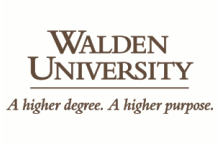

2019

Improving Nursing Knowledge of African American Heart Failure Self-Care Management

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This is to certify that the doctoral study by

Sharnee Moore-Jervis

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

Review Committee
Dr. Patricia Schweickert, Committee Chairperson, Nursing Faculty
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2019

Abstract

Improving Nursing Knowledge of African American Heart Failure Self-Care Management

by

Sharnee Moore-Jervis

MSN, Wilmington University, 2008

BSN, West Chester University, 1992

Project Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Nursing Practice

Walden University

November 2019

Abstract

Heart failure is a complex chronic disease affecting 6.6 million people in the United States, with an annual cost of $39.2 billion per year. African Americans are at an especially high risk for poor outcomes and readmissions from heart failure complications, as they are 2.5 times more likely to develop heart failure than other ethnic groups. This disease requires a high level of patient self-care management, and evidence suggests that African Americans do not always receive culturally sensitive education, which can lead to suboptimal self-care practices. The practice-focused question for this educational program asked whether nurses of African American patients with heart failure could use a culturally sensitive health education toolkit to improve patients' knowledge of self-care management. The purpose of this doctoral project was to determine if a culturally sensitive toolkit could increase nursing knowledge. The population focus was nurses caring for African American heart failure patients with frequent readmissions from a high-risk heart failure clinic in New Jersey. The use of Hofstede's cultural dimensions and an exhaustive literature review guided this doctoral project. The tool used to assess participants' pre- and post-knowledge was the cultural awareness and sensitivity tool. There were 11 participants comprised of nurses, nurse case managers, and advanced practice nurses; they exhibited a 1.92% improvement in knowledge after the education session. This outcome shows that this educational program was effective and has the potential to contribute to social change by educating nurses on providing effective, culturally sensitive self-care education to African American heart failure patients to increase their adherence to self-care practices.

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Dedication

I dedicate this to my grandmother, Evelyn Neal, who told me I would do something great one day. I can do all things through Christ, who strengthens me, Philippians 4:13.

Acknowledgments

I am praising God for allowing me to accomplish this goal. I could not have done this without his grace and mercy. I would like to acknowledge my family and friends for always supporting and encouraging me during this journey. I would like thank my chair, Dr. Schweickert, and my committee who guided me along the way. In addition, I would like to extend a special thank you to my mentor, Dr. Linda Kilby, who assisted and encouraged me when I was lost in this process. Also, a special thank you is extended to my preceptor, Dr. Emily Levitt-Gopie, for agreeing to precept me during my program.

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Section 1: Nature of the Project

Introduction

Heart disease affects many Americans. It represents the leading cause of death in the United States (Healthy People, 2020). It currently affects one in three adults. Heart disease can lead to disability, decreased quality of life, and billions of dollars in treatment (Cohn, 2016). Heart failure affects about 6.6 million people in the United States (Sharma, Colvin-Adams, & Yancy, 2014). However, heart failure affects African Americans more severely and at a younger age. African American women have a 50% greater chance and African American men have a 70% greater chance of developing heart failure. Furthermore, nine out of every 1,000 African Americans will develop heart failure. They experience an earlier onset of heart failure, which leads to increased rates of hospitalizations, earlier disabilities, and increased rates of mortality (Woda, Belknap, Haglund, Sebern, & Lawrence, 2015). According to the statistics reported in 2017 by Heart Health, African Americans are twice more likely than Caucasians (40% vs. 20.3%) to be readmitted, and the cost of hospital readmission is $1.7 billion per year (Gheorghiade, Vaduganthan, Fonarow, & Bonow, 2013).

According to Vuckovic, DeVon, and Piano (2016), African Americans are least likely to follow self-care management education that is provided prior to hospital release due to the lack of culturally sensitive health education and their own lack of education resulting from low literacy rates. Ong-Flaherty (2015) further supports the theory that African American patients' self-care management could improve if they receive culturally appropriate education. The focus of this doctor of nursing practice (DNP)

project was to provide education needed to improve nurses' knowledge so they could provide culturally sensitive health education, using the health education toolkit designed for African American heart failure patients.

This project has the potential for social change by improving the knowledge of the nurses' cultural sensitivity of health education for self-care among African American patients with heart failure. This change in educational practices for nurses can lead to a positive impact for the African American heart failure community. This population could experience appropriate self-care management, a decrease in cost from readmission rates, a decrease in financial burdens, and a decrease in lost revenue from early readmissions (Cuyjet & Akinboboye, 2014).

Problem Statement

There are 700,000 new heart failure diagnoses per year with an annual cost of overall treatment at approximately $39.2 billion in the United States (Banks, Ong-Flaherty Sharifi, 2016). African American patients are diagnosed with heart failure 2.5 times more than other ethnicities, and their diagnoses too often result in death within 5 years (Steele & Steele, 2015). This population has an increased risk of developing cardiac changes that contribute to heart failure, developing approximately 10 years earlier than other ethnicities (Sharma et al., 2014). African Americans with heart failure exhibit decreased self-care management knowledge due to a lack of culturally sensitive health education. The overall impact of heart failure for African Americans is a serious health concern, which is not always recognized by the patient until the disease has led to major functional disabilities. They often believe that once they are treated in the hospital, they

are cured. There is a lack of understanding of a self-care management plan, which contributes to the lack of adherence: lack of prescription refills, lack of monitoring daily weight, and lack of recognizing or responding to signs and symptoms, which eventually leads to heart failure exacerbation (Dennison et al., 2011). Woda, Belknap, Haglund, Sebern, and Lawrence (2015) found, as a result of this lack of adherence, a correlation of noncompliance and lack of access to health care, delay in diagnosis, delay in treatment, and the lack of culturally sensitive health education, which presents barriers to the patients' ability to effectively complete self-care management. Yancy (2012) agreed that many nurses treating African American heart failure patients were unaware of this correlation. They were unaware of how it affected the patients' ability to self-manage their care effectively once released from the hospital.

This project focused on improving the culturally sensitive self-care knowledge of nurses treating African American heart failure patients. The data were obtained both pre knowledge and post knowledge, assessed after the educational program. Low health literacy levels and lack of culturally sensitive education have impeded African Americans' self-care management, which exhibits the need for the development of this culturally sensitive health education toolkit. This population has experienced more hospitalizations than other patients with a higher literacy level (Wu et al., 2013).

Cohn (2006) stated that African Americans with heart failure have self-care management issues. There is a correlation with lack of culturally sensitive educational tools and self-care management, but there is limited data due to the limited number of studies of African Americans with heart failure. The lack of self-care among African

Americans with heart failure is attributed to their lack of culturally sensitive health education as well as their nurses being unaware of the need to provide this type of education (Ong-Flaherty, 2015). Many patients are provided health education but do not understand the information, which creates barriers to their adherence. African American patients need relevant education to assist them in their adherence of self-care. The provision of education can lead to an increase in their understanding of their treatment plan, which can contribute to their improved self-care management.

Nurses can benefit from the development of a culturally sensitive educational toolkit for use in their educational practice. Evidence suggests that culturally sensitive health education is needed to improve health outcomes (Dennison et al., 2011). The focus of this DNP project was to provide nurses with a toolkit covering effective culturally sensitive teaching guidelines on self-care management for heart failure patients. The plan was to introduce the toolkit in a manner that nurses would accept it as a better way to assist African American patients to improve their self-care management. The project has the potential to affect many different types of patients with chronic disease. In the United States, there are many different cultures and ethnicities that require a specific educational plan to address their various health care needs (Conway-Klaassen & Maness, 2017). This doctoral project sought to bridge the gap between nurses and patients with heart failure. This change in practice could potentially have a positive outcome for patients by increasing their adherence. To do so is challenging, but a strong educational toolkit can lead to implementation of health care education necessary to change patient outcomes. Nonetheless, nurses must first understand the need for culturally sensitive education. This

change in practice can encourage effective self-care management participation among African American heart failure patients, which could bridge the gap in nursing care. Although there is an effective treatment plan in place for heart failure, African American patients need the application of a treatment plan that will improve adherence to participation in their self-care management treatment plan (Dennison et al., 2011).

Purpose

The purpose of this project was to determine if nursing knowledge is increased with education on culturally sensitive self-care management for African American heart failure patients. In this patient community, heart disease is a leading cause of death. Evidence suggests that the health education provided to African Americans with heart failure is not culturally sensitive, and patients cannot use the information in a meaningful way (Banks, Ong-Flaherty, & Sharifi, 2016). This represents a gap in nursing practice, which this doctoral project will attempt to address. There is a low percentage of cultural sensitivity training and culturally sensitive education among nurses. Many nurses are unaware that they need to provide culturally sensitive health education. The toolkit was developed for nurses use to meet the self-care educational needs of patients. The practice-focused question asked whether the use of culturally sensitive health education by nurses could improve self-care management among African American patients with heart failure.

The purpose of the DNP project was to increase the knowledge of the nurses in relation to how culturally sensitive health education could improve self-care management. A presentation of evidence-based literature exhibited the patients' current

outcomes based on the education that has been provided. This was necessary to assist the health care providers in understanding the needed educational change among this population.

Mott-Coles (2014) referenced the importance of provider communication when educating different ethnicities. To have an impact on their practices, providers must be culturally sensitive and culturally aware of the content and method of providing education. The study identified a need for better understanding by health care providers when educating this population about their health care. Otherwise, the message was not received, signifying that the participation of the provider greatly impacts the patients' ability to adhere to the planned treatment.

The implementation of culturally sensitive education has the potential to address a gap in nursing practice by demonstrating how this change can positively affect this population through patients improving self-care management. It can solicit change by utilization of evidence-based practice through the creation of a health education toolkit, which can change how heart failure education is presented to African American patients. The goal was to equip nurses with a culturally sensitive health education toolkit to provide to African American heart failure patients. This project also provided an opportunity for nurses to see the exhibition of change in practice, which would assist in the use of the toolkit. This was also accomplished with a pretest to present what their current practice has been and a posttest to exhibit how the education improved their nursing knowledge. The data for this project were collected from nurses in the high-risk heart failure clinic via knowledge assessments. The assessments determined their

thoughts on their educational use in relation to African American patients with heart failure, the need for change, and the level of understanding of cultural sensitivity and understanding the problem. The plan was to exhibit the importance of the implementation of a culturally sensitive health education toolkit, which could potentially lead to improved self-care management among African American heart failure patients.

Nature of the Doctoral Project

The purpose of the project was to develop a culturally sensitive African American heart failure educational toolkit for nurses to improve their knowledge. To fulfill the purpose, evidence-based literature was presented in relation to culturally sensitive health education to the heart failure staff of a chronic care clinic. Data were collected with pre-education and post education surveys to determine the nurses' understanding of the need for cultural sensitivity education. Details about the nurses' role in the clinic were also obtained, which included a determination of the nurses' understanding of heart failure education and how the current education has impacted African American heart failure patients' self-care management. The sources of evidence-based literature were to support the goals planned for the program, which were obtained from databases, including CINAHL complete, MEDLINE complete, and peer-reviewed journals. The journal timeframes were approximately 10–20 years to accommodate the limited literature provided on this topic.

The planned approach for the DNP project was to use a staff education design. This included pre knowledge and post knowledge assessments to determine the participants' understanding of the problem, their acceptance of the problem, and their

desire to change. The purpose was to develop a culturally sensitive African American heart failure health education toolkit to improve nurses' knowledge, which aimed to increase self-care management among this patient population. The outcomes were obtained through data collection from the nurses' team. A post knowledge assessment determined the changes made and/or implemented by the nurses. Criteria were developed to determine if the nurses experienced an increase in their knowledge in relation to the use of the toolkit. Upon collection of data, a data analysis plan was implemented, which included descriptive statistics and a summary of data to assist with the development of conclusive data and information regarding outcomes. This was achieved by examining the assessments of the nurses.

This doctoral project could make an impact through the use of evidence-based research to determine if a culturally sensitive health education toolkit assisted in educating nurses who treat African Americans with heart failure, which affects this population more significantly than other ethnicities (Dennison et al., 2011). The evidence-based literature was obtained using peer-review journals. The literature discussed the correlation between lack of culturally sensitive education and patient nonadherence to treatment plans; however, there were limited data due to limited studies of African American patients with heart failure (Cohn, 2006). The evidence suggested that a lack of understanding health information contributes to African Americans' poor adherence (Mitchell et al., 2016). Furthermore, this suggested that patient education should be provided in a culturally sensitive manner. Therefore, the project's toolkit may allow nurses to understand and apply the changes needed to meet the educational needs

of this population. The potential outcomes could increase nurses' knowledge of cultural sensitivity and increase patients' adherence to self-care management. This project's goal was to educate the nurses regarding African American heart failure patients to improve their knowledge of self-care management.

Significance

A few stakeholders were impacted by this project. This included the African American heart failure patients and their nurses, including nurses, advanced practice nurses, and nurse case managers. The staff education project responded to the need of African Americans with heart failure who exhibit difficulty with self-care management. Research has shown that African American patients who receive culturally sensitive health education have better outcomes (Song, Hamilton, & Moore, 2012). This educational design has the potential to change patient self-care management behaviors and improve health outcomes. The nurses benefited from understanding and utilizing the toolkit, which could potentially impact the outcomes of heart failure patients. There is also the potential for nurses to use this educational design for the education of patients experiencing other chronic diseases as well.

Gross, Anderson, Busby, Frith, and Panco (2013) discussed the implementation of a culturally sensitive education project to improve the self-care management behavior of an antihypertension treatment plan. The project determined that when culturally sensitive education was implemented, patient self-care management behaviors improved. This was attributed to the health care provider having an effective conversation and being aware of the health beliefs and practices of their patients. The outcomes of the project exhibited

increased knowledge and self-care management behaviors of the patients to the antihypertensive treatment regimen. Patients were more likely to follow medication and dietary regimens when this change in educational practice was implemented. They reported lifestyle changes and kept clinic appointments. The increased participation in self-care management was determined to have been based on improved culturally sensitive education provided to the patients, which established a better understanding of the disease process. This educational design could have significance for heart failure patients and nurses because of similarities in the utilization of an antihypertensive plan and a heart failure education plan. The use of this plan requires that health care professionals become aware of their patients' cultural practices and health beliefs.

The antihypertensive culturally sensitive educational project was designed specifically to meet the needs of the population being treated. The project entailed an individualized, culturally sensitive, and evidence-based education program designed to improve outcomes among African Americans patients diagnosed with hypertension. It included their assessment of knowledge, literacy, and cultural factors. The specific educational plan was based on their obtained assessment data (Gross et al., 2013). This study is another example of why the implementation of culturally sensitive health education should be incorporated in patient care.

Heart failure treatment entails a detailed and complex plan. The use of this educational design not only requires the health care professional to have a good understanding of the chronic disease, but it is imperative that patients and caregivers are

provided the education to understand the disease process. If patients can follow their care plan, they could exhibit improved self-care practices.

