

2019

Adaptation of Heart Failure Education Materials for the Middle Eastern Population

Nadine A. Williams
Walden University

Follow this and additional works at: <https://scholarworks.waldenu.edu/dissertations>

 Part of the [Educational Administration and Supervision Commons](#), and the [Nursing Commons](#)

This Dissertation is brought to you for free and open access by the Walden Dissertations and Doctoral Studies Collection at ScholarWorks. It has been accepted for inclusion in Walden Dissertations and Doctoral Studies by an authorized administrator of ScholarWorks. For more information, please contact ScholarWorks@waldenu.edu.

Walden University

College of Health Sciences

This is to certify that the doctoral study by

Nadine Williams

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. Mary Catherine Garner, Committee Chairperson, Nursing Faculty

Dr. Cheryl Holly, Committee Member, Nursing Faculty

Dr. Andrea Tatkon-Coker, University Reviewer, Nursing Faculty

Chief Academic Officer

Eric Riedel, Ph.D.

Walden University

2019

Abstract

Adaptation of Heart Failure Education Materials for the Middle Eastern Population

by

Nadine Williams

MS, Walden University, 2015

BS, Felician University, 2010

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

Walden University

May 2019

Abstract

Cardiovascular disease, including heart failure, is the leading cause of death among male and female Middle Eastern Americans. In 2016, a medical center located in the northeastern region of the United States had an estimated 35% of heart failure patients readmitted within 30 days of discharge, 10% of these readmitted patients belonged to the local Middle Eastern community. The gap in nursing practice noted by nursing staff, patients, and their families was that the patient education materials on heart failure were not tailored to the cultural beliefs and customs of this high-risk population. The purpose of this project was to adapt the American Heart Association teaching tools on heart failure education to the Middle Eastern community to enhance compliance with treatment care plans, minimize days spent in the hospital, and decrease the readmission rates. The practice-focused question explored whether a team of experts could adapt heart failure education materials for the Middle Eastern community. An expert team met weekly to adapt the teaching materials to include information regarding effective communication techniques, adaptation to religious strictures, and modification of behavioral risks specific to Middle Eastern cultures. The information gathered was compiled and will be shared with the host medical facility. The positive social change resulting from this project might include improved culturally appropriate communication and support for the medical center's Middle Eastern population of heart failure patients, which may result in improved health outcomes.

Adaptation of Heart Failure Education Materials for the Middle Eastern Population

by

Nadine Williams

MS, Walden University, 2015

BS, Felician University, 2010

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

Walden University

May 2019

Dedication

I am greatly appreciative to each contributor in the completion of this proposal. In its completion, my sincere aim is to gain and share to other caregivers a deeper understanding of the Middle Eastern American cultural, their healthcare needs and how it help/hinder health care management in their community. My sincere gratitude goes to the health system who, generously allowed the development and conclusion of this project. I hope that it will make an effective impact into the lives of these people and will enable the provision of improvements in the future.

Acknowledgments

This project is in acknowledgement of my late mother Magrine Bennett. In remembrance of her prayers and encouragements. Standing in her words that for ME there is no glass ceiling and that God has furnished me with all the power I need to achieve (the sky is the limit). To my sister Karen Collins who has set the example that with hard work the so called impossible is at your feet. To my son Matthew who reminded me each time I looked at his face that failure is not an option. To Mrs. Ilene Matza who has been with me from the beginning. I am deeply in your debt. Thanks a million for your patience and the time you spent pouring and creating a dynamic care culture, you are one in a million. To my Walden family, all who have so willingly contribute to my education and this project a big thank you.

Table of Contents

Section 1: Nature of the Project	1
Introduction.....	1
Problem Statement.....	2
Purpose Statement.....	4
Nature of the Doctoral Project	5
Significance.....	6
Summary	7
Section 2: Background and Context	8
Introduction.....	8
Concepts, Models, and Theories.....	8
Cultural Sensitivity and Patient-Centered Care	10
Adaptation of Materials	11
Risk Factors	12
Cultural Beliefs.....	15
Language and Communication	16
Limited Cultural Proficiency of Health Care Providers	17
Knowledge, Awareness, Access to Health Information and Health Care	17
Definitions of Terms.....	19
Relevance to Nursing Practice	20
Local Background and Context	22
Role of the DNP Student.....	23

Role of the Project Team	24
Summary	25
Section 3: Collection and Analysis of Evidence.....	26
Introduction.....	26
Sources of Evidence.....	26
Analysis and Synthesis	27
Summary	28
Section 4: Findings and Recommendations.....	29
Introduction.....	29
Findings and Implications.....	30
Contribution of the Doctoral Team.....	31
Recommendations for Adoption.....	31
Relaying Information	33
Enhance Cultural Proficiency	34
Methods of Discharge Instructions	35
Written Materials	36
Limitations of the Project.....	38
Strengths of the Project.....	38
Summary	39
Section 5: Dissemination Plan	40
Introduction.....	40
Plans for Dissemination	40

Analysis of Self in the Role as Practitioner	42
Analysis of Self in the Role of Scholar.....	43
Analysis and Evaluation of Self in the role of Project Manager.....	44
Challenges, Solutions, and Insights Gained on the Scholarly Journey.....	44
Summary.....	45
References.....	46
AppendixA: American Heart Association Heart Failure Measures.....	55
Appendix B: Heart Failure Education	57

Section 1: Nature of the Project

Introduction

Heart failure (HF) impacts over 5 million Americans each year. This includes the formal diagnosis of over 670,000 new cases. For every five people diagnosed with this condition, one will die within the year (American Heart Association [AHA], 2016). HF was reported in 2016 as the main factor of death associated with over 286,754 people (AHA, 2016). The AHA (2016) projected that Americans will spend over \$39.2 billion in the next 5 years for heart failure costs (direct and indirect). Studies have shown that the Middle Eastern community has been disproportionately affected by this chronic condition (AHA, 2017). According to Heidenreich, Albert, & Allen (2013), by the year 2025, an estimated 20% of people belonging to the Middle Eastern community in the United States will be affected by HF.

As America becomes more ethnically diverse, it is important to ensure that educational materials take into account not only language, but also cultural beliefs and norms. In this doctoral project, I focused on improving the cultural sensitivity of educational materials used with patients of Middle Eastern origin with HF to improve their self-care management. The positive social change implications include improved communication and support for this population in improving health outcomes. All health care providers have the shared responsibility to ensure that patients have access to and possess the knowledge and skills required to minimize the consequences of HF.

Problem Statement

According to the AHA (2017), minority populations (non-White) in the United States are experiencing a wide range of disabilities, disease exposure, and premature death. The gap in care culture has had a negative impact on these individuals and communities alike (Heidenreich, Albert, & Allen, 2013). HF is characterized as a chronic health condition that is associated with high morbidity (Heidenreich, Albert & Allen, 2013). HF symptoms can range from bothersome to serious (breathlessness, unable to breathe, sleeplessness, and generalized swelling). This disease is linked to the chief reasons for many doctor visits and many other medical illnesses.

