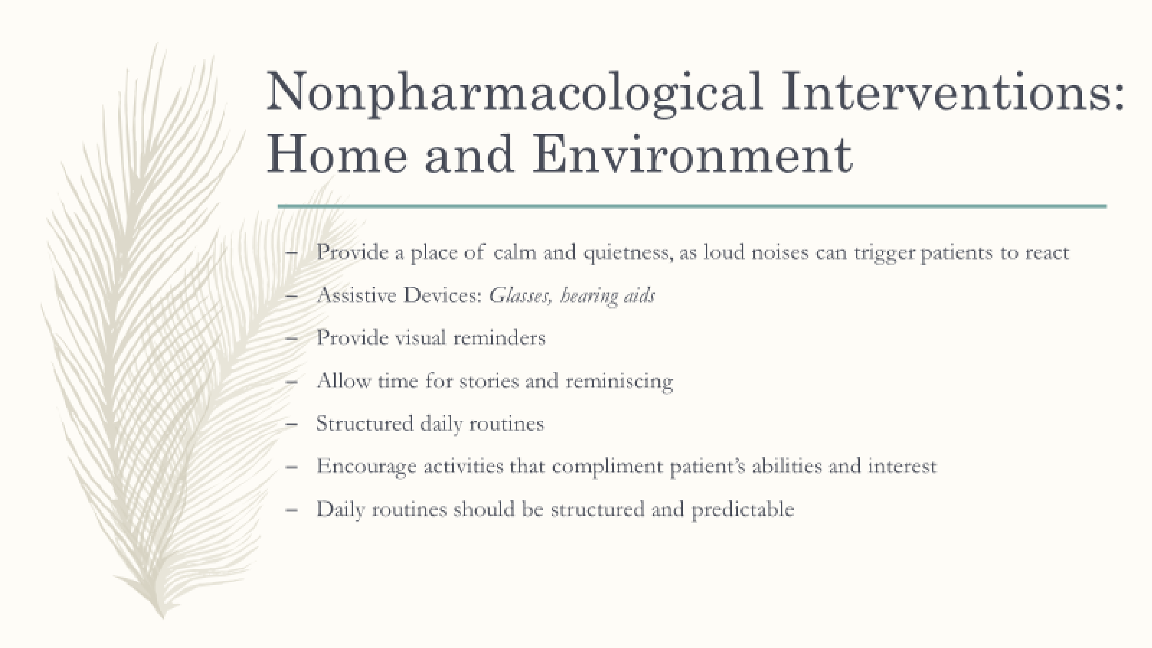


Nonpharmacological Interventions

- Consider how we speak
- Consider the patient’s environment
- Consider the patient’s medications
- Less is more
- Always consider the patient’s needs over your own personal objectives
  - *What may be important to you at this point, may be the cause of the patient’s anxiety.*

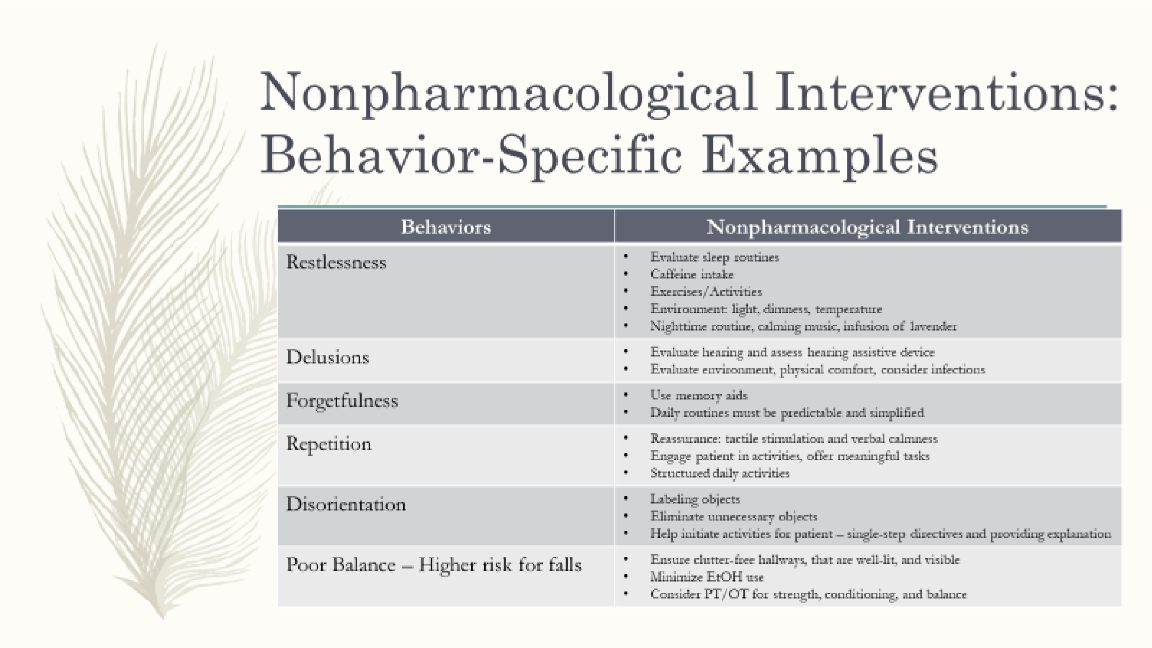
Nonpharmacological Interventions: Communication