This culturally sensitive educational plan for heart failure exhibited the importance of utilizing this toolkit for nurses and patients. The planned goal was to improve the knowledge of culturally sensitive self-care behaviors among nurses who treat African American patients with heart failure. Therefore, if the nurses are provided with the right resources, it is projected that their patients will successfully learn to provide effective self-care.

This educational process of learning benefits nursing clinical practice. It was established through the rigor of designing a project and determining through the program whether any positive nursing practice changes were identified. The doctoral project sought to encourage nurses to utilize cultural sensitivity when educating African American heart failure patients. The benefit of positive results has assisted the nurses and their improvement in knowledge to change the educational process, which could lead to improved practices of patients' self-care management behaviors. This change in the nurses' educational practice through the use of a culturally sensitive health education toolkit could contribute to nursing practice changes in relation to multiple chronic diseases.

The contribution of this doctoral project to nursing practice relates to several health care improvement initiatives, including Healthy People 2020 and the Institute of Medicine's (IOM) Future of Nursing. The Healthy People 2020 policies have two focuses: to decrease heart failure hospitalizations and increase cardiovascular health

(Office of Disease Prevention & Health Promotion, 2010). This project has the potential to improve these focus areas through change in nursing practice and change in educational practice. Furthermore, this project aligns with the IOM, Future of Nursing through several factors: (a) to redesign care delivery, (b) to promote nurses' inter professional and lifelong learning, and (c) common ground in relation to the scope of practice and other issues in policy and practice (National Academies of Sciences, Engineering, & Medicine, 2010).

In addition, this project aligns with the IOM through nursing research, which promotes the education of nurses through the involvement of evidence-based practice and evidence-based research. Additionally, it encourages nurses to be involved with changes in patient care delivery through potential practice changes and policy building in the health care system.

There is potential for positive social change within the African American community in relation to heart failure treatment as well as the overall heart failure community. If this heart failure education toolkit utilized by nurses can exhibit change in practice to improve self-care behaviors, this would be evidence-based practice with the possibility for additional health education toolkits. The improvement of their self-care management can potentially lead to a positive impact on their finances and their families (Ong-Flaherty, 2015). The benefits of improved self-care management exhibited to the nurses to recognize this change in practice signifies the value of this educational toolkit, which could potentially lead to improved patient outcomes.

Summary

Heart failure is a complex chronic disease that requires a multifaceted treatment plan. Nurses with improved culturally sensitive knowledge of African Americans with heart failure through the use of a health education toolkit can lead to appropriate self-care management with successful outcomes. This chronic disease affects a considerable amount of the U.S. population, but the African American population is affected more significantly than other ethnicities (Banks et al., 2016). Healthy People 2020 consider heart failure-related hospitalizations and improving cardiac health an important issue that must be addressed (Office of Disease Prevention & Health Promotion, 2010). According to the evidence, the lack of culturally sensitive health education has a major impact on self-care management (Rucker-Whitaker et al., 2006). The African American population suffers from lower health literacy more than many other populations; this impacts this population's ability to understand the education provided to self-manage heart failure symptoms. The purpose of this DNP project was to develop a culturally sensitive heart failure education toolkit for nurses to improve their knowledge and treatment of African American patients (Wu et al., 2013). The nature of the project was to improve the knowledge of the nurses through the use of evidence-based literature to support the purpose of the project. The significance of this project validated the need for changes in educational practices of nurses treating African American patients with heart failure. The next section discusses concepts, models, the relevance of this project to nursing practice, and the roles of the DNP student and the team.

Section 2: Background and Context

Introduction

The practice problem for this project was that nurses treating African American patients with heart failure lack a productive methodology for providing self-care management education. This education will assist patients in understanding the seriousness of their chronic condition and will provide them with best practice steps in a culturally sensitive manner. This improvement in nursing knowledge and change in practice will result in improved self-care management.

There is a significant health disparity of heart failure among African Americans compared to other ethnicities (Woda et al., 2015). African Americans suffer from heart failure at a higher rate and earlier age than other ethnicities. There is a major correlation between hypertension and heart failure. African Americans have a higher rate of hypertension than other ethnicities, which contributes to their higher rate of heart failure. In addition, their medical condition is often further complicated by the correlation between heart failure, hypertension, and diabetes. The health disparities of heart failure are attributed to higher rates of hypertension, diabetes, socioeconomic status, and higher dietary caloric and salt intake (Cuyjet & Akinboboye, 2014). African Americans are more likely to have a severe form of heart disease that is more difficult to control compared to other ethnic groups. These medical conditions can be due to an increased risk of developing functional and cardiac changes, which appear approximately 10 years earlier than the actual symptoms (Sharma et al., 2014). The abundance of low literacy, the lack of knowledge, and the inability to self-manage their chronic disease once discharged

from the hospital usually lead to early readmissions for this patient population. There is a need for nurses to be equipped with culturally sensitive health education so patients learn that they are suffering from a chronic disease and understand the need to maintain long-term self-care management of their disease. With a proper toolkit, nurses can acquire this education, and these changes could improve self-care management behaviors for African American patients with heart failure. The practice-focused question for this project asked whether improving the knowledge of nurses treating African American patients with heart failure would improve their self-care management outcomes. This education contains a best practice self-care management educational step that includes methods that can increase patient self-care management. This doctoral project focused on potential changes to how nurses give health care education, and if followed, this toolkit could assist in the quality of education, resulting in improved patient adherence. The overall goal was to improve the knowledge of nurses and patients, which can change behaviors among both.

The purpose of this practice project was to address knowledge improvement related to self-care management designed for African American patients with heart failure. It was projected that if the nurses were educated in a self-care management plan with the use of a culturally sensitive health education toolkit, they would be able to educate patients more effectively. The goal was to improve the knowledge of the nurses in relation to culturally sensitive health education to potentially improve their methodology when communicating with patients. This method can potentially foster the gap in nursing practice. It can also provide social change using culturally sensitive health

education for African American patients, to not only improve patient health but also reduce the amount of money spent on hospitalizations.

Concepts, Models, and Theories

The model chosen for this project was the Hofstede theory of cultural dimensions, which was used as guidance for this DNP project. The Hofstede model (1984) has four dimensions: (a) power distance, (b) individualism, (c) masculinity/femininity, and (d) uncertainty avoidance (Minkov & Hofstede, 2012). This model was designed to assist me in providing data related to a paradigm change when providing culturally competent education. The major focus was to provide proper guidance on managing cultural awareness through cross-cultural training. The four dimensions have been used in many industries, including aeronautics and aviation safety, but two of them are specifically related to health care, which contribute to cross-cultural understanding between health care professions: power distance and individualism. Power distance addresses how authority or social status is perceived among a population; everyone should look after themselves and be responsible for their own personal achievement. Individualism, however, addresses how a person is viewed in society, i.e., everyone has equal rights (Minkov & Hofstede, 2012). These dimensions are used to describe the lack of awareness among nurses with reference to African American patients. This theory focuses on culturally appropriate patient-centered care. According to the evidence, African American patients need heart failure education that incorporates cultural sensitivity to assist in the appropriate understanding of the education. Culturally sensitive health education can lead to effective self-care management (Woda et al., 2015). All nurses

bring their own culture, ethics, and health beliefs to their practice. These actions can complicate how they interact with patients who differ from their own culture and beliefs. Nurses must be knowledgeable of the culture and health practices of their African American heart failure patients. This can allow for appropriate communication, which can lead to culturally sensitive education. If nurses do not improve this lack of knowledge, it can lead to misperceptions and misunderstanding by both the nurses and the patients (Wallace et al., 2007). Banks, Ong-Flaherty, and Sharifi (2016) also discussed the lack of cultural congruence in patient education. African Americans and their culture are impacted by this issue, which contributes to their lack of trust and their ineffective communication with nurses, which can impact their safety.

Hofstede's dimensions describe how to assist a nurse in becoming culturally sensitive and how to secure positive outcomes. This theory emphasizes the value of cultural sensitivity in health care. Using this framework fosters empowerment in African American patients through proper education, which allows for the closure of the communication gap between nurse and patient. This can potentially lead to improved self-care management for the African American patients with heart failure.

Hofstede was considered a key theorist in relation to this doctoral project because his work focuses on cultural dimensions in health care. The cultural dimensions power distance and individualism specifically relate to this doctoral project. African Americans experience inequalities in health care in terms of access, education, and treatment, but some of these inequalities are unintentional. According to Mitchell et al. (2011), there are

only 12 African American heart failure trials, which provide the most effective heart failure guidelines for this population.

The framework discusses how people are viewed through culture, which can affect their treatment in health care. For instance, power distance represents the inequality of people. It is believed that there is equality, which everyone in health care is supposed to be entitled to. The other dimension is individualism, which states that everyone can be self-sufficient (Borisova, Marinussen, Ryland, Stornes, & Eikemo, 2017). These two dimensions are used to emphasize nurses' lack of awareness of cultural sensitivity. These dimensions point out the perceived mental model of equality and the same rights. When a person fails to follow health education instructions, the outcome is their fault due to cultural blindness. This failure is an unacceptable concept (Matusitz & Musambira, 2013). These dimensions assist in changing that mental picture for the nurse. Patients' experiences of inequality and lack of individual rights affect their health care educational experience.

Hofstede's cultural dimensions encourage patient-centered care by nurses. The framework was designed to educate the nurses about cultural awareness and cultural sensitivity. It also exhibits the importance of implementing the needed change in practice as well as the implementation of cross-cultural training. Evidence suggests there is a lack of cultural competence in current health care practices (Conway-Klaassen & Maness, 2017). Many nurses are unaware of their lack of cultural competence and are unable to meet the needs of their patients, which is a barrier to the use of this framework.

Hofstede's theory suggests the need for cross-cultural training to initiate cultural awareness and cultural sensitivity (Mansyur, Amick, Harris, Franzini, & Roberts, 2009).

Relevance to Nursing Practice

This project is relevant to nursing practice because it sought to assist nurses in recognizing their lack of knowledge in relation to providing culturally sensitive health education to African American heart failure patients. African American patients experience difficulty relating to the education provided to them by their health care providers (Dennison et al., 2011). Many issues affect African American patients' self-care in general, and one of the main issues is nurses being unaware of their own lack of cultural sensitivity. Thus, nurses are unable to begin to address the educational needs of this population in relation to their treatment.

This issue is relevant to nursing practice based on the evidence that African American patients experience lack of access, inequitable health care, lower educational levels, and culturally insensitive education (Yancy, 2012). This population has had negative experiences in relation to their health care, which impedes their outcomes. Nurses are insensitive to their needs based on their lack of knowledge of their experiences. This project sought to begin to address the nurses' lack of knowledge of cultural sensitivity. The implementation of this project potentially changed their insensitive behaviors to allow them to meet the needs of African American patients with heart failure.

Patients who suffer from chronic diseases require commitment to their care in multiple ways for potential positive outcomes and management of the disease (Yancy et

al., 2008). Patients are responsible for their dietary choices, weight monitoring, specialist appointments and medication regimen. However, some patients struggle with understanding their diagnosis, symptom management, and treatment plan; such an understanding can only be achieved if education is provided in a manner the patient can decipher. The patient must understand all these self-care management tasks and be able to understand the treatment plans. They are responsible for managing these multiple tasks and their self-care (Meeuwesen, Brink-Muinen & Hofstede, 2009). However, the necessary tools to provide this type of education may not be available to the educator or the patient. Therefore, the implementation of a plan to improve nurses' knowledge of this population is needed for them to be able to educate patients on the importance of effective self-care behaviors (Brega et al., 2015).

There is a lack of culturally sensitive care provided to minority patients in health care settings (Wallace et al., 2007), but many health care agencies provide cultural education to new employees due to the diversity of populations they treat. Nonetheless, the education designed for and provided to African American patients with heart failure is not always appropriate. Often, the wording is written above an eighth-grade level, which might be too technical for some patients to understand (Chaudhry et al., 2011). Barriers to culturally sensitive care in addition to language barriers, lack of diversity among nurses, lack of access to health care, reimbursement, and low literacy among patients and families can result in noncompliance (Cagle & Wells, 2017). It seems that nurses are often unaware of how these barriers can affect patient participation in their self-care management. There is a need for nurses to be educated and prepared to provide

this type of education to all patient populations. There needs to be a change in nurse education, but without explicit recognition of this need for change, nurses might not change their methods for educating patients. This recognition can lead to improved educational practices and the needed improvements in patients' ability to be responsible for self-care management (Mott-Coles, 2014). Improvement in the outcomes of breast cancer patient treatment results for African American and Latino women was noted once health care providers better understood the cultural practices and beliefs of these patient populations. In addition, providers needed to better understand how these beliefs and practices affected patients' decisions related to medical treatment. When communication between nurses and patients improved and health care providers showed respect for patients' beliefs, change in their participation in treatment began (Mott-Coles, 2014). Mott-Coles (2014) identified a need for health care professionals to recognize the necessity for improvement in their ability to communicate effectively with patients and for specific tools to be provided to help nurses improve the design of patients' self-care management treatment plans to make them acceptable to patients. If health care professionals have these specific tools, they can achieve more effective education of their patients.

The same response to improvement in health care professionals' educational experiences effected outcomes in cultural sensitivity education. Ho, Tran, and Chelsea (2015) conducted research with members of the Asian population who experienced a high rate of diabetes and a lack of self-care management. This population experienced issues of ineffective education regarding self-care management. The health care providers did

not meet the needs of the patients due to the lack of effective communication. Gross et al. (2013) documented similar results among African American patients with hypertension, who were introduced to an education program focused on lifestyle change. The researchers learned the importance of providing culturally sensitive education. In each study, health care providers who learned and practiced a more culturally sensitive educational methodology emphasized the need for current ethnic education. They were able to establish a more trusting relationship with their patients and help the patients develop a respect for the health care practices and benefit from improved health.

Hofstede's theory also includes the importance of patient-centered care, which identifies how individual and cultural preferences can impact the educational process, especially related to dietary practices, medication regimes, weight monitoring, and physician follow-up. Little to no follow-up has occurred regarding the misunderstandings experienced by members of the African American population. As a result, they have been unaware of the signs and symptoms of heart failure and the need to take prescribed medications correctly on a daily basis, or they have been unable to correctly relate to the correlation between their inability to follow the self-care management regimen and their readmissions to the hospital (Matusitz & Musambira, 2013).

The gap in practice, as documented in this DNP project, was that nurses were not providing the appropriate knowledge to African American patients with heart failure in a culturally sensitive manner. This project focused on improving nursing knowledge. Through the use of face-to-face group education and in-depth discussions, I sought to facilitate a clear understanding of the need for nurses to provide culturally appropriate

education to improve patient self-care management, which could lead to overall improved health for this population (Dickson, McCarthy, Howe, Schipper, & Katz, 2013).