In 2016, a medical center located in the Northeast region of the United States had an estimated 35% of HF patients return for readmission; 10% of this population belonged to the local Middle Eastern community. This number represented the largest subset of people with the same diagnosis to return to the hospital within 30 days of discharge. The increase in this condition among this population may be directly or indirectly connected to socioeconomic factors and/or lifestyle choices that may be uniquely cultural in nature. There are identified factors that may play a major role that leads to HF in this population. Some of these factors may include genetics, dietary choices, exercise, and cultural behaviors (Heidenreich, Albert, & Allen, 2013). These readmissions are financially detrimental to families, organizations, and insurance carriers (AHA, 2017).

Among both male and female, a significant subset of the Middle Eastern American population, cardiovascular disease including HF is the “leading cause of death” (National Middle Eastern American Medical Association, 2015). Despite growing

positive advances in HF treatments, HF prevalence in this group of people continues to rise (Roger, 2013). A majority of Middle Easternic speaking residents in this New Jersey area are foreign-born immigrants (Department of Homeland Security, 2013). Most of these individuals are coming from areas in the world where cardiovascular risk factors are not emphasized and education about general health and preventative medicine are not stressed (Mayo Clinic, 2017). These residents who arrived in the USA in the last 20 years are the primary target group for this project because they utilize the hospital services to control their chronic condition and are oftentimes followed by nurse practitioners.

The hospital that served as my project site uses the current guidelines, which are written in English, to provide quality HF care and education to its patients. Nurses have noted that some of the recommended dietary and exercise practices are not consistent with the cultural norms of this population. Culturally sensitive educational modalities utilized with the Middle Eastern population with HF can make a difference in preventing re-hospitalization and decreased daily functional disabilities. According to Reinhard (2011) and Chan et al. (2009), hospitals suffer when patients are readmitted within a 30-day period for the same diagnosis. The Centers for Medicare and Medicaid (CMS) uses the gate control system called MS-DRGs where hospitals are paid one payment for a condition (case base). Thus, an admission of the same nature within 30 days of the first is not billable under these conditions and is counted as a single episode. With these enforced Medicare guidelines, this project site health care system was challenged to create an effective HF program. However, even with the best education, there are those patients who keeps returning to the hospital in far worse conditions than the prior visits.

This chronic condition continues to substantially impact those in this community (Rosadio, 2012).

Purpose Statement

The teaching strategies and educational tools recommended by AHA in treating those with HF, along with anticipated clinical outcomes, are available to health care providers and can be retrieved from the registry OPTIMIZE-HF (Yancy, Jessup, & Bozkurt, 2013). These recommended strategies ranges from the first diagnosis of HF to treatment, monitoring, management, and performance improvement. The main focus of this program is on patients' education while admitted to the acute care facility along with the continued monitoring of care in the outpatient setting. Research has shown that use of the AHA guidelines for education in self-care can decrease days admitted to the hospital, readmissions, and increase daily functional abilities for patients with heart failure (Phillips, Wright, & Kern, 2004). The gap in nursing practice noted by nursing staff, patients, and their families at my project site is that the patient education materials on HF are not tailored to the cultural beliefs and customs of this high-risk population. I sought to explore options and make recommendations to fill that gap by using a tailored cultural approach to adapt the best evidence-based education strategies when teaching this population. The purpose of this project was to adapt the AHA teaching tools on HF education to the Middle Eastern community in order to enhance compliance to treatment care plans, minimize days spent in the hospital, and decrease the readmission rates. The practice focused question was: Can a team of experts adapt heart failure education materials for the Middle Eastern community?

Nature of the Doctoral Project

I began this quality improvement project with a synthesis of research I gathered using the electronic databases Medline, UpToDate, CINAHL, the registry OPTIMIZE-HF, the Cochrane Library, and Google Scholar. To increase the efficacy of the search method and minimize the chance of missing studies that could be of value to this project, I combined an array of possible terms for the Middle Eastern culture with terms for HF (e.g., Heart failure in the Middle Easternic community and the Middle Easternic patient and heart disease). The key words included *heart failure*, *cultural sensitivity*, *Middle Eastern/Middle Easternic patient*, *patient education*, and *teaching strategies*. Qualitative and quantitative studies were included if they were peer-reviewed and published between 2013 and December 2017. Studies were limited to full text, English language, and investigated at least one contextual or individual factor impacting the tailoring of HF teaching materials to adult (18 years and over) Middle Eastern patients with HF. The search included guidelines from the AHA, the Agency for Healthcare Research and Quality, the Institute for Healthcare Improvement, and other organizations as appropriate.

I synthesized this literature and assembled an expert panel that included a Middle Easternic speaker and scholar with expertise on Middle Eastern cultures, particularly regarding ability to self-manage medications, diet, and exercise. A dietician was included in this group to address specific dietary issues. The group worked together to adapt the teaching materials and to recommend supportive continuing education for the nursing staff. Once approved, the education materials will be piloted, but this is beyond the scope of this project.

Significance

The Middle Eastern population is one of the fastest growing ethnic groups in the United States (Kershaw, Osypuk, Do, De Chavez, & Diez Roux, 2015). Paterson, New Jersey, is one of the largest towns in the state and home to a mixture of Middle Eastern immigrants from Palestine, Lebanon, Syria, and Jordan (Hannan, 2014). This New Jersey population represents one of the largest Middle Eastern American enclaves in America (Hannan, 2014), where there was an estimated 20,000 residents who called this town home in 2014 (Hannan, 2014). It is estimated that about 5% of this Middle Eastern population has HF and has developed related complications (Kershaw, Osypuk, Do, De Chavez, and Diez Roux, 2015). Public access statistics from the state registrar's office indicated that an approximately 20% of Middle Eastern families living in this area are at or below the poverty level. Because of this, the affordability of healthcare is out of reach for a large portion of this population. Additionally, since regular medical care is unaffordable for many, they often rely on and utilize emergency departments (ED) for urgent and crisis care. Preventative care is generally nonexistent and health issues go unchecked until they are in the critical zone, making their condition, when discovered, more serious than the general population, resulting in longer hospitalization and greater co-morbidities. Therefore, the importance of education with every encounter, including admission, discharge, and follow ups in the healthcare continuum of this population cannot be underestimated. The challenge of effective education becomes real when these patients are expected to learn new and often unfamiliar information over a very short period of time (Calvillo-King, Arnold, & Eubank, 2013).

The adaptation of teaching materials for the Middle Eastern population would support the role of the nurse in educating these patient with HF. This process could be replicated across the institution for adapting other patient education materials to this growing population. Educational modalities used in the Middle Eastern community can make a difference in preventing re-hospitalization, decreasing daily functional disabilities, and increasing quality of life (Khalifa, n.d.).

Summary

HF is a progressive disease that affects people of all races, creeds, cultures, and socioeconomic status (Agency for Healthcare Research and Quality, 2017). This condition is associated with a high mortality rate along with recurrent and frequent hospitalizations and doctor's visits, and a decrease in quality of life. This condition currently has no cure and is responsible for a major portion of the U.S. healthcare monetary allotment (AHA, 2017). Using evidence-based strategies when educating those with HF can enhance quality of life and decrease hospital re-admission rates. Studies have proven that trips to the hospital can be minimized if patients (regardless of their culture or ethnic background) are more knowledgeable about their illnesses and how to control it (Agency for Healthcare Research and Quality, 2017). In Section 2, I will discuss the background and context of the project.