- Always introduce yourself and call patient by their first name
  - *Words of endearment must not be used to*
- Single-step directions
- Allow for extra time
- Acknowledge the patient’s emotion at the instance of contention
  - *Confusion, pain, tiredness, hunger*
  - *Provide a safe space: ensure that patient is safe, leave the environment, and re-approach later.*
- Offer choices
- Ask for permission, make eye-contact (if culturally appropriate), consider personal space
- Minimize distraction – Eliminate unnecessary stimuli
- Visual prompts and tactile cues
- Consider: tone of voice, intonation – Use a calm voice, normal volume, normal pitch
- Reflect on how the following is presented: Body language, facial expressions, patience



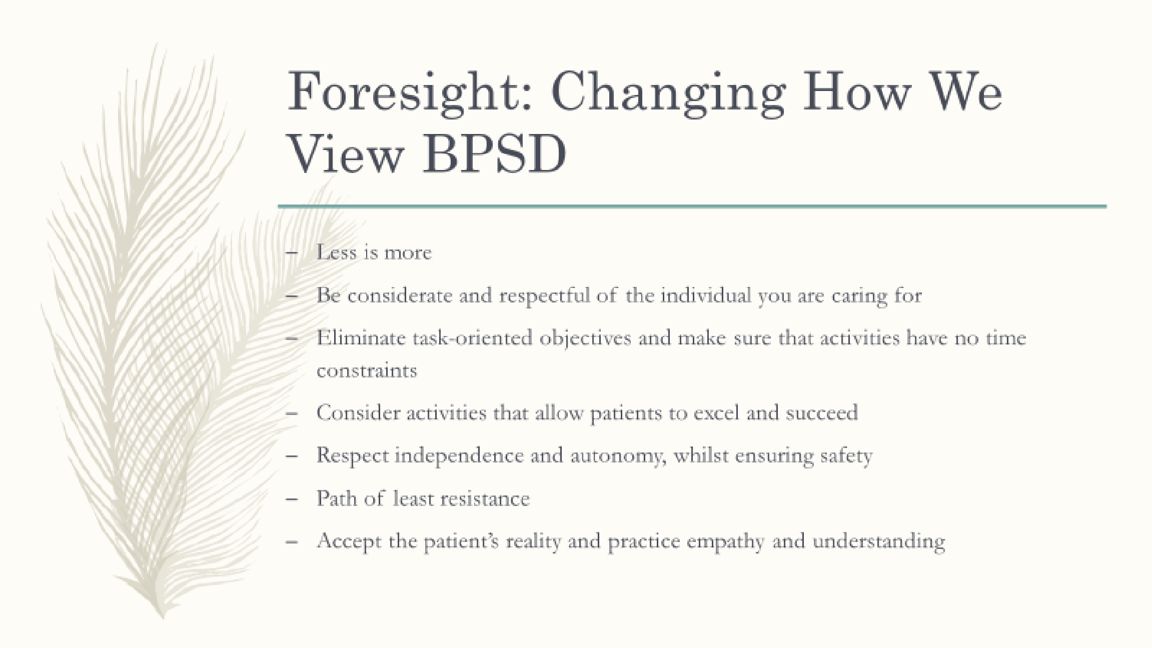
Nonpharmacological Interventions: Home and Environment

- Provide a place of calm and quietness, as loud noises can trigger patients to react
- Assistive Devices: *Glasses, hearing aids*
- Provide visual reminders
- Allow time for stories and reminiscing
- Structured daily routines
- Encourage activities that compliment patient's abilities and interest
- Daily routines should be structured and predictable



Nonpharmacological Interventions: Behavior-Specific Examples

Behaviors	Nonpharmacological Interventions
Restlessness	• Evaluate sleep routines • Caffeine intake • Exercises/Activities • Environment: light, dimness, temperature • Nighttime routine, calming music, infusion of lavender
Delusions	• Evaluate hearing and assess hearing assistive device • Evaluate environment, physical comfort, consider infections
Forgetfulness	• Use memory aids • Daily routines must be predictable and simplified
Repetition	• Reassurance: tactile stimulation and verbal calmness • Engage patient in activities, offer meaningful tasks • Structured daily activities
Disorientation	• Labeling objects • Eliminate unnecessary objects • Help initiate activities for patient – single-step directives and providing explanation
Poor Balance – Higher risk for falls	• Ensure clutter-free hallways, that are well-lit, and visible • Minimize EtOH use • Consider PT/OT for strength, conditioning, and balance



Foresight: Changing How We View BPSD

- Less is more
- Be considerate and respectful of the individual you are caring for
- Eliminate task-oriented objectives and make sure that activities have no time constraints
- Consider activities that allow patients to excel and succeed
- Respect independence and autonomy, whilst ensuring safety
- Path of least resistance
- Accept the patient's reality and practice empathy and understanding

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