Local Background and Context

The practice-focused question asked whether the education process of providing the nurses with hands-on knowledge in a participatory learning setting will change. An assessment was completed to determine whether there was a change in knowledge of self-care management education of the African American patients in their care. The nurses in this project worked at different levels and had multiple interactions with many types of patients. The clinic setting was in a small urban hospital that focuses on African American patients suffering from various heart failure conditions. The nurses worked closely with the patients to assist in their treatment, provide self-care management education to help the patients improve their poor heart failure outcomes, increase adherence to the medical prescriptions and reduce their frequent heart failure exacerbations.

The health system is committed to serving the poor and the underserved in its community. They recognize heart failure as a chronic disease that needs intervention. Therefore, there was initiation of a program to address the issues of heart failure by implementing a specific treatment plan. This project was initiated to address the health of more than 3,000 patients of different ethnicities with the largest percentage being African Americans. The program was designed to provide education to nurses.

Many of the patients' lives are affected by living below the poverty level and being considered the underserved population, their health care cost is provided through

Medicare and Medicaid, with a few patients covered by private insurance carriers. The mission of the clinic is to provide comprehensive heart failure treatment without cost being a barrier. Using an improved team approach, this program will help change the paradigm as it helps the clinic provide a more comprehensive and preventative approach to the care of heart failure patients.

There are different types of nurses and patients who require interactions, which can affect the patients' ability to understand their education and self-care instructions. The local context of this project was within a clinic that focuses on heart failure for African American patients. They use nurses to work closely with the patients to assist in their treatment and education of self-care management in relation to heart failure. This clinic was created due to poor heart failure outcomes. The focus for the clinic was to increase patient adherence, improve their self-care management and reduce their frequent heart failure exacerbations.

Definition of Terms

There were several terms used in this doctoral project, including the following:

Health literate toolkit: Equips a practitioner with a step-by-step approach to achieve optimum heart failure control (Wu et al., 2013)

Heart failure: This is a chronic progressive condition in which the heart muscle is unable to pump enough blood to meet the body's need for blood and oxygen. The heart is having difficulty performing properly (Dennison et al., 2011).

African Americans: Black Americans or Afro-American ethnic group of Americans with total or partial ancestry from any of the black racial groups of Africa (Long, Ponder & Bernard, 2017).

Health disparities: Disparities in health care related to race, ethnicity, financial status, poor self-care behaviors, but relationships between these factors are unknown (Sharma et al., 2014).

Health literacy: IOM defines health literacy as the degree to which individuals have the capacity to obtain process and understand basic health information and services needed to make appropriate health decisions (Parker & Kindig, 2006).

Low health literacy: This increases the risk for re-admissions with estimated associated costs of $215 billion in increase of annual health care cost (Brega et al., 2015).

Culture: Culture is defined to socioeconomic status, historical and sociological experience of African Americans may play a pivotal role in how clients manage this symptom (Banks et al., 2016).

Cultural sensitivity: serves as a foundation for the development of cultural competence (Yilmaz, Toksoy, Direk, Bezirgan & Boylu, 2017).

Cultural awareness: involves self-examination of in-depth exploration of one's cultural and professional background. This component begins with insight into one's cultural health care beliefs and values (Bacote & Munoz, 2001).

Heart disease is the leading cause of death in the United States. According to the Center for Disease Control (CDC), 5.7 million adults in the United States have heart failure. Heart failure has been the contributing factor for 1 in 9 deaths per year.

Furthermore, 50% of the heart failure patients diagnosed with heart failure die within five years (Cohn, 2006). The diagnosis of hypertension is a major contributing factor in African Americans who develop heart failure. The federal involvement with heart failure constitutes a major input from Healthy People and the Affordable Care Act. The Healthy People initiative has included cardiovascular health within their goals due to heart disease being the leading cause of death in the United States. One of their goals is to improve cardiovascular health and quality of life through prevention, detection, and treatment through the Office of Disease Prevention & Health Promotion (2010). Therefore, there have been initiatives to change heart failure outcomes such as chronic care clinics, heart failure programs and telehealth programs. These programs have been initiated to improve heart health. The Affordable Care Act, 2010 has changed the accountability of hospitals for patients with frequent readmissions after being discharged. This was to improve the quality of care for patients especially with chronic diseases. Hospitals receive incentives or penalties in relation to the readmission rates of their heart failure patients. The goal of the Center for Medicare and Medicaid is to decrease hospital readmission rates of 1.6 million and/or save the estimated $15 billion spent in hospital readmissions. This can be accomplished by creating an environment of patient-centered care, care coordination and smooth transition across all health care settings. Therefore, this DNP project was a culturally suitable health education program designed to align with these measures and improve eventual outcomes for African American heart failure patients. The Healthy People initiatives and the Affordable Care Act program align with this heart failure

education plan to improve nurses' cultural sensitivity to African Americans with heart failure (Wu et al., 2018).

Role of the DNP Student

The role of the DNP student played a major part in patient education, which impacts the patients' treatment plans**.** How the education was provided potentially determines whether it is understood or misunderstood, which ultimately leads to positive or negative outcomes. My role in this project was to provide evidence-based literature and evidence-based practice knowledge of African American heart failure self-care management education to nurses and, to improve the nurses' knowledge of their educational practices, which potentially improved patient self-care management. Lastly, my role was to obtain data that included past educational practices and new educational practices after the presentation, to determine if the implementation of the DNP project has reached the planned goal to implement culturally sensitive educational practices.

The goal as a nurse was to provide evidence-based literature and evidence-based practice to improve African American heart failure patient outcomes, which is a paramount concern. This doctoral project potentially changed the way practitioners provide health education by incorporating cultural sensitivity for the African American heart failure patients. Furthermore, this change in practice could signify the need to incorporate culturally sensitive health education in relation to all chronic disease treatment plans within this population. Although there was minimal literature to support this population in relation to cultural sensitivity and education, all the literature clearly discussed the need for this type of education for any ethnicities to make an impact on

positive self-care management (Majumdar, Browne, Roberts & Carpio, 2004). My goal for this project was to improve the nurses' knowledge in relation to culturally sensitive self-care knowledge of African Americans with heart failure. Also, my role in the institution was to provide evidence-based practice and program development, which demonstrated the need and the outcomes.

As a nurse and a nurse practitioner, I had the opportunity to care for patients with heart failure in many different health care settings, such as ambulatory care, home care and acute care. This chronic disease has a multi-faceted treatment plan, which requires the patient to understand and participate for successful outcomes. Initially, I did not understand the reasons for their nonadherence to their treatment plan. However, after some research with patients, it was determined that they lacked the education and the understanding needed to manage their heart failure. My motivation was to make a difference by providing tools that can improve the nurses' knowledge on how they educate their African American patients about heart failure. I was hoping to make a positive impact within the heart failure community.

The only potential bias I may have is being African American myself as well as creating a health education toolkit that is beneficial. The desire was to create a culturally sensitive health education toolkit that will benefit the nurses of African American patients with heart failure. The utilization of evidence-based practice and evidence-based literature was paramount, to develop the doctoral project that can potentially change outcomes for African American heart failure patients. The potential bias was addressed through utilizing evidence-based literature that is culturally sensitive to all ethnicities.

Role of the Project Team

The project team included nurses, nurse case managers and advanced practice nurses participated through attending educational information sessions. They completed knowledge assessments pre- and post-attending these educational information sessions. These educational sessions included culturally sensitive health education for African American heart failure patients. In addition, they received evidence-based literature related to culturally sensitive health education, which included how the education can improve self-care management.

This project recognized and respected the expertise of the nurses within this heart failure clinic, which included registered nurses, nurse case managers and advanced practice nurses. The team members are specially trained to work with heart failure patients. They understood the importance of the heart failure treatment plan and patient adherence. Therefore, there was a review of the past and current educational treatment plans. These methods were incorporated when revising a culturally sensitive health education toolkit.

Summary

Nurses who improve their knowledge about culturally sensitive education for African Americans with heart failure have the potential to improve patient outcomes (Napoles et al., 2011). The evidence suggests that African Americans experience poor self-care management due to lack of culturally sensitive health education (Tucker, Marsiske, Rice, Herman & Nielson, 2011). However, nurses needed the tools to provide this type of education. This improvement in the nurses' knowledge allows for the

application to the gap in practice needed in heart failure education for African Americans and other ethnicities.

Section 3: Collection and Analysis of Evidence

Introduction

African Americans are 2.5 times more likely to be diagnosed with heart failure than any other ethnicities (Steele & Steele, 2015). In addition, they usually have a more severe form of heart failure, developing the symptoms 10 years earlier than other ethnicities. Furthermore, African Americans have more readmissions to the hospital for heart failure exacerbations due to barriers from equitable health care treatment and lack of self-care management (Woda et al., 2015). These barriers contribute to a major health concern of poor heart failure outcomes for this population. Their lack of access to appropriate health care, delays in obtaining correct diagnosis, delays in treatment, and lack of appropriate culturally sensitive health education materials contribute to patients' nonadherence (Belknap et al., 2015). For heart failure to be managed correctly, patients must be invested in self-care management. This is a skill this population lacks. Patients' inability to manage self-care of their disease is often due to a lack of culturally sensitive education (Cagle & Wells, 2017). Patients' inability to understand what is needed to manage their disease can lead to nonadherence of self-care or self-maintenance (Wu et al., 2013).

Unfortunately, nurses are often unaware of patients' lack of understanding the education the nurses have provided. This project provided nurses with education materials that included a culturally sensitive health education toolkit designed for African Americans with heart failure to improve their knowledge. The assessment of the nurses' knowledge in relation to this culturally sensitive education was obtained through

knowledge assessments. The framework of this project was guided by Hofstede's cultural dimensions, including the need to implement culturally sensitive education in health care, which is necessary to provide patient-centered care (Minkov & Hofstede, 2012).

Practice-Focused Question

The practice-focused question in this project asked whether health care providers of African American patients with heart failure will use a culturally sensitive health education toolkit to increase self-care management. The culturally sensitive education toolkit was needed for nurses to provide African American heart failure patients with the appropriate education needed to improve their self-care management of the disease. Although, the specialty clinic was committed to addressing these needs, patients were still experiencing frequent exacerbations of heart failure. The facility's vision was to improve patient outcomes of health, independence, and self-care management of heart failure. The nurses were educated in the treatment of heart failure; they are specifically trained to properly prescribe and educate a plan of care to patients with heart failure. However, they were unaware of the issue of cultural sensitivity and its effects on their patients' adherence. This lack of knowledge of cultural sensitivity can affect African American heart failure patient outcomes. Nurses are often unaware of the health disparities this population experiences (Ameling et al., 2014).

Many nurses are of different ethnicity and background than the patients they serve. This is especially true in African American communities. Nurses often lack an understanding concerning the culture of the African American patients. In addition, they might have an inability to recognize how this lack of cultural sensitivity could lead to

inappropriate self-care management for this population. According to the American Association of Colleges of Nursing, only 6% of nurses in the United States are African American. This disparity between the nursing population and the patient population can create barriers to care. Although health care professionals are often following the gold standard of care documented by their professional organizations, it is usually care that is not culturally sensitive, which can contribute to patient nonadherence (Christopher, Wendt, Marecek, & Goodman, 2014).

There is a need to educate nurses about different methodologies for providing patient education to address the issue of poor outcomes and frequent exacerbations among African American patients. In addition to heart disease, African Americans are also affected with other significant health disparities that include hypertension, diabetes, lower social economic status, and higher dietary caloric intake and salt intake, which can result in the need for education of the importance in making significant changes in their behaviors (Cuyjet & Akinboboye, 2014).

Because of genetic disposition, hypertension correlation, and inequalities experienced in the health care area and poor self-care management, African Americans are affected by heart failure more significantly than other ethnicities (Mitchell et. al., 2011). This gap in nursing practice exhibits the need for nurses to be better equipped to provide appropriate knowledge to African American patients with heart failure in a culturally sensitive manner. This correlated to the practice-focused question, which asked whether the improvement of the educational process of providing nurses with hands-on

knowledge in a participatory learning setting would improve self-care management among African American patients with heart failure.

This doctoral project presented a staff education toolkit, which focused on the improvement of nursing knowledge in relation to the development of culturally sensitive education for African American patients with heart failure. Dickson et al. (2013) suggested that the medical outcomes for this population could be improved with nursing knowledge education. Therefore, the projected improvement in the educational plan for the nurses serving African American heart failure patients in this clinic setting had the ability to provide productive assistance to the patients as they learned more about their disease and understood the mechanisms of treatment. This knowledge could potentially lead to improved patient outcomes and decreased readmissions.

The purpose of this practice project was to improve nursing knowledge to assist them in recognizing their lack of awareness of cultural sensitivity and how this can affect patients' self-care management. The culturally sensitive health education toolkit assisted nurses in achieving this goal. In addition, participation in the educational process required an understanding of specific terminology, including heart failure, cultural sensitivity, health education toolkit, health care provider, staff education, and African American. It is imperative these terms are understood for clarity in this staff education project for appropriate assessment. Use of the culturally sensitive health education toolkit has the potential to assist nurses in improving patient self-care management and reducing hospital readmission rates. In addition, as the nurses participated in the educational process, they became more familiar with the specific terminology to be shared with

patients. This knowledge improvement mechanism was projected as the gap in practice to be addressed, which should result in improved patient self-care management.

Operational Definitions*:*

African Americans: Black Americans or Afro-American ethnic group of Americans with total or partial ancestry from any of the black racial groups of Africa (Long et al., 2017).

Culture: A set of shared attitudes, values, goals, and practices that identify a particular group of people defined by everything from language, religion, cuisine, social habits, music, and the arts (Zimmermann, 2017)

Cultural awareness: Involves self-examination and in-depth exploration of cultural and professional background; it begins with insight into cultural health care beliefs and values (Bacote & Munoz, 2001).

Cultural sensitivity: Consciousness and understanding of the morals, standards, and principles of a specific culture, society, ethnic group, or race, joined by a motivation to acclimate to such culture, society, group, or race. (Nugent, 2018)

Cultural sensitivity in health care: Being responsive to patients' attitudes, feelings, and circumstances as well as soliciting their preferences and opinions in relation to their health care (Brinkmann, 2017).

Health disparities: Disparities in health care related to race, ethnicity, financial status, and poor self-care behaviors; relationships between these factors are unknown (Sharma et al., 2014).

Health educational toolkit: Equips a practitioner with a step-by-step approach to achieve optimum health (Wu et al., 2013).

Heart failure: A chronic progressive condition in which the heart muscle is unable to pump enough blood to meet the body's need for blood and oxygen; the heart is having difficulty performing properly (Dennison et al., 2011).

Heart failure exacerbation: A sudden or prolonged worsening of a patient's heart failure symptoms, such as increased shortness of breath, mental confusion, lower extremity edema, fatigue, and weight gain (Heart Health, 2018).

Health literacy: The degree to which individuals have the capacity to obtain, process, and understand basic health information and services needed to make appropriate health decisions (IOM, Parker & Kindig, 2006).

Low health literacy: The lack of understanding of basic health information, which increases the risk for readmissions with estimated associated costs of $215 billion in increased annual health care costs (Brega et al., 2015).