Section 2: Background and Context

Introduction

In 2016, the medical center that served as my project site, which is located in a northeast region of the United States, had an estimated 35% of HF patients return for readmission, 10% of whom belonged to the local Middle Eastern community. This number represented the largest subset of people with the same diagnosis who were readmitted within 30 days of discharge. While there are best practice materials available from the AHA, nursing staff, patients, and their families have noted that these educational materials do not address some of the cultural beliefs and customs of the Middle Eastern community. This project sought to explore options to fill that gap by using a tailored cultural approach to adapt the best evidence-based educational strategies when teaching this population. The purpose of this project was to adapt AHA teaching tools on heart failure education to the Middle Eastern community to enhance compliance to treatment care plans, minimize days spent in the hospital, and decrease the readmission rates. The practice focused question was: Can a team of experts adapt heart failure education materials for the Middle Eastern community? In this section, I review the conceptual model, the project's relevance to nursing practice, the local background and context, and my role as DNP student.

Concepts, Models, and Theories

I used Leininger's (Leininger, 2001) transcultural nursing theory and Orem's (Orem, 1971) self-care deficit nursing theory (SCDNT) as the project's theoretical framework. Leininger's transcultural nursing theory highlights that the practitioner and/or

caregiver needs to have a sound understanding of the patient's background (ethnicity), what they believe in, and what is important or valuable to them, and then must tailor intentional education and care according to findings without compromising quality. Orem's theory holds that systems in nursing are formed to aid those who have a challenge or are limited in providing care for self (Orem, 1971). Additionally, Orem's theory highlights the relationship between a person's abilities and the actions necessary for effective self-care. The theory's emphasis is to have patients do for themselves as much as humanly possible to foster natural wellbeing, healthy age progression, and sustained life. Orem stressed that in order to meet what constitutes human functioning, the person must strive to learn actions that enhance a healthy state and then intentionally practice them in their everyday living. According to Orem, the concept of taking care of one self is especially vital when it comes to those who have chronic conditions, since in the long run the patient is the main person responsible for their own care and therefore is responsible to acquire the necessary knowledge to effectively respond to changes in their conditions. This is particularly important for patients living with heart failure.

According to Abuelezam (2018), the impact of stigma, discrimination, and stress on illness and recovery has been researched in many different populations in this country, but not much literature exists on Americans of Middle Eastern origin. Even though there are an estimated 3.7 million citizens of Middle Eastern origin in United States today, there is not much research on the healthcare needs of this population (Abuelezam, 2018). Following the September 11, 2001 terrorist attacks, there has not been much emphasis directed to addressing any medical issue in the Middle Eastern (Salim, Al Suwaidi,

Ghadban, Alkilani, & Salam, 2013). When it comes to healthcare, this population has suffered substantial disparities laced with fear and anger (Lovito, 2015). When observed, many nurses and other healthcare workers in this project's facility were very reserved when caring for this population, especially those who were wearing a turban or beard. Discussions with staff revealed that many nurses could not separate each individual person from the act of terrorism that had taken place, the emotional pain the nation had endured, and the continued news of ongoing wars in these patients' countries of origin (Lovito, 2015). Understanding barriers that block effective care of this community is a step in the right direction in the development of strategies to get and keep its members healthy (Lovito, 2015). Regardless of the current social and political climate towards those of Middle Eastern descent in the United States today, nurses and other providers must understand their health care needs (Abuelezam, 2018).

Cultural Sensitivity and Patient-Centered Care

According to Maude and Barry (2016), cultural sensitivity and patient-centered care involves providing intentional tailored care to a specific group of people who have specific traditions, beliefs, customs, history, folklore, and institutions. As the number of different races and ethnicities increases in U.S. communities, the need for cultural diversity training of health care providers is great. Given that Middle Eastern Americans are one of the fastest growing minority groups, their increasing healthcare issues will be a serious concern for the U.S. healthcare infrastructure in the very near future (Piña & Ventura, 2014). Persons of Middle Eastern descent have cultural practices in the ways they eat and treat illnesses, which gives way to an increased risk of cardiovascular

diseases such as HF. Therefore, practitioners' understanding of cultural components will be essential in ensuring that these patients receive healthcare that is effective, efficient, and of high quality (Heidenreich, Albert, & Allen, 2013). The American Nurses Association (ANA, 2016) called the attention to the necessity and importance of providing culturally sensitive and patient-centered care, and iterated that part of the ANA's code of ethics calls for nurses at all levels to practice with compassion and respect for the inherent dignity, worth, and uniqueness of every individual (ANA, 2016)

Adaptation of Materials

The AHA's most recent recommendations for strategies to manage HF stressed the importance of education, including those instructions given at discharge and continuing at home. A comprehensive education program must include the patient's activity, diet including fluid and salt restriction, medications and their actions, an appointment follow up date, how and when to monitor one's weight, and what to do in the case of worsening symptoms (AHA,2007).

In a prospective longitudinal study of 156 heart failure patients of different ethnic backgrounds, Schwarz and Elman (2003) found that 44% of these were readmitted within a 3-month period, and 30% were readmitted in 1 month. Through chart review and interview of caregivers, the researchers concluded that major risk factors for readmission were concurrent with advance age, the burden of cardiac illness, decreased activity level, lack of drive to comply with treatment strategies due to significant depression, and lack of social and caregiver support.

Challenges contributing to readmission were highlighted by Happ et al. (1997) in a retrospective study involving medical records of 16 patients. These included the lack of medication supply or the inability to afford medication, the non-adherence to dietary restrictions, and poor life style decisions, such as excessive alcohol intake, smoking, and non-prescriptive substance abuse. Happ et al. also highlighted that patients do better in staying out of the hospital with strong family support, regular/routine follow up with primary providers, and the will to live/individual motivation to survive. These researchers recommended a treatment strategy tailored for each individual patient that should include medication and diet regimens that are compatible with the person's culture and are affordable. This would foster buy in and compliance from the patient and caregiver.

Risk Factors

Heart disease and stroke share the same factors that contribute to the risk of developing HF (Mayo Clinic, 2017). A major risk factor of HF development is a history of a heart attack or myocardial injury/dysfunction. According to the Framingham Study conducted in 1949, hypertension is one of the most dangerous risk factor for developing HF (Mahmood & Vasan, 2013). This is a very significant finding since hypertension is symptomless most of the time and therefore goes untreated for years until its effect has caused irreversible damage to the heart and other organs in the body (ACC/AHA, 2015).

Cigarette smoking is a significant risk factor of developing HF (CDC, 2015). Forty to 60% of Middle Eastern Americans use tobacco, which is much higher than rates in other ethnic groups and the general population as a whole (Lovito, 2015). In this culture, smoking is an accepted part of everyday living and considered a sign of maturing

into adulthood. Smoking is not considered a negative behavior that requires modifying, so there is little or no emphasis on smoking cessation (Middle Eastern American Institute Foundation, 2014). Hookahs are the most common method for tobacco use among this population (Lovito, 2015). The Middle Eastern Community Center for Economic and Social Services (ACCESS) from Southwestern Wayne County did a study in 1995 of the Middle Eastern Americans living in that area. Of the 505 people interviewed, 54% of participants reported being an active smoker who started smoking as a teenager. Eighty three percent expressed a desire to quit smoking, while 75% said they have actually tried quitting but have failed on multiple tries. Eleven percent of participants reported successful smoking cessation, which is still lower than the general public's rate of 29.4% (Lovito, 2015).