Patient adherence: The degree to which patients correctly follow the medical advice or prescribed regimen, whether pharmacological, exercise, or physical therapy (Khalid, 2014).

Self-care: The decisions and behaviors patients with chronic illness engage in, which affect their health (Improving Chronic Illness Care, 2018).

Self-care management support: The care and encouragement provided to people with chronic conditions and their families to help them understand their central role in

managing illness, making informed decisions about care, and engaging in healthy behaviors (Improving Chronic Illness Care, 2018).

Sources of Evidence

Cohn (2006) stated there are minimal African American heart failure trials, which has led to limited data to substantiate the benefit of culturally sensitive health education and how implementation can positively affect African American patients with heart failure. However, evidence-based research repeatedly discussed the need for implementation of culturally sensitive health education to meet the needs of patients. Banks et al. (2016) presented pertinent data on poor health outcomes for African Americans with heart failure due to the lack of culturally sensitive health education, which was the basis for this DNP project. The statistical data revealed that African Americans are 2.5 times more likely to be diagnosed with heart failure than other ethnicities are. Moreover, African Americans developed symptoms 10 years earlier and in a more severe form than other ethnicities (Steele & Steele, 2015).

According to Ong-Flaherty (2015), the lack of self-care management by African American patients with heart failure has been attributed to their lack of culturally sensitive health education and their health care providers being unaware of the need to provide this type of education. Subsequently they experienced more exacerbations than any other ethnicities have (Ong-Flaherty, 2015). Mott-Coles' (2014) study supported the importance of the purpose of this DNP project, which was for nurses to improve their educational knowledge in relation to culturally sensitive health education for their African American heart failure patients, suggesting this could decrease the difficulty this

population is experiencing in implementing self-care management. The focus of this project identified the knowledge gap of nursing practice by addressing it.

The collection and analysis of data potentially exhibit how this knowledge improvement in nursing practice can lead to positive outcomes for patients. The data collection of the pretest assessment identified the gap in the nurses' knowledge and understanding regarding the need to improve their cultural sensitivity in relation to their African American patients. The education session was designed to provide the necessary tools nurses needed to improve their knowledge. The posttest was designed to collect data to show the improvement of the nurses' knowledge and ability to provide more culturally appropriate education. As exhibited in Gaston's (2013) research, the data also provided the basis for additional training and support to encourage continued improvement in the nurses' educational process. The data also provided information to answer whether the nurses experienced an improvement in their nursing knowledge in relation to educational practices to include cultural sensitivity (Gaston, 2013).

The practice-focused question required sources of evidence to address the issue. African American heart failure patients have lacked the education needed to be adherent to self-care management. Gaston (2013) suggested that patients are more likely to be adherent if they are educated appropriately. This adherence can exhibit a change in the patient's self-care management, which was a result of their education.

Published Outcomes of Research

Through a systematic review of the literature, I examined data relevant to the study objectives. The search was conducted through online databases that included

CINAHL, Medline, OVID full-text, Cochrane Library, PubMed Health, and PROQUEST to obtain evidence-based historical research related to the problem. Research studies included peer-reviewed studies published in English within the last 15 years. I searched these databases using specific keywords or phrases: *African Americans with heart failure, cultural sensitivity, patient adherence,* and *health education*. The initial search of *African Americans with heart failure* yielded over 1,400 articles. I used several subtopics to increase specificity in the search, which included *health care providers with culturally sensitive health education,* which yielded 53 articles. *African Americans with health care providers* and *cultural sensitivity* yielded 68 articles, *self-care behaviors of African Americans with heart failure* yielded 17 articles, and *self-care management of African Americans with heart failure* yielded 10 articles. *African Americans with heart failure patient adherence* yielded 15 articles, *African Americans with heart failure* and *health care providers* and *cultural sensitivity* yielded 36 articles. These studies were identified through a manual search for original articles and reviews on the subject found by electronic review, which is to summarize why the practice-focused question here is being discussed.

The literature review signified the importance of determining how lack of culturally sensitive health education has affected self-care management. It exhibited the benefit of nurses improving their knowledge in relation to culturally sensitive health education. The literature review discussed the major barriers that have impeded this population and its self-care management. Furthermore, it exhibited through evidence-based practice that culturally sensitive health education can lead to increased self-care

management and positive outcomes. In addition, the literature review signified that nurses were unaware of their lack of knowledge in relation to cultural sensitivity.

African Americans With Heart Failure

Heart failure is a chronic disease that affects millions of Americans and their families. It affects them physically, emotionally, and financially. However, heart failure has plagued the African American community with a diagnosis rate 4.6% greater than other ethnicities. Physically African Americans have risk factors that are unavoidable. They have genetic predispositions that increase their risk factors for heart failure. Their symptoms usually arrive 10 years earlier than any other ethnicities and exhibit a more severe form, which contributes to their poor outcomes with higher morbidity and mortality rates. African Americans living with heart failure are hospitalized seven to eight times more than Caucasians (Cuyjet & Akinboboye, 2014). According to the literature, this population suffers with disproportionate treatment in health care. They face many barriers such as lack of access, lack of health insurance, delay in diagnosis, lack of self-management skills and lack of culturally sensitive health education (Dickson et al., 2013).

Woda et al. (2015) clearly identified that African American patients with heart failure have poor medical outcomes. Furthermore, this population has a higher re-admission rate, low patient adherence and self-care management rate. This chronic disease requires commitment from the nurse and the patient for positive outcomes. However, if the treatment and education is not provided in an appropriate manner the patient will lose. The patient must recognize that there must be a commitment of self-care

management through adherence to their diet, medication, and symptom management for positive outcomes.

In the evidence, it was discovered that much of their noncompliance correlated with the lack of culturally sensitive health education (Ho et al., 2015). Furthermore, the providers were unaware that they were contributing to their African American patients' heart failure nonadherence. Dickson et al. (2013) discussed the naturalistic decision-making model of heart failure self-care management. Patients make decisions based on their "knowledge, skills and experience." The patients cannot make appropriate decisions to follow their self-care plan, if they are not given the necessary tools to be adherent and independent in their care. Evidence from Mitchell et al. (2011) concluded that health care providers lack the knowledge of cultural sensitivity when educating their patients and they were unaware of how African Americans are affected in health care. The evidence suggested that patients who receive health education have improved outcomes. This practice fostered improved patient self-care management as well as allowed the patient to understand the education needed to participate effectively in their self-care. Furthermore, it discussed why it was so important to improve the knowledge of the provider in order to provide this appropriate education (Gross et al., 2013).

Sharma et al. (2015) suggested these issues of lack of culturally sensitive health education, health inequities, delay in treatment, lack of access, lack of trust in health care and misdiagnosis as major contributors to these poor outcomes. Another correlating factor was the diagnosis of hypertension, which increases their risk factors tremendously.

According to the literature, these factors contributed to the patient outcomes of the African Americans with heart failure (Gross et al., 2013).

This population frequently experience exacerbation of this disease and/or readmission to the hospital more than any other ethnicity. The literature contributed these statistics to their lack of relatable or culturally sensitive health education. According to the evidence, an educational intervention was needed to address this gap in nursing practice (Debiasi & Selleck, 2017).

Gap in Literature

The gap in literature addressed the fact that there were many contributing factors for African Americans patients being nonadherent to their treatment plans. A major factor was how their health education was presented. The literature discussed that patients were unable to relate to the education provided by the nurses because they did not understand it (Banks et al., 2016). There is limited evidence-based research of culturally sensitive health education developed for African Americans with heart failure, but minimal utilization of culturally sensitive health education for African Americans with heart failure exhibits positive outcomes. However, nurses were unaware of how the lack of cultural sensitivity in health education was negatively impacting their patients. But, African Americans have been impacted by the negative history of health care, which has led to lack of trust, which affects their willingness to be adherent, especially when the nurses were not culturally sensitive with the education (Woda et al., 2015).

According to the literature, presenting relatable health education was by utilizing cultural sensitivity (Yilmaz et al., 2017). It has been noted that patients cannot relate

because the education is not culturally sensitive. Hofstede's cultural dimensions encourage meeting the needs of the patient, it must be patient-centered care. Therefore, the nurses need to understand how to provide patient-centered care, which begins with becoming culturally aware (Minkov & Hofstede, 2012). This required improvement in nursing knowledge of cultural sensitivity. Unfortunately, nurses were unaware that the lack of knowledge of cultural sensitivity has such a negative impact on their patient outcomes. They lacked this historical cultural knowledge and its correlation to how African Americans view health care. Many were not aware of the trust factor as it relates to the patients' self-care management. All these negative indicators impacted the nurses' ability to educate the patients so that their self-care management improved in addition to long-term effects of patient outcomes and patient-provider relationships (Dupre et al., 2017). To see a change in patient outcomes, the provider must become culturally aware to recognize the need for improvement in their education of cultural sensitivity. This practice improvement in nursing knowledge can lead to an improved provider-patient relationship, establishing trust within the health care provider and increased self-care management (Conway-Klaassen & Maness, 2017).

Callejo and Geer (2012) discussed that in health care, many health care providers were not aware, therefore, they were not culturally sensitive to the population they served. In their article, a study incorporated the dietary significance of increased mercury in their patient education. However, the health care provider did not ensure the population was educated effectively about how fish can increase mercury in their bodies. The education was negated because the health care provider did not understand their

population's diet. However, if the providers were culturally sensitive and/or culturally aware of this information, they would have noted the significance and provided the culturally sensitive education needed for this at-risk population, about mercury in fish (Callejo & Geer, 2012).

When the improvement in nursing knowledge was provided, it allowed the nurses to become culturally sensitive, which can result in the exhibition of open-minded, cultural awareness and understanding of other ethnicities. This improvement of nursing knowledge can certainly facilitate education and communication appropriately. The literature stated that these types of educational programs lead to safe practice and safe health care interventions, which aided the provider to intervene appropriately to meet the patients' needs (Callejo & Geer, 2012).

Hofstede's cultural dimensions focused on power distance and individualism to guide the framework of this DNP project, which discussed the importance of the implementation of culturally sensitive education. This theory has been used and emphasized as the only way to provide patient-centered care internationally in the health care field (Borisova et al., 2017). Hofstede's theory also provided a clearer understanding of how the lack of cultural awareness affected patient outcomes. Therefore, the nurses' education was only as effective as the providers' awareness of their cultural sensitivity and cultural awareness, which also affected patient outcomes (Minkov & Hofstede, 2012). The theory emphasized the importance of the nurses being educated in relation to the minority population they served as well as being aware of their own culture, before they can begin to recognize and/or respect another person's culture. It assisted in the

development of awareness of one's own cultural awareness, which was needed to recognize the lack of cultural awareness and sensitivity (Borisova et al., 2017). For instance, power distance was about social status and individualism, which focused on self. It was believed that society encompassed equality amongst everyone, but your outcomes were based on your choices. Therefore, someone facing inequality is incomprehensible. This theory fostered the need for a provider-patient relationship, which focused on patient-centered care and communicated the educational message effectively, which was needed for improved patient outcomes. This model related to the need to improve the knowledge of cultural sensitivity in nurses who educate African American patients with heart failure (Matusitz & Musambira, 2013). Therefore, this project addressed the lack of knowledge of the nurse, the improvement and benefit of nursing knowledge and the exhibition of evidence-based research.

Background Need To Develop The Toolkit

Although, there is a prescribed and evidence-based practice treatment plan for heart failure, this population continues to have poor outcomes. According to the literature, they are still having difficulty with the treatment plan because the education presented to them is not relatable; therefore, their needs are not being met (Chaudhry et al., 2011). The practice guidelines that have been established are usually not culturally sensitive to the African American population, which leads to continued patient nonadherence. These standards are generally established by evidence that has been obtained with insufficient minority representation. Therefore, this is a continued

exhibition of unequal and disproportionate evidence-based practice, which limits the validity in relation to African American patient outcomes (Mott-Coles, 2013).

Hofstede's cultural dimensions asked nurses to change how they provide care to their minority patients. This required them to provide well-rounded care (Matusitz & Musambira, 2013). However, the nurses must become aware of their own cultural bias before they can be open to accepting education-related cultural sensitivity and cultural awareness of another group. This doctoral project addressed the gap in the nurses' awareness and helped them using the health education toolkit, to improve the education being provided to the African American patients with heart failure.

The Need To Develop The Toolkit

The toolkit was an educational packet designed specifically for the nurses of African American patients with heart failure. This educational device for the African Americans with heart failure included diet, symptom management, medication, exercise regime, weight management and provider management, but with a culturally sensitive focus. Therefore, it included a simplified plan for the population it will serve. For instance, the plan included alternatives of herbs and spices for substitutes of salt and/or sodium. The medication plan has simplified examples and schedules to improve adherence and understanding. Furthermore, to encourage exercise, the plan included dancing which was relatable and fun for this population. It also included a simplified symptom management system, which included instructions of when to call the provider, calendars, and weight management. This allows the population to understand the treatment plan in a manner they can follow.

Goals Of The Toolkit

There were several goals of the toolkit, which included a better method, nursing knowledge and benefit of the toolkit, and commitment of the nurses. First, it provided a better method for the nurses to assist the patients to understand the seriousness of their disease and to understand the need to improve self-care management. This outcome was based on evidence-based practice, when patients were educated in a manner they can relate to, they recognized the seriousness of their disease, therefore they improved their self-care management behaviors (Gross et al., 2013). Second, the toolkit encourages the improvement of nursing knowledge of nurses. The literature stated that for improvement in patient behavior there must be an improvement of the nurses' education to facilitate the needs of the patient. Most nurses were concerned about the outcomes of their patients, therefore, once the impact had been acknowledged and the benefit recognized a change was usually initiated (Lee, Moser, Pelter, Nesbitt & Dracup, 2017). Third, the toolkit encouraged commitment of the nurses to implement this education when working with other ethnicities. Each study exhibited positive outcomes based on meeting the cultural needs and educational needs of the patients. This related to African Americans with heart failure needing this type of education to understand. However, the provider has been educated on the importance of culturally sensitive education for their patients.

The evidence included outcomes from various ethnicities such as African American, Latino, Asian and Caribbean immigrants. It exhibited how patients are affected by the lack of culturally sensitive health education. Gross et al. (2013) discussed a study exhibiting the outcomes of a culturally sensitive educational program for the

African American antihypertensive regime. The study was guided by the theory of planned behavior, which included an individualized education program that was established with the focus to determine the patients' behavioral beliefs in relation to hypertension and its treatment. This plan incorporated the promotion of independent beliefs by exhibiting respect, but also including factual information. In addition, the plan recognized the importance of assessment of the patients' knowledge, literacy, and culture, which was utilized to create the teaching interventions needed for the treatment plan. The study outcomes found the implementation of culturally sensitive education lead to increased knowledge, communication with the provider and increased trust, and improved adherence by the patient. It clearly stated that regardless of the ethnicity, the nurse must be able to provide culturally sensitive education, to have the most effective outcomes (Gross et al., 2013).

A study that discussed the concern of Chinese Americans developing diabetes at an alarming rate recognized a significant issue of nonadherence to their diabetic self-care management. It exhibited the importance of providing culturally sensitive, printed patient education materials to Chinese Americans with diabetes. The patient education was specifically designed to incorporate language, pictures, food, and exercise that were culturally sensitive and culturally appropriate for this population. The education included examples of how to gauge their food portions utilizing bowl measurements. Also, their exercise was in the form of Tai Qi, which was meant to exhibit education designed specifically for this population. The goal of the study was to provide culturally sensitive, relatable education to the population to improve their patient adherence (Ho et al., 2015).

The implementation of culturally sensitive care was exhibited with Mexican Americans being diagnosed with a higher rate of cancer in the later stages. In this study, the implementation of culturally sensitive health education changed how the patient education was being delivered. The focus was determining how to meet the needs of the patients, therefore recognizing the barriers of culturally sensitive care. There was an emphasis placed on language, diverse providers, beliefs, and literacy because these were noted barriers of culturally sensitive education for this population. As a result, the patients felt the culturally sensitive education was respectful, responsive, and focused on providing what they needed, which changed their response to adherence (Cagle & Wells, 2017).

Development of the Culturally Sensitive Toolkit For African American Patients With Heart Failure

The development of a culturally sensitive toolkit as a means of providing appropriate patient education for the African American population with heart failure was projected as the method that is needed to help improve their overall health and to improve self-care management. Based on research over the past 20 years, it has been documented that the provision of culturally sensitive education for patients suffering from other medical conditions has resulted in improved self-care management. It also exhibited that if health education was culturally sensitive for any ethnicity; it would exhibit improved outcomes. Once the nurses' experience improves knowledge, it can assist them with improving their self-care management. Also, the development of this culturally sensitive

toolkit was devised to assist the nurses when educating their African American heart failure patients (Wallace et al., 2007).

According to the literature when a nurse has implemented culturally sensitive health education, they are improving their provider-patient relationship and safe practice. This evidence-based practice was based on the patients' ability to understand the conversation about how to care for themselves effectively (Song et al., 2012). The toolkit utilized in this doctoral project was previously created for African American heart failure patients. This educational device addressed the basic issues of cultural sensitivity and literacy levels of African Americans. It conveyed basic instructions for the client to participate in their self-care management. Therefore, it fostered the adoption of change in health education by the nurse. Hofstede's cultural dimensions guided the framework of this implementation of culturally sensitive education.

Callejo and Geer (2012) discussed a study of health education being disseminated to pregnant females. The study utilized the health belief model. The concept targeted a change in behavior by creating effective communication strategies. This study believed that if the health care provider did not effectively communicate to the population, there would not be any change in behavior. The health care provider identified culturally appropriate strategies to communicate the education to the population of Caribbean immigrants. They needed to identify the risk factors by understanding the population and in this case their dietary habits. The issue was elevated mercury levels in pregnant Caribbean women in Brooklyn. It was determined that this population's diet consisted of fish with high levels of mercury. Therefore, the educators devised an educational plan to

address the pre-pregnant and pregnant Caribbean women in the community. The health care providers were unaware of the issue and the education needed for this population. They did not understand how this issue needed to be addressed, but the health care provider recognized the strategy to communicate the risk of mercury exposure to the population effectively by the incorporation of culturally sensitive education, which was important when utilized by the right people and the right way (Callejo & Geer, 2012).

In a hypertension study for Latinos, there was utilization of social cognitive therapy and the stages of change to exhibit when to incorporate cultural sensitivity, which elicited the improvement of health behaviors. This study emphasized the incorporation of cultural sensitivity interventions that assisted the patients with self-care management. It also exhibited that once the providers are educated; they can guide patient behaviors and development of skills to improve self-care management (Rocha et al., 2010).

This hypertension study incorporated lifestyle behaviors when recognizing change in health behaviors. The goal was to change self-care management of heart failure patients with interventions and cultural adaptions. The toolkit conveyed interventions specifically designed to assist the patient to regulate behaviors correctly, provide skills to change behavior, which adapts necessary dietary changes and develops plans to change behaviors. It exhibited the benefit of cultural adaptation, such as in the study of Latino patients incorporating recipes and/or the physical activity of dance. However, it was imperative for the nurses to understand the diet of their African American patients, to adequately intervene through education. Furthermore, the encouragement of exercise through dance can relate to this population more effectively (Rocha et al., 2010).

These studies exhibited the importance of the need to develop evidence-based practice of culturally sensitive health education, which benefits each ethnicity. The toolkit has incorporated a portion of each of these studies that exhibits the benefits of cultural sensitivity. In each ethnicity, the evidence-based practice focused on how education can be relatable to the specific patient population. It recognized that their culture must be incorporated in the health education. The significance of nurses being culturally sensitive, culturally aware, and culturally educated is needed, to provide the necessary education for the needed communication that must transpire between the patient and the nurse. Although there are limited studies on culturally sensitive health education, each study exhibits positive patient outcomes, therefore, this educational device has the same potential (Gaston, 2013).

The Attitude Of The Nurse Accepting The education In Relation To Communicating Effectively With Patients

Nurses have been educating their African American patients without the information needed for their treatment plan. They were unaware of the history of African Americans' experience in health care. Therefore, they did not recognize that there was an issue that could affect how they communicated and educated their patients, which also affected their relationship and their trust. This experience has affected their patients' self-care management. The lack of appropriate education or culturally sensitive education impeded the effectiveness of their outcomes (Bryant, 2017). It is important for the nurses to improve their nursing knowledge in relation to cultural sensitivity. The literature exhibited cultural sensitivity as one of the most effective ways to educate African

Americans with heart failure as well as other ethnicities. The presentation of evidence-based research to the nurses to assist in the recognition of the need to effectively educate their African American heart failure patients was required for improvement in their nursing knowledge. However, nurses want their patients to improve in self-care management and patient outcomes; therefore, they are willing to improve their education in relation to cultural sensitivity (Papadakos et al., 2014).

Barriers To Development Of Effective Communication Procedures

There are barriers to the development of effective education and communication that are based on the nurses' lack of knowledge in relation to their cultural incompetence. Hofstede's cultural dimensions discussed the lack of cultural competence in health care. This cultural incompetence has led to nurses being culturally unaware and culturally insensitive, which was a major barrier to effective communication and education with their patients (Borisova et al., 2017). Once the nurses recognize, accept, and implement an educational process to improve their nursing knowledge in relation to cultural insensitivity, this removes barriers for appropriate development of culturally sensitive education. Also, this can impact the removal of the patient barriers that affected their receptiveness to their educational response. However, if the nurses recognize and provide the education including cultural sensitivity, it will begin to remove these barriers of the population's disproportionate, inequitable, and misinformed health care (Debiasi & Selleck, 2017).

Evidence Generated for the Doctoral Project

The nurses participated in a three-part education process: (a) the pretest, which assessed the knowledge base of the nurses and helped the trainer know where the educational process needed to begin; (b) introduction to and education on the use of a culturally sensitive toolkit; and (c) the posttest, which assessed the depth of understanding by the nurses. The evidence-based practice that was generated for this doctoral project included the culturally sensitive educational toolkit provided to nurses for African American patients with heart failure. This toolkit represented a different type of health education, which was culturally sensitive specifically to relate to the African American heart failure patients.

The participants included nurses who work with African American heart failure patients within a heart failure clinic. These providers included a combination of nurses, advanced practice nurses, and nurse case managers; who are involved in the treatment of heart failure patients. The nurses' specific focus was to provide culturally sensitive education to African Americans with a diagnosis of heart failure and frequent exacerbations. The data to answer the project question was obtained using the cultural awareness and sensitivity tool (CAST). This tool measured the knowledge of cultural sensitivity and cultural competency of the nurses.

The goal was for nurses to improve their nursing knowledge of culturally sensitive health education for heart failure patients. They were chosen due to being invested in providing education that can change their African American heart failure

patients' outcomes. This accomplishment of the collected data was to exhibit the improved knowledge of the nurses.

A pretest-posttest design was used to answer the project question. This design utilized the Hofstede theory, which assisted in identifying the current practice problem. CAST was designed to assess cultural awareness and sensitivity. This tool assisted participants in determining their need to change educational practices in relation to cultural sensitivity. Judgements are made based on evidence-based research and evidence-based practice, which allowed for the suggestion of improved outcomes through the improvement of nursing education in relation to the current practice of patient education (Grove, Burn & Gray, 2012).

Data was obtained using a pretest and posttest knowledge assessment tool. The pretest was completed prior to the educational session and the posttest after the education session to determine if the practice-focused question was being addressed or obtained. This educational session commenced during a staff meeting with specific instructions in relation to the assessment knowledge test. This test was obtained using the Likert scale to determine the data for cultural sensitivity.

An institutional review board (IRB) approval was obtained from Walden University. The participants were given the option to participate. They received an information session in relation to the study to encourage participation. In addition, they were asked to complete a consent form prior to the beginning of the educational process. The participants received a pretest prior to the educational session and a posttest after the educational session, which consisted of CAST. This tool includes 25 questions with focus

on cultural sensitivity, cultural awareness and ethnic and/or racial backgrounds. The measurement device is a Likert scale with descriptors of ‘strongly agree, agree, neither disagree and strongly disagree. It was presented in a Likert scale format of assessment. The data was collected and the statistical package for the social science (SPSS) software IMB statistics 25. SPSS was used to determine the statistical results. According to literature, the tool has high reliability and moderate internal consistency (Pasricha, 2012). CAST assessed the cultural awareness and sensitivity of the participants. There are no restrictions demonstrated for this tool.

The nurses’ knowledge and views were kept confidential. Their willingness of whether they understood the need and/or will improve their knowledge was kept confidential. This project utilized pre- and post-knowledge assessments to collect the evidence. The test results potentially assist the nurses to understand the need for education and implementation.

Analysis and Synthesis

The project required collection of data. The utilization of the statistical package for the social sciences (SPSS) software IMB statistics 25 organized and interpreted the data. The integrity of this project was obtained through evidence-based research, which verified the data obtained by the DNP student. Also, the education was presented by the DNP student, utilizing culturally sensitive evidence-based practice and evidence-based research materials. The outcomes demonstrated a potential change in nursing knowledge, which addressed the practice problem and practice-focused question.

The DNP project design was followed, to account for the concept definition and operational definition to encompass the entirety of the data collection. The pretest was administered before the educational session was provided. The posttest was administered after the education session. The pre- and posttests were submitted into the SPSS software. The Likert scale format of the assessment was utilized. The change in the pretest and posttest scores exhibited a potential change in knowledge and/or the need to improve knowledge in relation to cultural sensitivity with the health education toolkit. The tool used was CAST, which was previously created with strong incorporation of the Inventory for Assessing the Process of Cultural Competence Among Healthcare Professionals-Revised (IAPCC-R). This tool incorporates themes of cultural competence, which include awareness and sensitivity. It incorporates these themes with behavioral interactions. Also, this tool was designed to measure cultural knowledge. According to the outcome data reported, this was a reliable and valid tool (Pasricha, 2012). The only data utilized for the final analysis was from nurses who completed all stages of the packet. This was also to ensure the validity and reliability of data collection (Pasricha, 2012).

Summary

African Americans with heart failure suffer disproportionately with this chronic disease. Nurses lacked the knowledge to implement culturally sensitive health education to assist in the changes for positive outcomes. This DNP project addressed this problem through education of the nurses about their lack of knowledge and encouraged their improvement of knowledge by exhibiting the benefit of implementing a culturally sensitive health education toolkit for African Americans with heart failure. Furthermore,

this project utilized evidence-based practice and evidence-based research to exhibit the validity of this change in practice. The focus of section 4 includes the outcome of the project as well as potential recommendations. It discusses whether nursing knowledge was increased with culturally sensitive health education in relation to self-care management. Furthermore, the section determines if the project answered the practice question of whether health care providers of African American heart failure patients benefit from utilizing a culturally sensitive health education toolkit. The findings exhibited the implications and assisted with recommendations in relation to culturally sensitive health education.

Section 4: Findings and Recommendations

Introduction

Currently, heart disease affects one in three Americans (Cohn, 2016), and nine out of 1,000 African Americans will develop heart failure. Their experience is an earlier onset of heart failure, which leads to increased rates of hospitalizations, earlier disabilities, and increased rates of mortality (Woda et al., 2015). African American patients are least likely to follow the self-care management education provided prior to hospital release due to the lack of culturally sensitive health education and their lack of education, which is a result of low literacy rates (Vuckovic et al., 2016). Ong-Flaherty (2015) stated that self-care management improves when African American patients receive culturally appropriate health education.

The gap in practice for this project is that nurses are unaware of their lack of knowledge of cultural sensitivity, which has a negative impact on their patient outcomes. They lack historical cultural knowledge and its correlation to how African American patients view health care. Unfortunately, they are unaware of the trust factor as it relates to patient self-care management. All these negative indicators impact nurses' ability to educate patients, which affects patients' self-care management and patient-provider relationships (Dupre et al., 2017).

The practice-focused question asked is whether nurses of African American patients with heart failure would use a culturally sensitive health education toolkit to increase self-care management. The purpose of this project was to develop knowledge improvement for nurses who provide care to African American heart failure patients. A

culturally sensitive health education toolkit was developed for use by the nurses to improve their patient self-care management and to exhibit to the nurses how to communicate more effectively with their patients. This project can promote social change for African American heart failure patients through health improvement and decreased expenses in relation to health care costs due to treatment.

Summary of Sources of Evidence

Cohn (2016) stated that there have been minimal African American heart failure trials. Thus, limited data exists to substantiate the benefits of culturally sensitive health education and implementation, which could affect African Americans with heart failure. Research published in the *Journal of Cultural Diversity* has presented data on poor health outcomes for African Americans with heart failure due to a lack of culturally sensitive health education. Steele and Steele (2015) reported that African Americans are 2.5 times more likely to be diagnosed than other ethnicities and they develop symptoms 10 years earlier. A lack of self-care management among this patient population can be attributed to the lack of provision of culturally sensitive health education. Furthermore, health care providers have been unaware of the need to provide this type of education (Ong-Flaherty, 2015). Mott-Coles (2014) supported the idea of nurses improving their educational knowledge in relation to culturally sensitive health education. Such knowledge improvement for nurses treating African American patients with heart failure could decrease their difficulty implementing self-care management. This project identified the knowledge gap in nursing practice and sought to address it.

The collection of data could potentially exhibit how this knowledge is important in nursing practice and patient outcomes. For this project, I conducted an educational session designed to provide the necessary tools to the nurses to improve their knowledge. Prior to the educational session, participants were required to complete a pre assessment survey, and upon completion of the educational session, participants completed a post assessment survey. These data were collected to assist in identifying the potential gap in nursing knowledge and to improve nurses' cultural sensitivity in relation to African American patients. The data were assessed to see whether the participants experienced an improvement in their nursing knowledge on their educational practice, including culturally sensitive education (Gaston, 2013). The surveys were electronically administered through Survey Monkey. The data were input into SPSS version 25 for analysis to determine the outcome results.