According to the CDC (2015), most Middle Eastern Americans consume more grams of fat per day when compared to people from other small ethnic groups. Alcohol abuse and type 2 diabetes are prevalent among members of this group. These are chronic conditions that are significant risk factors for the development of HF and are cause for concern (CDC, 2015). In a research study conducted in Michigan, 33 women were chosen to participate in a nonrandom study. Health educators who were versed in speaking Middle Easternic collected data on their eating habits and the food they prepared for their families. The researchers found that the majority of participants had a greater propensity for unhealthy eating patterns than for heart-healthy practices (Hekman, Weir, Fussman, & Lyon-Callo, 2013). For example, the majority consumed foods high in fat prepared via frying, whole fat milk, sweets, high-fat snacks, and few fruits and

vegetables. Among cardiovascular risk factors, the most prevalent among participants were being physically inactive, overweight, and exposed to second-hand smoke (Hekman et al., 2013). The dietary behaviors found in this study increase cardiovascular risk by contributing to obesity, predisposing individuals to diabetes, and raising low-density lipoproteins (LDL) and total cholesterol levels. Of concern was the high proportion of participants who were unaware of their personal risk factors for cardiovascular disease (CVD). One out of every three was unaware of blood pressure being high (> 140/90mmHg), more than half of those who participated did not know they were overweight, and more than a quarter did not know that their total cholesterol was high.

All people as a whole are at high risk for being overweight and obese after the age of 40 (AHA, 2017). However, the rate of obesity among Middle Eastern American males age 20 and older is 76%, compared to 71% for white men; in Middle Eastern American women it is 73%, compared to 57% for white women (Hekman et al., 2013). The high incidence of overweight or obesity contributes to a similarly high prevalence of heart disease, stroke, and diabetes in this population. Being overweight or obese is estimated to account for 60% of deaths among the Middle Eastern American population (Hekman et al., 2013). Even though there is fair understating about the known health benefits of physical activity in this group, only a handful of its members participate in it. When the researchers surveyed Middle Eastern Americans at admission about participating in physical activities, only 15% reported regularly participating in any kind of intentional physical activity. Participants reported the lack of child care, transportation, and safe and accessible exercise facilities as barriers to physical activity. In addition, this population

has reported a lack of family support and language barriers as contributing to their lack of exercise (Hekman et al., 2013).

Cultural Beliefs

The focus on a higher being and its place in sickness and recovery is very influential (National Middle Eastern American Medical Association, 2015). Because a “God/god” is placed in the center of all actions that is done and said in the everyday lives of these people, it would be prudent to incorporate this important ingredient when developing treatment strategies for this ethnic group because healing and management rest heavily upon the health care beliefs and behaviors of the Middle Eastern American family. Cultural values and beliefs may present as barriers that can hinder their understanding of risk factors of cardiovascular and other disorders. The beliefs, and cultural practices differ significantly between subgroups of AA but are well differentiated from those of the mainstream U.S. community (Salim, Al Suwaidi, Ghadban, Alkilani, & Salam, 2013). They will first seek recommendations for their illness from religious leaders before conventional medicine. Family and friends are also embedded in the way they chose to treat sickness. Additionally, they are taught to treat their illness with home remedies such as healing teas, herbs, roots, and foods before seeking professional medical help (Salim, Al Suwaidi, Ghadban, Alkilani, & Salam, 2013). Patients belonging to this population may need to be convinced to take medications and be compliant to treatment strategies. Therefore, it may be necessary to involve family members to ensure treatment compliance. Clinicians need to learn what is important to the patient and family

and tailor treatment strategies so as to foster compliance and build a trusting relationship (Salim, Al Suwaidi, Ghadban, Alkilani, & Salam, 2013).

Language and Communication

Language and communication barriers may impact compliance. According to Hadziabdic, and Hjelm, (2014), because of not being able to speak and or understand English, many people from this community will not seek preventive services. Non-English speaking communities are at an increased risk for being misunderstood and therefore are often miss-diagnosed and or under-diagnosed, non-compliant, dissatisfied and/or mistrustful, resulting in increased stress and poor outcomes (Hadziabdic, & Hjelm, 2014). Patients who primarily speak Middle Easternic are much more likely than primarily English-speaking persons to be dissatisfied with their physicians and the information they received (Hadziabdic, & Hjelm, 2014). Hadziabdic, et al stressed that effective physician-patient communication results in improved health outcomes. In order to disseminate information about heart health, all medical practitioners alike must be able to communicate effectively with their patients. If patients cannot understand the messages their providers are attempting to communicate, patients are less likely to comply with treatments ((Hadziabdic, and Hjelm, 2014). Middle Eastern American patients who speak Middle Easternic stated greater satisfaction with health care professionals and rated the quality of their care more highly when the providers spoke their language. Moreover, a study done by the same author on this same population of non-English speaking patients found that health messages presented with illustrations were preferred and better understood (Hadziabdic, and Hjelm, 2014).

Limited Cultural Proficiency of Health Care Providers

There is an immediate need for health care professionals to be trained in Middle Eastern specific cultural and linguistic issues, including an understanding of the diversity that exists among this population. Essential areas include basic knowledge about the health care systems of immigrants' countries of origin, the potential impact of family members and friends serving as patient translators, and an awareness of core Middle Eastern cultural constructs and their impact on heart health beliefs, prevention, and treatment frameworks (Middle Eastern American Institute Foundation. (2014). Research findings also point to the presence of a frequent disconnect between providers and patients, which can cause negative health outcomes (Lovito, 2015). Inadequate or poor communication combined with structural barriers frequently fosters mistrust, resulting in negative behaviors such as avoidance of care (Middle Eastern American Institute Foundation, 2014). Further, more study is needed to establish a better understanding of such patterns and facilitate the development of tools to overcome them.

Knowledge, Awareness, Access to Health Information and Health Care

People as a whole are not aware of cardiovascular disease risk factors and are also less likely to continue medical management and comply with treatment strategies indefinitely (Hekman, Weir, Fussman, & Lyon-Callo, 2013). This study utilized the assessment done on admission. Among the 200 patient assessed, only 95 of these admitted being aware of the risk factors or seriousness of HF. Being male, married, having Medicaid (thus being low-income), and less visits to the doctor stood out as factors associated with lack of awareness.

Poor access to health care and health information that results from language barriers and cultural issues increases the risk for HF and other cardio vascular diseases among the Middle Eastern populations (Salim, Al Suwaidi, Ghadban, Alkilani, and Salam, 2013). This information is especially important to consider when designing educational materials and interventions. A 2013 study done by Hekman, Weir, Fussman, and Lyon-Callo, (2013) found that heart disease prevention messages developed for the general population were not effective for Middle Eastern Americans because of language and cultural differences. Another study done by Lovito (2015) discovered that when compared to other ethnic groups, Middle Eastern Americans were more unlikely to be aware of therapy for acute heart issues, less likely to know of the time window for treatment, and less likely to indicate that they would call 911 when experiencing an acute attack, thereby limiting timely and appropriate treatment. In addition, this population had less knowledge about HF symptoms and risk factors and less confidence in their ability to prevent an attack (Lovito, 2015).

The Middle Eastern American Institute Foundation (2014) reported that 30% of this population was uninsured nationwide in 2010. Furthermore, Middle Eastern Americans are less likely to enter the health care system for any type of care, including hospital admissions or preventive services (Middle Eastern American Institute Foundation, 2014). Another study examining pharmaceutical treatment differences among racial and ethnic groups found that Middle Eastern Americans were nearly 13% less likely to receive appropriate secondary HF prevention treatments. Distrust of the

health care system and difficulty in paying medical bills are additional major barriers for this ethnic group.

According to Adams et al (2006) the absence of appropriate knowledge on how to care for heart failure is very common when it comes to non-English speaking populations. It was highlighted by Tsuyuki, Fradette, Johnson, Bungard, Eurich, Ashton, et al. (2004) that not being able to fully comprehend self-care healthcare educational modalities often ends in non-compliance. Non-compliance or failure to follow medical therapy of heart failure care and management has major consequences in worsening of disease, rehospitalization and death.

Definitions of Terms

Cultural health: According to the CDC (2015), cultural health is a discipline set aside to accurately portray health delivered to a specific ethnic group.

Cultural competence: Cultural competence is being able to effectively treat, relate to, and bond with people from other cultures and ethnicities.

Empowerment: This involves aiding other people in using their own inner abilities to self-manage issues in their lives to bring about stability, health, and happiness (McCloskey & Flenniken, 2010).

Health literacy: The acquisition of knowledge pertaining to health that allows one to willfully and effectively manages one's health (O'Brien & Shea, 2011).

Middle Eastern: The term Middle Eastern is a classification of people with shared geographic, historical, cultural identity, and language (Middle Easternic). Middle Easterners includes peoples whose origins can be identified from a large geographic

region. This regions extends from the Gulf of Persia to Northern Africa on the Atlantic coast.

Relevance to Nursing Practice

The aim of this project is to add to the body of knowledge in the nursing profession relating to the delivery of HF discharge education in the Middle Eastern community. Nurses at all educational levels play a pivotal role in providing education that is culturally relevant to their patients (American Academy of Nursing, 2015) Practitioners who are knowledgeable about a given topic are setting the stage to increase the chance that what they are conveying will be understood without misconceptions (Douglas, Rosenkoetter, Pacquiao, Callister, Hattar-Pollara, & Lauderdale, 2014). The AHA (2017) recommends that these patients and their families receive individualized education that highlights the importance of self-care. Additionally, they also recommended that all education and counseling be provided by medical workers who are trained in the understanding of this culture and then translate this knowledge in emphasizing the importance of astute HF management. The American Academy of Nursing (2015) states that it is necessary to tailor education modalities around one's culture and beliefs in order to make a positive change in preventing HF related re-admission rates,

The importance of discharge education after an admission with a primary diagnosis of HF cannot be overemphasized, especially when these patients need to learn new and seemingly strange information in a short time frame (Robinson & Miller, 1996). This is especially true when giving discharge instructions to those with heart failure. If a

patient returns to the hospital within a 30 day period then reimbursement for that patient will not be paid. According to Heart Failure Society of America (2016), all education instructions given to patients should start with assessing the patient's knowledge of the disease and its consequences, then a firm understanding of what the patient is concerned with, and then decipher potential barriers to the information being understood. This includes the state of mind and psychological position of the patient, their stance on the importance of cultural acts, and their financial position. All educational material in whatever form given to the patient should be easily understood and followed by the patient or care giver. Bearing in mind that people learn differently and are at different stages in life and educational level, it is important that a variety of educational materials and methods are available and used when educating (ie, pamphlets, videos, one-on-one discussions, and internet resources). Most patients retain information when it is repeated multiple times or when certain actions are practiced. This is also important when planning a teaching session since most of the time a single session is never enough to retain so much information (Adams et al., 2006, p. 25). The educators needed to make it his/her practice that the patient or care givers understood the information given. Therefore, it is good practice to have them repeat the information taught back to the educator. This allows the practitioner to know exactly what the patient remembers, understands, misunderstands, and where to put extra emphasis (HFSA, 2006). Education given to patient should be uniquely tailored to them, since education that is too vague can be a hindrance rather than help (Cumprich, 1992; Robinson & Miller, 1996). Patients

may consider the information too much, too deep, or too vague and then do not to follow them (Robinson & Miller, 1996).

Local Background and Context

The meeting place of this project is slated to take place on the cardiac telemetry monitoring unit of a northeastern University Medical Center. This health care institution represents the major health care providing facility in the surrounding area. It provides primary, emergency, and follow up care to the majority of this town and other neighboring communities. In 2016, this facility had an average of 35 % of heart failure patients return for readmission, 10% of which belongs to the Middle Eastern Community. This number represents the largest subset of people with the same diagnosis to return to this medical facility within 30 days of initial discharge for the same reason.

According to United States Census Bureau, (2016) there are approximately 146,987 people living in this community. Of these residents only 81.6% are legal resident or citizens (United States Census Bureau, 2016). The ethnic composition of the town is very diverse comprising Hispanics (59.3%), African Americans/Blacks (27.5%), Caucasians (8.56%), Asian residents (3.78%), and Other (i.e.: small ethnic groups) (0.74%). Many residents in this town are gifted with the ability to read, write and speak multiple languages. The most frequent language spoken is a combination of both English and Spanish (72,307 speakers). In 2016, Spanish only speakers make up 49.2%. Middle Easternic only was approximately 3,525. So while there are English language heart failure educational materials manufactured and presented at a hospital visit, some patients end up receiving education in English or through translation to their native tongue via a

registered translator or Spectrum phone (official translator access for the facility).

Because of this, interest in care plans and compliance remains low, a steady stream of readmissions is realized and morbidity among this community remains high.

The HF program was developed by one of the hospital's leading cardiologist in 2005. In that year, two heart failure coordinator-roles were initiated and staffed by APNs. This department serves patients admitted with the primary diagnosis of HF and later follow them as outpatient once they are discharged from the hospital. The chief assignments of the APNs were to oversee actions that would decrease readmissions rate and improve compliance and overall outcomes of those with HF. Since the initiation of this program the hospital has had better success in reducing the re admission of patients with heart failure. However, as of mid-2016 the readmissions rate is 35.98%, which is still too high.

Role of the DNP Student

Working full time with this group of people, I noted that many patients of Middle Eastern origin and their families lack the needed "know how" that is necessary to self-manage HF. A closer look revealed that "all" patients with HF who are admitted to this hospital and receive follow up care from the HF clinic are given HF education while admitted, on discharge, and at each clinic visit. However, most of the materials provided during these educational sessions is without regard to their ethnic background or cultural practices. On most teach back sessions a lot of the patients were unable to repeat what was relayed to them during these educational sessions. Additionally, many of the available written materials were done in English, and patients were unable to decipher the

content. The instructions given were not followed, and the cycle on nonadherence of medical instructions and readmission continues. I will be coordinating the work of the expert panel during the processes that goes into the recommendations on adapting educational modalities for the people of the Middle Eastern community.

Role of the Project Team

This project was supported by the HF department program's director and coordinator of the medical institution of my clinical site (preceptor), and other hospital administrators. All the results of this project will be shared with the hospital personnel and the Walden University DNP program. As the DNP student, I coordinated the work of the team and collected relevant literature, and brought structure to the process. The HF educator presented all materials presently in use. The rest of the team consisted of members of the medical staff. The doctor who reviews the individual charts of the patients to ensure compliance will provide insights as to whether the patient is receiving treatment according to recommendation. My preceptor, who is the facility's HF coordinator, ensured support materials collected are relevant and factual. The team included an Middle Easternic speaking doctor who translates education instructions and any questions the patient or student may have. He explained the structures of the Middle Easternic culture and why members of this population may chose not to follow instructions. All of these members are skilled personnel who are well trained and motivated and positively influence the journey of this research project.