Findings and Implications

This DNP project used a pre-education and post education design to assess improvement in nursing knowledge on culturally sensitive heart failure education for African American patients. The framework for this project was guided by Hofstede's cultural dimensions, which focus on nurses providing culturally appropriate patient-centered care to overcome health care providers' tendency to be culturally unaware (Minkov & Hofstede, 2012). CAST was used to answer the project question. A 1.92% improvement in the participants' responses from pre- to post-education indicated a change in knowledge. The educational toolkit included in this project was developed using evidence-based heart failure guidelines. The evaluation tool to assess the project

question was CAST. This project provided participants with a heart failure education presentation and assessed knowledge of cultural sensitivity before and after the educational session. This project included a presentation and discussion of the evidence supporting the culturally sensitive heart failure education toolkit via PowerPoint and additional resources (Appendix B and Appendix C).

Participants in the program included registered nurses, advanced practice nurses, and nurse case managers (two men and nine women). Although 21 invitations were extended for nurses to participate, and 20 nurses attended the educational session, only 11 pre assessment and 10 post assessment test responses were completed. The criteria to participate in the project outcomes required the participants to: (a) complete the pre-assessment survey, (b) attend the educational session, and (c) complete the post-assessment survey.

The practice-focused question for this educational program asked whether nurses treating African American patients with heart failure could use a culturally sensitive health education toolkit to improve their patients' knowledge of self-care management. The project question was evaluated by a comparison of the pre- and post-knowledge data obtained from CAST, revealing a 1.92% improvement in the knowledge of the subjects in this project (See Table 1).

Table 1

Pre-post Knowledge Assessment

Question	Pretest N=11	Posttest N=10
1	51	48
2	51	48
3	21	31
4	53	48
5	36	42
6	50	47
7	51	47
8	23	33
9	40	28
10	43	42
11	44	37
12	49	43
13	48	44
14	49	35
15	54	44
16	39	46
17	47	44
18	39	38
19	47	43
20	49	38
21	29	30
22	41	37
23	43	37
24	49	40
25	41	42
Total	1087 = 79.04%	1012 = 80.96%

The data suggest a 1.92% overall change in the participants' responses. This represents a change in the pre- and post-assessment knowledge after the educational session. This number is representative of an overall knowledge improvement of the participants in the cultural sensitivity project and is a measurement of their increased understanding of cultural sensitivity. The education represents the potential to influence

nurses' cultural sensitivity and cultural awareness. The outcome data can potentially increase patient outcomes through increasing their self-care.

Several factors may have contributed to the small improvement in outcomes. First, there were a small number of responses. Additionally, participants only received one education session; their knowledge may have increased improvement with additional education sessions. Lastly, the nurses were initially unclear of how cultural sensitivity and heart failure had a correlation, but once the presentation began, they were able to recognize the connection.

Table 1 has the pre- and post-assessment responses, which show the changes in participant responses. Appendix D shows outcome data of each question in detail (Table D1 through Table D25). The data collected in this project is presented below. The CAST included 25 questions and assessed the cultural sensitivity and cultural awareness of the participants. (Appendix A). The participants' responses could be (a) strongly agree, (b) agree, (c) neither, (d) disagree, or (e) strongly disagree.

Some of the participants' responses exhibited changes after the educational session, revealing an increase in knowledge. The outcome data from the pre-assessment and post assessment revealed an overall 1.92% difference, indicating a 1.92% increase in knowledge. A more detailed assessment of the individual question results in the data demonstrated some interesting differences, as there were specific questions with a higher improvement. After the educational session, the participants demonstrated change through improvement of knowledge or recognizing their lack of knowledge. These questions exhibited a potential change in their increase in knowledge. The questions were

sectioned into three categories: culture, communication, and influence. The categories demonstrated change in percentage responses in the pre-assessment and post-assessment knowledge test, which can potentially reflect an increase in nursing knowledge or the need to increase nursing knowledge in relation to cultural sensitivity and/or cultural awareness. These categories exhibited assessment of whether the intended purpose of the project was accomplished.

Culture

There were several questions specifically relating to culture, which assessed the nurses' thoughts and beliefs on culture. Questions 3 and 9 exhibited 8% and 9.6% change respectively, in knowledge in relation to culture after the educational session. This increase potentially exhibited the nurses' recognition of the importance of culture in relation to educating patients. Furthermore, there is a need for culture to be primary when formulating education and interactions with patients. In Question 14, there is an 11.2% change in relation to cross-cultural barriers. This change infers that if the nurses are educated in cultural awareness, this can decrease the barriers. These potential changes in interactions with the patients may be based on factors such as race, culture, comfort level, beliefs, cultural group differences, norms, and health care. These are the nurses' views and potential challenges that they may have experienced in relation to culture. This potentially affects their interpretation of how their knowledge base impacts their interaction with patients. The outcome data potentially demonstrates a focus of the project, which was an increase in their nursing knowledge in relation to cultural sensitivity and cultural awareness. In each of these questions, a significant change in

relation to the importance of culture, the level of integration and the barriers was signified in the nurses' response. Tables 2, 3 and 4 exhibits the pre-assessment and post-assessment test results in relation to culture that have been previously discussed. This table represents the change in knowledge about culture.

Table 2

Pre-post Assessment Test Results for Culture, Question 3

Responses	Pretest N=10	Posttest N=10
Strongly Agree	0	2
Agree	1	2
Neither	1	1
Disagree	6	5
Strongly Agree	2	0
Total	21	31 = 8% improvement

Table 3

Pre-post Assessment Test Results for Culture, Question 9

Responses	Pretest N=11	Posttest N=10
Strongly Agree	1	1
Agree	0	4
Neither	3	1
Disagree	5	4
Strongly Agree	2	0
Total	40	28 = 9.6% improvement

Table 4

Pre-post Assessment Test Results for Culture, Question 14

Responses	Pretest N=11	Posttest N=10
Strongly Agree	6	3
Agree	4	3
Neither	3	1
Disagree	0	2
Strongly Agree	0	1
Total	49	35 = 11.2% improvement

Communication

These questions related to the participants' interaction with patients based on their cultural perspectives. In Table 5, which includes Question 15, there was an 8% change, which exhibits their ability to recognize the communication of nonverbal cues. This question signifies the nurses' lack of importance of the recognition of nonverbal cues. Furthermore, in Tables 6 and 7, which includes Question 8 and 20, there was an 8% and 8.8% change in responses, respectively. This demonstrates recognition by the nurses for need of additional education on how to communicate with their patients in a culturally aware or culturally sensitive manner. Table 3 demonstrates the results of the assessment test. It represents the knowledge change based on the importance of communication in health care.

Table 5

Pre-post Assessment Test Results of Communication, Question 15

Responses	Pretest N=11	Posttest N=10
Strongly Agree	6	4
Agree	5	6
Neither	0	0
Disagree	0	0
Strongly Disagree	0	0
Total	54	44 = 8% improvement

Table 6

Pre-post Assessment Test Results of Communication, Question 8

Responses	Pretest N=11	Posttest N=10
Strongly Agree	1	2
Agree	0	3
Neither	2	1

Disagree	4	4
Strongly Agree	4	0
Total	23	33 = 8% improvement

Table 7

Pre-post Assessment Test Results of Communication, Question 20

Responses	Pretest N=11	Posttest N=10
Strongly Agree	6	2
Agree	4	6
Neither	1	0
Disagree	0	2
Strongly Disagree	0	0
Total	49	38 = 8.8% improvement

Influences

The nurses exhibited a 7.2% change in the comfort level of the lack of culturally sensitive colleagues demonstrated in Table 8. These influences are direct effects of belief systems. This could potentially change the need to continue to improve their cultural sensitivity and/or cultural awareness education. Table 4 demonstrates the assessment outcomes in relation to influence. It represents the comfort level of colleagues and culture as well as the changes sustained after the educational session.

Table 8

Pre-post Assessment Test Results, Question 24

Responses	Pretest N=11	Posttest N=10
Strongly Agree	6	4
Agree	4	4
Neither	1	1
Disagree	0	0
Strongly Disagree	0	1
Total	49	40 = 7.2% improvement

Survey Limitations

The surveys had a low response rate of approximately 50%. The difference in the response rates in relation to the pre-assessment and post-assessment rates may have affected the outcomes. Therefore, the outcome data may not have exhibited the complete impact of the educational session. Some of the nurses had difficulty relating heart failure to cultural sensitivity because they were unaware of their lack of knowledge but once the education session began; they exhibited some understanding and/or correlation. However, one educational session is only introducing them to a different way of educating their patients. Also, there are limited cultural sensitivity surveys to utilize or relate to, for this project.

Organizational Limits

There were some organizational limits, which affected the participants' responses. The surveys were sent electronically but were initially viewed as spam, which affected the initial responses. The nurses had difficulty assessing the surveys; therefore, they deleted the survey prior to the educational session. More nurses attended the educational session than participated in the surveys; therefore, their assessments were not included in the analysis. Although, there were some organizational limits that affected the response, there was still participation from the nurses in the surveys.

Implications

The implications of this project exhibited the need for improving nursing knowledge in relation to cultural sensitivity and cultural awareness. This was exhibited through the outcome data, which represented an increase in knowledge after the

education session. The percentage increase in knowledge was small and it could be because there was only one education session. This suggests the potential for additional educational sessions for continued knowledge improvement.

The survey responses suggest the nurses recognized the need to respect and incorporate culture in their practice. Furthermore, the nurses recognized the importance of communication with patients from various cultures to provide culturally sensitive education. They also recognized how their influence may have affected their cultural sensitivity.

This project contributes to positive social change by exhibiting the importance of improving nursing knowledge of cultural awareness and/or cultural sensitivity health education for African American heart failure patients. The outcome data suggest that there is a need for continued education for nurses due to the lack of nursing knowledge in relation to cultural sensitivity and cultural awareness. The inference that cultural awareness and/or cultural sensitivity are important in health care education should be addressed in relation to other chronic conditions as well.

Recommendations

The findings elicited continued education of cultural sensitivity and cultural awareness of staff. The staff was unaware of their cultural insensitivity in some areas. The clinic could incorporate a heart failure toolkit within their clinical practice to improve self-care of African American heart failure patients. There is a need for further analysis of the heart failure educational toolkit to determine continued change in behavior in relation to incorporating cultural sensitivity within their clinical practice. Also, the

clinic exhibits a need for ongoing education in relation to cultural sensitivity and awareness. The change in practice would begin to address the gap in nursing practice, in regards to cultural sensitivity and cultural awareness within this facility.

Contributions

The doctoral project could not have been completed without the participation of the nursing staff within this heart failure clinic. This participation assisted with the data collection that occurred during the project. The project team assisted in supplying the necessary feedback needed to determine if the practice question was addressed. The nurses participated through electronic surveys and education sessions. The team was limited only to nurses who worked with heart failure patients. They were supportive and receptive to the education sessions. There were valuable outcomes that elicited the need for improving team knowledge in relation to cultural sensitivity in regards to pharmacology and communication.

Strengths and Limitations

Strengths

The focus of this project was to determine if a heart failure toolkit could improve the nursing knowledge by providing culturally sensitive heart failure health education for African American patients. The first strength was improving nursing knowledge since there is limited literature on cultural sensitivity and African Americans with heart failure. This was education provided to the nurses, which is a topic of interest due to their specialty in heart failure. Furthermore, it addressed a gap in education and nursing practice. The second strength was providing a health education toolkit for the participants

during an education session. It provided a framework for the nurses to utilize, to incorporate cultural sensitivity. The third strength was assisting the clinic to improve their patient outcomes. This project has the potential to assist the clinic to improve their outcomes. The fourth strength was the education session provided with resources and presented by the DNP student, which was completed succinctly. The surveys were completed electronically via Survey Monkey. The pre- and post-assessment surveys were anonymous.

Limitations

There was a small sample size, which included a 50% response rate. The small sample size also potentially affected the determination of the outcome of the project. Some of the participants did not complete the pre-assessment survey, which could potentially affect the outcome data. Although all participants received the education, it is a possibility that different nurses completed the pre-assessment and post-assessment surveys. There was no way to match the surveys due to the anonymity of the participants within the project. Furthermore, this factor may have impacted the outcome data. There was some delay in the participants completing the post assessment, which could have affected their responses. To potentially avoid the delay in response, offering a paper option to the participants may have been helpful. Also, to offer a paper option prior to the education session to ensure completion of the survey may have improved the response rates pre- and post the educational session.

Section 5: Dissemination Plan

The dissemination of these project findings in an appropriate manner is imperative. Therefore, the communication of the findings must be presented to the project team. A presentation of the project outcomes will be presented to the nursing leadership. Although their outcomes have improved, it has been a costly solution. Therefore, the leadership is interested in making improvements in their patient education and patient outcomes, but in a more efficient way.

The findings of the project recommendations will be made available to the leadership and the project team to provide positive assistance and support the development of a plan needed to change the educational practices of the institution. The dissemination plan will be formulated by the leadership, the project team, and the DNP project presenter to incorporate the use of the health education toolkit into practice by the nurses. Therefore, there must be an evaluation method for the health education toolkit implemented to determine its effectiveness.

This project's information could be beneficial throughout the health system of the clinic. The heart failure clinic was designed as an attempt to improve patient outcomes in the hospital and the community. The facilitation of disseminating a different education model for African American heart failure patients in the health system could elicit a positive impact. The incorporation of educational models that draw from cultural sensitivity could be beneficial to the health system staff working with patients from multiple cultures and ethnicities.

The dissemination of this project through written documentation in professional journals, describing the background of the study and resulting improvement in patient compliance as the result of the providers' use of the health education toolkit would be beneficial to the larger health care community. Although this project was designed to address the needs of African American patients suffering from heart failure, the model of designing a health education toolkit can easily be replicated for other diseases and patient populations and can be communicated to health care professionals at all levels.

Analysis of Self

The focus of the project was to educate other nurses about cultural sensitivity in relation to heart failure and the African American population. This project was designed to increase the knowledge of heart patients and reduce the number of hospital readmissions through the development of a health education toolkit. Nursing professionals were taught the importance of understanding their patient population and being able to communicate effectively with patients culturally or ethnically different from themselves. The overall goal was to improve the outcomes for African American heart failure patients.

Scholar

As a scholar, this project required vast research of the topic. Evidence-based research and evidence-based practice were used throughout the creation and implementation of this project. As a scholar, I was able to increase nursing knowledge regarding cultural sensitivity and African Americans with heart failure. This evidence-

based research has the potential to improve outcomes for African Americans with heart failure.

Practitioner

As a practitioner, I was able to use my scholarly knowledge to provide and create a health education toolkit. This could bridge a gap in nursing knowledge in relation to cultural sensitivity and African Americans patients with heart failure. This process has facilitated my ability to plan education for nurses, and to potentially establish an educational model for culturally sensitive health education of chronic diseases.