Summary

Historically, the relationships between patients who experience Middle Eastern culture personally and medical professionals from the western world are said to be marred by miscommunications, language barrier, and the mutual misunderstanding of culturally influenced values. Medical professionals who wish to effectively treat those from the Middle Eastern culture need to embrace and incorporate their values, beliefs, and behaviors that center around family, religion, personal space, ways of interacting with others, and feelings towards health and illness into treatment strategies. Applying a culturally tailored approach to medical practice and a purposeful effort in learning this community's ethical values can help narrow the gap between patients of Middle Eastern decent and medical professional from the Western world who care for them. Section three will discuss the collection and analysis of evidence.

Section 3: Collection and Analysis of Evidence

Introduction

In 2016, a Medical Center located in the northeast region of the United States of America (USA) had an estimated 35 % of heart failure patients return for readmission, 10% of which belonged to the local Middle Eastern Community. This number represented the largest subset of people with the same diagnosis to be readmitted within 30 days of discharge. The gap in nursing practice is that the patient education materials on HF are not culturally appropriate for teaching this high risk population. In this project, I sought to explore options to fill that gap by using a tailored cultural approach to adapt the best evidence-based education strategies when teaching this population. The purpose of this project was to adapt AHA teaching tools on heart failure education to the Middle Eastern community in order to enhance compliance with treatment care plans, minimize days spent in the hospital, and decrease the readmission rates. The practice focused question was: Can a team of experts adapt heart failure education materials for the Middle Eastern community? Section 3 contains a review of the sources of evidence I used, as well as analysis and synthesis of that evidence.

Sources of Evidence

I conducted a search of the literature using databases including Medline, UpToDate, CINAHL, the registry OPTIMIZE-HF, Cochrane, and Google scholar. To increase the efficacy of the search and minimize the chance of missing studies that could be of value to this project, I used an array of possible terms for the Middle Eastern culture combined with terms for heart failure. Key words, and terms included: *heart failure*,

cultural sensitivity, Middle Eastern patient, Middle Eastern American, HF compliance, daily weight monitoring, sodium and fluid restriction, sign and symptom, health and help seeking behavior, community barriers and facilitators, physical activity, and exercise.

Analysis and Synthesis

For the analysis and synthesis stage of the project, I assembled the DNP project team and scheduled meetings with the following agenda. At the first meeting, the team reviewed material currently being used for discharge education and follow-up. They compared the materials against the AHA guidelines to determine if current materials are consistent with the AHA guidelines and tools. Any changes were made, and then these guidelines were reviewed to address: daily weights, exercise and weight control, medication use, smoking and alcohol intake, and diet (particularly during periods of religious fasting, fluid intake and salt intake). The team also reviewed the patients' understanding of the signs and symptoms of their HF and when to report these to the MD and or to the emergency room from their admission interview. This is in alignment with Lininger's theory of cultural sensitivity and Orem's contention that education should support self-care.

Once the materials were revised to address specific areas and provide education on why changes are recommended, the entire team performed a quality review using the cultural sensitivity checklist adopted from the Institute of Medicine's (IOM, 2009) Race, Ethnicity, and Language Data: Standardization for Health Care Quality Improvement data collection instrument. This tool was approved by the National Quality Forum, the Health Research & Educational Trust Disparities, it provides step-by-step instructions on

how to collect information from communities and how to use the uniqueness of that particular population to manage its members' health issues successfully. This collected information will be used to guide strategies in highlighting cultural sensitivity in education and care management of the Middle Eastern population. According to the IOM (2014), this guide is intended to be used as a part of a set of strategies developed to help healthcare institutions minimize disparities when providing care and promote care to all in a way that is equal and effective. After approval, the team will compile and share recommendations for adoption on culturally sensitive care of the patient of Middle Eastern descent with heart failure.

Summary

In the American healthcare system that works to address the needs of a vast array of ethnic groups, all care givers need to understand the impact that culture has on the health behavior of individuals, since best health outcomes rest very heavily on these behaviors. There is great need to tailor culturally relevant education that is able to get the attention of the Middle Eastern American population and the sub-population of Middle Eastern immigrants to encourage them to engage in cardiovascular health promotion activities with the aim of reducing return rates and improving the trajectory of heart failure management among them. In Section 4, I will discuss findings and implications, recommendations, the contribution of the doctoral project team, and the strengths and limitations of the project.

Section 4: Findings and Recommendations

Introduction

In 2016, a Medical Center located in a northeast region of the United States of America (USA) had an estimated 35% of heart failure patients return for readmission 10% of whom belonged to the local Middle Eastern Community. This number represented the largest subset of people with the same diagnosis to be readmitted within 30 days of discharge. While there are best practice materials available from the AHA nursing staff, patients, and their families noted that these educational materials did not address some of the cultural beliefs and customs of the Middle Eastern community. In this project, I sought to explore options to fill that gap by using a tailored cultural approach to adapt the best evidence-based education strategies when teaching this population. The purpose of this project was to adapt AHA teaching tools on HF education to the Middle Eastern community to enhance compliance with treatment care plans, minimize days spent in the hospital, and decrease the readmission rates. The practice focused question was “Can a team of experts adapt heart failure education materials for the Middle Eastern community?” The AHA (2016) and Yancy, Jessup, and Bozkurt (2013) have recommend that all educational information be tailored to each person’s particular needs and culture. Therefore culture should be an important aspect when designing management plan for those who seek medical care, especially those with heart failure (Mahmood & Vasani, 2013).

Findings and Implications

In this project, I focused on the education patients are given while admitted to the acute care facility that served as my project site. The team's charge was to tailor heart failure treatment according to the AHA guidelines in order to accomplish positive outcomes in the lives of the Middle Eastern population and the healthcare system. The expert team was composed of me, an independent cardiologist (who sees private patients at this facility, who self-identifies as being Middle Eastern, speaks Middle Easternic, and has expertise on Middle Eastern culture particularly regarding medication, self-management, diet, and exercise), the facility's heart failure coordinator and educator, the unit's charge nurse, the unit's physical therapist, social worker, and dietician. The team members first reviewed the heart failure treatment strategies recommendations by the AHA retrieved from the registry OPTIMIZE-HF (Yancy et al, 2013). The most recent strategies to manage heart failure recommended by the AHA include stressing the importance of education including the instructions given at discharge. A comprehensive education program must include the patient's activity, diet including fluid and salt restriction, medications and their actions, an appointment follow up date, how and when to monitor one's weight, and what to do in the case of worsening symptoms (AHA, 2013). Given that the delivery of effective healthcare includes respect for the cultural values of patients, the intentional act of tailoring treatment strategies to accommodate patients is expected by the patients from the medical community.

Contribution of the Doctoral Team

Once weekly for 4 consecutive weeks after the regularly scheduled heart failure rounds, this group of professionals evaluated the generic education materials used by this facility to educate HF patients and made recommendations to adapt this material as best as possible to the Middle Eastern culture. The group discussions addressed questions pertaining to treatment strategies in treating patients who belong to the Middle Eastern community and how we can help them comply with treatment as per the AHA recommendations. Each team member addressed each of the following questions as they pertained to their discipline: (a) Is there a set of common CVD risk factors (RFs) that are found to be highly prevalent in Middle Eastern communities and what are the ways of minimizing them? (b) Can we safely say Middle Eastern patients diagnosed with coronary artery disease (CAD) have at least one of the four major causes of HF (HTN, DM, cigarette smoking, and hypercholesterolemia), and/or the coexistence of two or more risk factors? (c) Do dietary patterns and cultural practices account for the population-attributable risk of heart failure? (d) How does cultural meaning of heart failure influence self-care behaviors? (e) How does spirituality shapes self-care? And (f) how do social norms drive social supports and social isolation in this population?

Recommendations for Adoption

Although Middle Eastern Americans may be from different parts of the Middle East, they share similar values and behaviors that highlight what is importance in their culture. In this culture there is great emphasis on the place of a higher being, family, friends, and attitudes toward health and illness (Shishehgar, Gholizadeh, DiGiacomo, &

Davidson, 2015). Therefore, to gain the attention of the Middle Eastern community members and highlight heart disease and its consequences, the recommendation is to develop heart disease awareness programs in their community at the place of worship and/or family/friends gatherings and then invite those who are influential in their community including religious and political leaders, medical professionals and use them as champions of change.

The team recommended that each patient's morality and readmission risk score for hospitalized patients be assessed and charted as recommended by the AHA. For a newly admitted diagnosis of heart failure, the recommended focus would be task-directed, which includes patients' expectations, new goals, patient's physical limitations, diagnostic tests, and nutritional benchmarks. The team recommended a goal of 8 hours of education time during hospitalization with the aid of the specific TV channels in the patient's room that can be accessed at any given time, which give the patients a chance to learn at their own pace and in the presence of their choice of family members if they so choose. Additionally, laptop computers located in each room should be used to allow teach-back interaction with an educator on the other end in the language of the patient's choice.

The cardiologist who is a part of the team stressed the importance of waiting for the chosen family member since this person may be the one to enhance compliance to treatment strategies. According to Hekman, Weir, Fussman, and Lyon-Callo (2013), family is an important part of fostering healing in the Middle Eastern community. As the patient is prepared for discharge, the culturally appropriate calendar developed by the

facility's heart failure department written in the patient's choice of English or Middle Easternic should be given.

Relaying Information

In Western medicine, health professionals are taught to be honest about medical conditions of the patients they serve, as this will foster a trusting relationship. A medical practitioner will gain the trust of a Middle Eastern patient and help to remove the wedge that is culturally placed between the Middle Eastern population and others who care for them by being consistent in what is being said (Shishehgar et al., 2015). Being blunt or forthright in the Middle Eastern culture is frowned upon because having a positive attitude even in the worse of situations is highly valued. Medical news of a grave nature needs to be known by members of the family only, but once they are told the severity of the illness, one should never repeat it again (Mahmood et al, 2013). In Middle Eastern culture, relaying medical information that is not pleasant should be given in the company of an elder and in stages (Shishehgar et al., 2015). In this culture, wisdom comes with age and elders are relied on to relay bad news, since their delivery makes the situation seem less detrimental (Shishehgar et al., 2015). If bad news have to be conveyed, it would be prudent to use a male professional of the same culture (Mahmood et al, 2013) to give a diagnosis that is considered not good. According to Lovito, (2015), a male who is middle-aged is more readily accepted and trusted than a young woman who may be more knowledgeable or have more experience in the subject matter. As previously stated, Middle Eastern people are from different regions in the Middle East, but there is a bond that makes them comfortable with those who share their culture, so it is wise to

accommodate a patient where possible and couple them with people we know will make an effective pairing. It is perceived as disrespectful and disingenuous if impending death is announced or a suggestion is given for a do-not-resuscitate status or a call is made for their religious leader to visit without their consent. For Middle Easterners who relate all life's victories and challenges to the will of God, talking about expected death is playing God and obstructing his plans (Shishehgar et al., 2015).

Enhance Cultural Proficiency

Health professionals taking care of people from a background different than their own need to be educated about that culture (Leininger, 1978). Being culturally educated to be more effective in patient care utilizes the transcultural nursing theory that highlights the importance of the practitioner and/or caregiver to have a sound understanding of the patient's background (ethnicity), what they believe in, what is important or valuable to them, and then tailor intentional education and care according to findings without compromising quality. For instance when educating a Middle Eastern patient about illness and preventative care, the practitioner must learn to associate their holidays to their cultural activities as in fasting or feasting periods and plan/prescribe accordingly for treatment strategies to work. Some patients with HF may choose to fast during Ramadan; this choice should be respected and treatment strategies should be planned to reflect provider understanding and respect (Ajabnoor et al., 2014). However, the act of fasting may make the patient experiencing an acute exacerbation of HF to have worsening or additional health problems.

The expert team recommended that during this occasion, it is of great importance for the doctor to be aware so he/she could appropriately guide and monitor the health of their fasting patients during this culturally significant time. Alomi (2016) showed that patients who had pre-Ramadan educational instructions about their illness and how to take care during this period did better and did not exhibit signs of any serious complications that manifested with others who were not educated. Ajabnoor et al., (2014) pointed out that the Middle Eastern patient who does not participate in cultural activities of the community oftentimes feels isolated and may become depressed, which could hinder the desire to acquire health improvement status or enhance self-care. By the same token, these patients should be educated on how to restrict fluid and salt in their diet to comply with recommendations and remain healthy while remaining in accordance with religious restrictions.

Methods of Discharge Instructions

The discharge education given to patients should be delivered with the patient and or caregiver/s ability to comprehend and process the information in mind (Hadziabdic, and Hjelm, 2014). As mentioned in Section one, the education and discharge process starts once a patient is registered and seen. Assessing the needs of the patient at each meeting is a must and in line with the hospital's mission, vision and values. This process should consist of an assessment of what the patient/caregiver knows about their illness, their learning capabilities and how much teaching and motivation may be needed to keep the patient out of the hospital and return to the best functional level of health they can attain (Hadziabdic et al, 2014).

Additionally, culture/cultural needs that pose as a barrier to compliance and health care access should be acknowledged and addressed, since, knowing what comes between a patient and the healing process can change the medical outcome (Hadziabdic et al, 2014). Developing a plan of care for patients should include the patient's input about strategies that fits their learning preference while utilizing ethnic tailored interventions which will in turn foster compliance. When instructions are given, an evaluation of what is understood should be done. It is of great importance that those with HF understand and agree with discharge instructions and plans (Hadziabdic et al 2014).