Project Manager

The role as a project manager required organization of the process needed to implement the project. The initial task was to gain the attention of leadership in order to recognize the validity of the project. Also, the engagement of the staff was needed for recognition of the need for additional education as it related to heart failure and cultural sensitivity. The educational process began with a presentation of the health education toolkit and administration of the assessment tests. In addition, the project required management of implementation, documentation, and collection of the data for the project. Finally, the analysis of the project outcomes and the recommendations will be supplied to the facility. Lastly, I facilitated the results and the establishment of the correlation of cultural sensitivity and health education. This included exhibiting the need to change educational practice, and ultimately bridging the gap between the patient and the clinician.

Completion

The completion of this project provided an opportunity to develop evidence-based research and evidence-based practice of culturally sensitive health education for African Americans with heart failure. Since there is limited evidence, this project can make a major contribution to patient education. In the clinical setting, it was recognized that there was a lack of awareness by the clinicians. Therefore, there was need for not only additional education but awareness for change to occur in the process the clinicians used, to educate all their patients. The use of the new health education toolkit can help the nurses to understand the need to utilize these educational resources.

The challenge in completing this project was a process. It was clear to me that there was a need to assist African Americans with heart failure, and if possible, to change their medical outcomes, but to narrow the focus of the project to one goal was difficult. Another challenge was that the nursing population had difficulty initially correlating cultural sensitivity and African Americans with heart failure. After the education session and extensive discussion using questions and answers, they began to understand the correlation.

This scholarly journey has been an intense learning experience. It has facilitated my growth as a scholar and as a clinician, and has increased my ability to implement evidence-based practice and evidence-based research more effectively. As a nursing scholar, it challenges me to continue to increase the standards of nursing to meet their fullest potential.

Summary

African Americans with heart failure suffer more disproportionately with this chronic disease than any other ethnicity. They also suffer increased admissions and increased exacerbations at a younger age, more severely. However, nursing can begin to bridge the gap of this disproportionate disparity through education. Nursing is committed to educating this population, but they were unaware of their lack of cultural sensitivity and cultural awareness and how this lack of knowledge has impacted heart failure education being provided to the African American patients in their care. The purpose of this project was to increase the knowledge of the clinicians through training and use of a culturally sensitive heart failure educational toolkit. The goals were to bridge the gap in nursing education and to provide possible changes to nursing education practices, which could ultimately increase and improve self-care management of African American patients with heart failure. These changes could also reduce the number of inpatient hospital admissions. An overall social impact of this project is to be seen as a potential model for change, which incorporates culturally sensitive health education for all patients.

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Appendix A: Pre and Post Assessment Survey Questions

1. I feel comfortable working with people from cultural or ethnic backgrounds different from my own.

A. Strongly agree
B. Agree
C. Neither
D. Disagree
E. Strongly disagree

2. People from different cultures may define the concept of "health care" in different ways.

A. Strongly agree
B. Agree
C. Neither
D. Disagree
E. Strongly disagree

3. Race is the most important factor in determining a person's culture.

A. Strongly agree
B. Agree
C. Neither
D. Disagree
E. Strongly disagree

4. Understanding a patient's cultural background will help me provide better care as a clinician.

A. Strongly agree

B. Agree

C. Neither

D. Disagree

E. Strongly disagree

5. I feel comfortable evaluating situations from different cultural perspectives.

A. Strongly agree

B. Agree

C. Neither

D. Disagree

E. Strongly disagree

6. Learning about beliefs and values held by individuals of another cultural background is interesting for me.

A. Strongly agree

B. Agree

C. Neither

D. Disagree

E. Strongly disagree

7. Knowing about different cultural groups improves my ability to interact with others.

A. Strongly agree

B. Agree

C. Neither

D. Disagree

E. Strongly disagree

8. It is challenging for me to interact with individuals from a different cultural background than my own.

A. Strongly agree

B. Agree

C. Neither

D. Disagree

E. Strongly disagree

9. For a physician, a patient's cultural perspective is secondary to other issues in the provision of good quality care.

A. Strongly agree

B. Agree

C. Neither

D. Disagree

E. Strongly disagree

10. Cultural groups differ in the ways in which they interact with members of their own culture versus other cultures.

A. Strongly agree

B. Agree

C. Neither

D. Disagree

E. Strongly disagree

11. I am aware of prevailing beliefs, customs, norms and values of other cultural groups.

A. Strongly agree

B. Agree

C. Neither

D. Disagree

E. Strongly disagree

12. When I am surrounded by culturally diverse individuals, I feel that my own beliefs and values are being threatening.

A. Strongly agree

B. Agree

C. Neither

D. Disagree

E. Strongly disagree

13. Learning about alternative/non-Western medicine and traditional healing practice is an important part of the medical training.

A. Strongly agree

B. Agree

C. Neither

D. Disagree

E. Strongly disagree

14. Cross-cultural barriers between the patient and physician can lead to negative consequences for clinical care such as longer office visits, noncompliance, and unnecessary testing.

A. Strongly agree

B. Agree

C. Neither

D. Disagree

E. Strongly disagree

15. In conversations, I am attentive to nonverbal cues and culturally specific gesture.

A. Strongly agree

B. Agree

C. Neither

D. Disagree

E. Strongly disagree

16. Culturally influenced spiritually and religious beliefs are important aspects of a patient's decision around their health.

A. Strongly agree

B. Agree

C. Neither

D. Disagree

E. Strongly disagree

17. I reflect on and examine my own cultural background, biases, and prejudice related to race and culture that may influence my behavior.

A. Strongly agree

B. Agree

C. Neither

D. Disagree

E. Strongly disagree

18. I respect the decisions made by my friend and colleagues when they are influenced by their cultural backgrounds even if I disagree.

A. Strongly agree

B. Agree

C. Neither

D. Disagree

E. Strongly disagree

19. Many aspects of culture influence a person's decisions and perceptions about health and health care.

A. Strongly agree

B. Agree

C. Neither

D. Disagree

E. Strongly disagree

20. The ease with which patients can communicate with their physicians varies across cultures.

A. Strongly agree

B. Agree

C. Neither

D. Disagree

E. Strongly disagree

21. I am knowledgeable in the area of ethnic pharmacology (variation in medication responses in individuals of different ethno-cultural backgrounds).

A. Strongly agree

B. Agree

C. Neither

D. Disagree

E. Strongly disagree

22. I am comfortable discussing racial or cultural issues with my friends and colleagues.

A. Strongly agree

B. Agree

C. Neither

D. Disagree

E. Strongly disagree

23. I am aware of specific health risks faced by people of varied cultural and ethnic backgrounds.

A. Strongly agree

B. Agree

C. Neither

D. Disagree

E. Strongly disagree

24. I would feel uncomfortable working with a colleague who makes derogatory remarks toward individuals of a particular cultural background.

A. Strongly agree

B. Agree

C. Neither

D. Disagree

E. Strongly disagree

25. When I come in contact with individuals from another culture, I adapt my behavior in accordance with my understanding of their culture.

A. Strongly agree

B. Agree

C. Neither

D. Disagree

E. Strongly disagree

Appendix B: Heart Failure Education Packet Part 1

Slide 1

Heart Failure Education

Sharnee Moore-Jervis, DNP(c), CRNP, RN

Slide 2

What is Heart Failure?

Heart Failure means that your heart is weaker than normal and cannot pump blood as well as it should

Slide 3

What causes Heart Failure?

High blood pressure

Heart attack

Diseases of the heart valves

Infection (endocarditis is infection of the heart)

Alcohol/street drugs

Unknown (unsure why)

Slide 4

What are the signs of heart failure?

Most common signs:

•Shortness of breath when walking

•Needing to rest after 1 or 2 blocks

•Needing to rest while climbing stairs

•Shortness of breath while lying flat

•Chest pain

Slide 5

What are the signs of heart failure (cont'd)

•Chronic cough

•As heart failure becomes worse, the patient may cough up frothy or foamy pink or white sputum

•Getting tired easily, having no energy

•Puffy feet, ankles, legs, fingers, stomach, scrotum

•Because the heart cannot pump blood strongly enough, blood backs up in blood vessels. Water from the blood leaks into the tissues around the blood vessels. This is called **EDEMA**.

Slide 6

Why does the fluid build-up?

•The weak heart cannot pump blood strongly enough to the kidneys.

•The kidneys are in charge of getting rid of extra water in the body.

•So the kidneys hold onto salt and water, trying to get a stronger flow of blood. But this puts even more pressure on your heart.

Slide 7

What happens if I do nothing to stop this?

•Your shortness of breath and swelling will get worse.

•The heart will become so overworked and weak that you can have a heart attack, and maybe die.

Slide 8

What can I do to help my heart?

Follow instructions from your health care provider about:

•Salt

•Fluid

•Weighing yourself

•Medicine

•Exercise and rest

Slide 9

Heart Failure Care

•Weigh yourself:

-Weigh yourself every day and write it down

-Call your doctor if you gain 2-3 pounds overnight or 5 pounds in a week

-Take your weight log to the doctor with you

•Measure your fluids

Limit your fluid to _____ per day

Remember that fluid means

-Liquids (water, coffee, tea, soda or juice)

- Things that would be liquid at room temperature (ice, ice cream or jello)

Slide 10

Weigh self every day

In the morning, after you empty your bladder, before you eat or drink

Month _____ Start Date ____						
S	**M**	**T**	**W**	**T**	**F**	**S**

Slide 11

Heart Failure Care (cont'd)

Watch your salt:

-Follow a low sodium (salt) diet

-Your doctor has said you should have no more than _____ per day

-Choose foods and drinks with low salt or no salt

-Remove the saltshaker from the table

Slide 12

Heart Failure Cont'd

•Follow doctor's orders about your activity

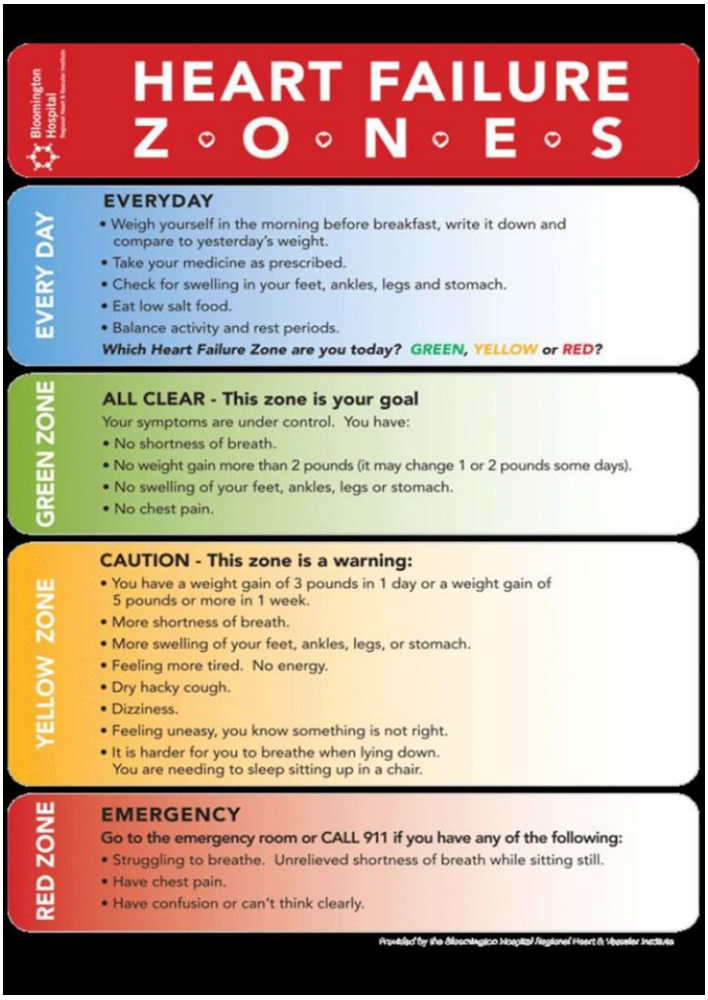
-Talk to your doctor about how active you can be

-Take rest breaks if you feel tired. Do not over exert yourself

-Stop and rest if you have pain, shortness of breath, or feel dizzy

Slide 13

Heart Failure Zones



Appendix C: Heart Failure Education Packet Part 2

Slide 14

Heart Failure Education Packet Part 2

Slide 15

How do you care for yourself?

•Salt restriction

•Fluid monitoring

•Weight monitoring

•Take your medicine

•Rest and exercise

Slide 16

All about salt

What is salt?

•Sodium

•Na

•MSG (monosodium glutamate)

•Sea salt

•Kosher salt

•Brine (as in pickles)

•Baking soda, baking powder

•If it says salt, it is salt

•If it says sodium, it is salt!!!

•Why do I have to watch my salt?

•Salt makes your body hold water

•When you have heart failure, your body cannot get rid of the water easily

•If you have too much water, your heart has to work hard to pump it through your body to your kidneys.

•Medicine can only do so much. Too much salt, the medicine cannot rid the water

Slide 17

What can you eat?

•Fresh Fruit

•Fresh vegetables

•Frozen Fruit

•Frozen vegetables

•Fresh or frozen meat, fish or chicken

•Tuna packed in water

•Eggs (but only if good cholesterol)

•Egg whites (high cholesterol)

•Use herbs, pepper, garlic, onion, hot sauce or lemon for seasoning

Slide 18

How much salt can I have?

•Your health care provider will tell you.

•Usually no more than 2000 milligrams or 2 grams, this equals 1 teaspoon of salt

•Take the saltshaker off the table

•One or two shakes of salt on your food can use your salt for the day.

Slide 19

Read the food label

•You must read the food labels when you have heart failure.

Ask the questions:

•How big is one serving?

•How many servings are in the box?

•How much salt (sodium) is in each serving?

•Measure the servings

Slide 20

How to measure the servings

•A can of soup is not 1 serving but it is usually 2 or 3 servings

•The salt listed on the label is for 1 serving

•If the can has 2 servings, you must count the salt listed twice.

•Always read the label

•Count your salt

Slide 21

Bad Foods

•Lunch meat or deli meats

•They may say low salt (check the labels)

•Hoagies, subs, deli sandwiches are all made from deli meat.

•Cheese (most cheese is high in salt)

•If you buy lunchmeat or cheese request the low salt option and measure servings

•Most fast food is loaded with salt

•If it has a drive through or a walk up counter, it is probably fast food.

•Bacon, sausages, scrapple, ham unless they say low salt, but still read the label and count.

Slide 22

Bad Foods continued

•Frozen dinners or pre-cooked frozen meals. They are loaded with salt.

•Canned foods. If they say low salt, you must still count the salt.

•Most snacks-potato chips, cheese curls, pretzels, nacho chips, packaged popcorn, salted nuts.

•Most Chinese food-most use lots of salt or MSG. Request no salt and no MSG in your food

•Quick breads, like cornbread or soda bread, made with baking soda (a form of salt)

•Bouillon cubes, ketchup, barbeque sauce, Worcestershire sauce, soy sauce, pickles, olives, relish and gravy.

Slide 23

TIPS for Heart Failure

•Low sodium foods items have no more than 140mg of sodium per serving

•Make sure you are only having one serving. Add it to your salt count

•If you cheat and eat something you know has a lot of salt, add it to your salt count. Be extra careful of your salt the rest of the day.

•Watch out for low fat foods. When they take the fat out, they add extra salt to make it taste better.

Slide 24 Sodium-free Flavoring Tips

Beef

Basil

Nutmeg

Onion Powder

Bay Leaf

Onion

Parsley

Curry Pepper

Dill

Rosemary

Dry Mustard

Sage

Garlic

Grape Jelly

Green Pepper

Fresh Mushrooms

Chicken

Basil

Cloves

Cranberries

Nutmeg

Oregano

Paprika

Parsley

Sage

Saffron

Savory

Thyme

Tomato

Turmeric

Pineapple

Tarragon

Fresh Mushroom

Slide 25

Sodium-free Flavoring Tips cont’d

Fish

Basil

Bay Leaf

Marjoram

Curry

Dry Mustard

Dill

Green Pepper

Tomato

Lemon Juice

Turmeric

Pepper

Paprika

Fresh Mushroom

Lamb

Cloves

Curry

Garlic Powder

Garlic

Mint Jelly

Mint

Onion

Oregano

Pineapple

Parsley

Rosemary

Tarragon

Thyme

Slide 26

Sodium-free Flavoring Tips cont’d

Vegetables

Basil

Dill

Garlic Powder

Garlic

Ginger

Nutmeg

Lemon Juice

Tomato

Onion Powder

Onion

Sugar Substitute

Sugar

Tarragon

Marjoram

Salt-free Dressing

Vinegar

Dessert

Allspice

Cinnamon

Cloves

Nutmeg

Vanilla Extract

Other Extracts

Slide 27

Label

Nutrition Facts

Serving Size 1 oz (28g)
Serving Per Container 2

Amount Per Serving	
Calories 100	Calories from Fat 15
	% Daily Values*
Total Fat 1.5g	**2%**
Saturated Fat 0.5g	**3%**
Trans Fat 0g	
Cholesterol 35mg	**12%**
Sodium 400mg	**17%**
Total Carbohydrate 1g	**0%**
Dietary Fiber 0g	**0%**
Sugars 1g	
Protein 21g	**42%**

Calcium 2% • Iron 15%

*Percent Daily Values are based on a 2,000 calorie diet. Your Daily Values may be higher or lower depending on your calorie needs.

	Calories	2,000	2,500
Total Fat	Less than	65g	80g
Sat Fat	Less than	20g	25g
Cholesterol	Less than	300mg	300mg
Sodium	Less than	2400mg	2400mg
Total Carbohydrate		300g	375g
Dietary Fiber		25g	30g

How much salt will you eat if you eat the entire package?

•800 mg of salt

•2000 mg of salt per day, you will eat 40 percent of your intake.

•There is only 1200 mg of salt left for the day.

•Sprinkling salt on your food can easily use your allowed salt for the day.

Slide 28

Fluid in heart failure

What is fluid?

Fluid is anything that is liquid or would be liquid if it were at room temperature.

Examples of fluid:

Water Ice (1 cup ice=1/2 cup of water)

Coffee

Jello

Sauces

Tea

Ice cream

Citrus Fruits

Soda

Soup

Fruit Juice

Gravy

Popsicles

Watermelon

Yogurt

Slide 29

Why fluid restriction

•All the fluid you drink or eat becomes water and goes into the blood vessels

•When you have heart failure, your heart does not pump as strongly as it should

•If you have too much water in your blood vessels, it becomes harder for the heart to pump the blood.

•This causes extra work for your heart, and can make your heart even weaker.

•The extra water can leak out of the blood vessels and build up in your feet, ankles, legs, stomach and scrotum.

• If there is a great deal of extra water, or if your heart becomes very weak, it can build up in your lungs and make you short of breath.

Slide 30

How much fluid can I have?

•Most people with heart failure are told to keep their fluid below either 64 ounces or 48 ounces over 24 hours. This is called a fluid restriction.

•64 ounces:

•8 cups (measuring cups)

•2 quarts

•½ gallon

•4 pints

•About 1800 ml (milliliters)

Slide 31

How much fluid can I have?

•48 ounces is:

•6 cups (measuring cups)

•3 pints

•1 ½ quarts

•About 1500 ml (milliliters)

Slide 32

How should I keep track

•Fill a 2-liter soda bottle

•Each time you eat or drink fluids, pour the same amount of water from the bottle. This will help you see how much water you have left to drink.

•When the bottle becomes empty this means you have drank or ate all your fluids for the day.

•Remember to drink enough fluid to reach fluid restriction amount to keep kidneys healthy.

Slide 33

Weigh Yourself: Why do I have to weigh myself?

•Weighing self can help us make sure that you are not holding on to too much water.

•You will be told to weigh yourself, and write down.

•Either daily weights or a few days a week.

•If you gain 3 or more pounds overnight or 5 pounds in a week, call your health care provider to let them know

Slide 34

Weigh Yourself: Why do I have to weigh myself

•You gained water weight not fat.

•If your health care provider knows early enough that you are keeping too much water in your body, your medicine can be changed to help get rid of the extra water.

•It is much easier to get rid of 2 pounds or water (one quart) than it is to get rid of 8 pounds of water (one gallon) in your body.

Slide 35

What happens if I don't weigh myself?

•If you do not weigh yourself when you have heart failure, you can put on a lot of water weight very quickly.

•This water makes it more difficult for the heart to pump, and can weaken the heart even more than it already is.

•If your heart is weak, the body will try to save the most important parts of the body. It will send most of the blood to the brain, heart and lungs.

Slide 36

What happens if I don't care for myself?

•Not enough blood will go to the stomach. You may notice that you feel full, and do not have an appetite.

•Since not enough blood is going to your stomach, then even if you take more medicine, it won't work.

•Your body will not digest the medicine

•The medicine will not get into the blood

•The medicine cannot get to the heart and kidneys where it needs to do its work.

Slide 37

Why do I have to weigh myself?

•This is why, if you put on too much weight, you will have to go to the hospital and get IV medicine pushed into your vein

•This is why we ask you to weigh yourself. If we know early enough, we can give you medicine while you are at home to get rid of the extra water

Slide 38

Medicine and Heart Failure

•Why do I have to take so many medicines?

•When you have heart failure, each medicine has its own job to do.

•Some medicine helps relax your blood vessels so your heart does not have to pump so hard to get the blood through your body

•Other medicine makes your kidneys get rid of more water, which lessens the work your heart has to do.

•There are medicines that can help your heart pump better.

•All the medicines working together keep your heart pumping as strongly as it can, without making it strain too hard.

Slide 39

Why does the doctor change medicine?

•Since everyone's body is different, not every medicine works the same for every person

•Your doctor will work with you to find the right mix of medicine that will work best for you.

Slide 40

How do I take my medicine?

•It is very important that you take your medicine every day

•Take your medicine at the same time every day

•Do not skip doses

•But if you forget to take a dose, and it is almost time for the next dose, then just take the new dose. Do not take two doses at the same time.

•Keep a written list of your medicine and the times you need to take it.

•Some medicines should be taken with food. Write this on your list.

•If you get side effects from your medicine or if you feel sick after taking your medicine, call your doctor.

Slide 41

How can I keep track of my medicine?

•Use a weekly pill box and fill it with all your medicine for the week.

•Fill it on the same day each week to make it easy to keep track of whether you took your medicine that day.

•If you see that your medicine bottle is getting empty, call your pharmacy to order a refill. If it is too soon for a refill, write the day you need to call for a refill on your calendar.

•Remember to call a couple of days ahead so your pharmacy will have the medicine when you need it.

•Never let your medicine run out!!!

Slide 42

Exercise and Rest

•What am I allowed to do?

•First rule of exercise:

•Always talk to your doctor before you start an exercise program

•Most people with heart failure can do normal daily activities.

•Depending on how bad your heart failure is, you may have to take your time when you do things.

•Aerobic exercise is exercise that gets your heart beating a little faster. This is exercise such as walking, biking, and swimming, or low impact aerobic exercise class.

•Most people with heart failure can and should exercise 20-30 minutes a day, at least 2-3 days a week. But you may not be able to start all at once.

•Pace yourself-increase your activity a little at a time. Take your time

•Stop and rest if you get short of breath, tired, or have chest pain. Listen to what your body is telling you!!

•You should not lift or pull greater than 20 pounds when you have heart failure.

•Discuss this with your health care provider.

Slide 43

Warning Signs

•Remember-if you have any of these signs:

•Chest pain

•Pain in your arm, back, neck, jaw

•Severe shortness of breath

•Breaking out in a cold sweat, feeling like you may pass out, heartburn or upset stomach (nausea)

•If these signs do not go away when you rest, call 911. Do not wait longer than 5 minutes. They could be signs of a heart attack.

Slide 44

Rest and Heart Failure

•Try to rest in the middle of the day for about 30-60 minutes

•Rest whenever you feel tired

•If you get short of breath with activity-stop and rest!

•If you have chest pain with activity-stop and rest!

•When you are climbing stairs, stop and rest halfway up.

Slide 45

Rest and Heart Failure

•You may have to stop more than once when climbing stairs-Listen to what your body is telling you.

•Some people with heart failure feel that they need to sleep with their head raised on more than one pillow.

•If you start to need more pillows than usual to sleep well, or if you need to sleep in a chair, call your health care provider.

Slide 46

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Appendix D: Assessment Data

Table D1

Question 1	Pretest N=11	Posttest N=10
Responses		
Strongly Agree	7	8
Agree	4	2
Neither	0	0
Disagree	0	0
Strongly Disagree	0	0

Percent change= 2.4%

Table D2

Question 2	Pretest N=11	Posttest N=10
Responses		
Strongly Agree	7	8
Agree	4	2
Neither	0	0
Disagree	0	0
Strongly Disagree	0	0

Percent change= 2.4%

Table D3

Question 3	Pretest N=11	Posttest N=10
Responses		
Strongly Agree	0	2
Agree	1	2
Neither	1	1
Disagree	6	5
Strongly Disagree	2	0

Percent change= 8%

Table D4

Question 4	Pretest N=11	Posttest N=10
Responses		
Strongly Agree	9	8
Agree	2	2
Neither	0	0
Disagree	0	0
Strongly Disagree	0	0

Percent change= 4%

Table D5

Question 5	Pretest N=11	Posttest N=10
Responses		
Strongly Agree	4	5
Agree	3	3
Neither	2	1
Disagree	2	1
Strongly Disagree	0	0

Percent change= 4%

Table D6

Question 6	Pretest N=11	Posttest N=10
Responses		
Strongly Agree	7	7
Agree	3	3
Neither	1	0
Disagree	0	0
Strongly Disagree	0	0

Percent change= 2.4%

Table D7

Question 7	Pretest N=11	Posttest N=10
Responses		
Strongly Agree	7	7
Agree	4	3
Neither	0	0
Disagree	0	0
Strongly Disagree	0	0

Percent change= 3.2%

Table D8

Question 8	Pretest N=11	Posttest N=10
Responses		
Strongly Agree	1	2
Agree	0	3
Neither	2	1
Disagree	4	4
Strongly Disagree	4	0

Percent change=8%

Table D9

Question 9	Pretest N=11	Posttest N=10
Responses		
Strongly Agree	1	1
Agree	0	4
Neither	3	1
Disagree	5	4
Strongly Disagree	2	0

Percent change= 9.6%

Table D10

Question 10	Pretest N=11	Posttest N=10
Responses		
Strongly Agree	2	3
Agree	6	6
Neither	3	1
Disagree	0	0
Strongly Disagree	0	0

Percent change= .8%

Table D11

Question 11	Pretest N=11	Posttest N=10
Responses		
Strongly Agree	2	1
Agree	7	7
Neither	2	0
Disagree	0	2
Strongly Disagree	0	0

Percent change= 5.6%

Table D12

Question 12	Pretest N=11	Posttest N=10
Responses		
Strongly Agree	0	0
Agree	0	0
Neither	0	0
Disagree	6	7
Strongly Disagree	5	3

Percent change= 4.8%

Table D13

Question 13	Pretest N=11	Posttest N=10
Responses		
Strongly Agree	5	5
Agree	5	4
Neither	1	1
Disagree	0	0
Strongly Disagree	0	0

Percent change= 3.2%

Table D14

Question 14	Pretest N=11	Posttest N=10
Responses		
Strongly Agree	6	3
Agree	4	3
Neither	1	1
Disagree	0	2
Strongly Disagree	0	1

Percent change= 11.2%

Table D15

Question 15	Pretest N=11	Posttest N=10
Responses		
Strongly Agree	6	4
Agree	5	6
Neither	0	0
Disagree	0	0
Strongly Disagree	0	0

Percent change= 8%

Table D16

Question 16	Pretest N=11	Posttest N=10
Responses		
Strongly Agree	6	6
Agree	4	4
Neither	1	0
Disagree	0	0
Strongly Disagree	0	0

Percent change= 5.6%

Table D17

Question 17	Pretest N=11	Posttest N=10
Responses		
Strongly Agree	4	4
Agree	6	6
Neither	1	0
Disagree	0	0
Strongly Disagree	0	0

Percent change= 2.4%

Table D18

Question 18	Pretest N=11	Posttest N=10
Responses		
Strongly Agree	0	2
Agree	8	7
Neither	2	1
Disagree	0	0
Strongly Disagree	1	0

Percent change= .8%

Table D19

Question 19	Pretest N=11	Posttest N=10
Responses		
Strongly Agree	5	4
Agree	4	5
Neither	2	1
Disagree	0	0
Strongly Disagree	0	0

Percent change= 3.2%

Table D20

Question 20	Pretest N=11	Posttest N=10
Responses		
Strongly Agree	6	2
Agree	4	6
Neither Agree and disagree	1	0
Disagree	0	2
Strongly Disagree	0	0

Percent change= 8.8%

Table D21

Question 21	Pretest N=11	Posttest N=10
Responses		
Strongly Agree	0	1
Agree	2	4
Neither	3	0
Disagree	6	4
Strongly Disagree	0	1

Percent change= .8%

Table D22

Question 22	Pretest N=11	Posttest N=10
Responses		
Strongly Agree	0	2
Agree	8	5
Neither	3	1
Disagree	0	2
Strongly Disagree	0	0

Percent change= 3.2%

Table D23

Question 23	Pretest N=11	Posttest N=10
Responses		
Strongly Agree	1	2
Agree	9	5
Neither	0	1
Disagree	1	2
Strongly Disagree	0	0

Percent change= 4.8%

Table D24

Question 24	Pretest N=11	Posttest N=10
Responses		
Strongly Agree	6	4
Agree	4	4
Neither	1	1
Disagree	0	0
Strongly Disagree	0	1

Percent change= 7.2%

Table D25

Question 25	Pretest N=11	Posttest N=10
Responses		
Strongly Agree	0	3
Agree	9	6
Neither	1	1
Disagree	1	0
Strongly Disagree	0	0

Percent change= .8%