Written Materials

People who has been hospitalized multiple times for HF are often very aware of the importance of compliance to treatment strategies. In a survey conducted by Douglas, Rosenkoetter, Pacquiao, Callister, Hattar-Pollara, and Lauderdale (2014), patients ranked signs of heart failure as extremely important, frightening, and uncomfortable. After an exacerbation of HF, patients tend to listen closer and more attentively to what is being said during an educational session. Regardless of what continent one originates from, many do have the will to live. Therefore, after a near brush with death, many have said they wish never to have that experience again and will try to avoid it (Hadziabdic et al, 2014). Therefore, taking advantage of any opportunity to educate a patient with HF is a plus. According to Douglas et al, (2014), the educational level of the patient or caregiver dictates their ability to process and understand discharge instructions given in written form. Education materials must be presented at a reachable reading level in order to meet the needs of a wider range of patients. Douglas,et al (2014), went on to say, educational

materials developed to accommodate everyone including those with low literacy, showed marked improvements in self-care behaviors and may be associated with a stable condition and decreased signs and symptoms of acute illnesses. Dorothea Orem's SCDNT proposed that systems in nursing are formed to aid those who have challenges or are limited in providing care for self. Orem's theory highlighted the relationship between the ability of a person and what actions are necessary to count as effective self-care. Additionally, the concept of taking care of one self is especially vital when it comes to those who have chronic conditions, since in the long run the patient is the main person responsible for their own care and therefore is responsible to acquire the necessary knowledge to effectively respond to changes in their conditions.

Language barrier still remains a major problem in patient education of non-English-speaking populations (Mahmood et al, 2013). All teaching materials should be tailored to each ethnic group for maximum impact and a translator should be utilized when necessary (Hadziabdic et al, 2014). All physical disability has the potential of being a barrier to effective teaching. Being visually impaired can prevent an otherwise sound person from reading discharge instructions, likewise being deaf can limit one from learning about treatment strategies from an audio presentation. The method of providing educational information that is easily conveyed varies from patient to patient, so it is imperative to know and remedy barriers that prevent effective teaching. When possible written educational material is best because the patients can always have a source of reference in case they forget a specific instruction in part of their care (Mahmood et al 2013).

In one initiative, this facility had a calendar made for this population written in Middle Easternic prepared at a Grade 6 education level with contents strategically placed so the patients can use it as a source of reference. Making this calendar was an intentional act as familiarity with the language may spark an interest in reading it and ultimately adhering to the recommended strategies. This calendar has slots in the daily plan where the patients can describe their feelings when they were feeling unwell, when illness started, what their diet was at the time, daily weights, activity level, dietary intake and a slot to remind the patient of follow up appointments. However, tailoring the information to match cultural norms was missing. The team recommended that a root cause analysis be performed for every HF diagnosis that is readmitted within a 30 day window to verify that the education plan was presented at discharge and to allow further research into the need for modifications of the plan.

Limitations of the Project

The project was limited to addressing the needs of one Middle Eastern community regardless of the country of origin or number of years in the United States. It may not be applicable to other Middle Eastern populations.

Strengths of the Project

A strength of this project is the raised awareness of a major societal issue and the cultural trends that can hinder or enhance the treatment and management of HF in underserved ethnically diverse populations. If successful, this model could be adapted for other chronic diseases affecting this population.

Summary

While there is a very small amount of research done that is directly focused on the Middle Eastern community with HF, a reasonable query relating to the quality of care including education can be built from the available scant literature. This project can serve as a stimulant to foster a deeper organize project in the management of HF among this community. It is clear that providing a culturally tailored education to any ethnic group is a necessary ingredient to improving outcomes. Therefore, all medical providers should strive to understand their patient's culture that can be a barrier to adherence and self-care (Douglas, et al, 2014). Section five will discuss the dissemination plan, the analysis of self and project and the final summary of the project.

Section 5: Dissemination Plan

Introduction

Section 5 contains a summary of the project, recommendations to build upon in the future, and plans for dissemination. HF impacts over 5 million Americans each year. This includes formal diagnosis of over 670,000 new cases. For every five people diagnosed with this condition, one will die within the year AHA (2016). In 2016, the AHA reported heart failure as the main factor in the deaths of 286,754 people. The AHA (2016) projected that Americans will spend over \$39.2 billion in the next 5 years for heart failure costs (direct and indirect). Studies have shown that the Middle Eastern community has been disproportionately affected by this chronic condition (AHA, 2017). According to Heidenreich et al., (2013) by the year 2025, an estimated 20% of people belonging to the Middle Eastern community in the United States will be affected by HF.

Plans for Dissemination

Plans to disseminate the results of this improvement project will begin with presentations to Walden University's DNP department, the hospital's heart failure department, and to all who are interested in gaining more knowledge in managing heart failure in the Middle Eastern population.

In response to the high percentage of Middle Eastern patients who return to the hospital after initial discharge for heart failure, this project highlighting gaps in education modalities was long overdue. In 2016, my project site had an estimated 35% of heart failure patients return for readmission; 10% of this population belonged to the local Middle Eastern community. This number represented the largest subset of people with

the same diagnosis to return to the hospital within 30 days of discharge. These readmissions proved to be financially detrimental to families, the organization, and insurance carriers. I developed this report to address barriers to compliance in regards to treatment strategies in this specific population.

My aim for this project is that it will serve as an example for a wider clinical audience who will in turn use this information wherever their academic journey may take them. The project site is capable of a large scale implementation strategy because it is a nonprofit institution that is sustainable and is a part of a health care system with three other healthcare facilities. Within this healthcare system, implemented information is evenly distributed across all clinical sites.

My recommendations for implementation comprise three critical features. First, they are in line with the hospital system's values and goals. Second, the implementation approach does not require dual roles of the clinical staff, but rather builds on their existing responsibilities and capacities with minimal shifts in clinical routine. Third, the findings from observed data demonstrated that the use of a culturally saturated, patient centered teaching strategy is worth exploring, developing, and sharing. This project has given me and team confidence that our recommendations balance integrity and are in line with the AHA criteria for treating those with HF. Additionally, the plan also involves the use of each facility's IT system to make these recommendations accessible on a wide scale across the healthcare system for all to access.

Analysis of Self in the Role as Practitioner

Spearheading and developing this improvement project has provide a gateway for me to gain an intimate perspective and knowledge about the Middle Eastern culture and how they perceive illnesses. Patients from this ethnic group have suffered disproportionately mainly because of cultural issues, so my interest began with the observation of chronic suffering and the consequences and burden it puts on the hospital that has had and is experiencing significant financial penalties. The preparation process for this project required application of intentional actions to perform investigations of issues that are problematic in the nursing arena with a goal to develop and or change policies, influence change and bring more vigor to inspire future research as the outcome (see Zaccagnini & Waud White, 2011).

This project to decrease readmission of patients from the Middle Eastern community using patient centered culturally relevant information was done as a necessary process improvement project, which had a major focus on care improvement for this ethnic group. The role of the DNP is to first act to prevent illness, so providing effective education at every meeting is important. The prevention of HF requires aggressive medical measures that are also culturally relevant. However, providing information to patients from the Middle Eastern community has been a challenge. Being a woman and of a different culture, I have often found that the information I provided patients from this population was not taken seriously at first and required multiple sessions for the information to be accepted. After going through this project process, I

now recognize and understand the cultural characteristics of Middle Easterners that I can use to improve their care.

Analysis of Self in the Role of Scholar

Researching the care of heart failure for people in the Middle Eastern community has allowed me to acquire an intimate knowledge of this community's culture and how its members view illness. Additionally, this process has assisted me in developing a deeper understanding of the evidence-based recommendations by the different associations in the appropriate care of those with heart failure. I used the transcultural nursing theory as the project's guiding framework (Leininger, 2001). This theory highlights the importance of the practitioner having a sound understanding of the patient's background (ethnicity), what they believe (including health and illnesses), and what is important or valuable to them, and then to tailor intentional education and care according to findings without compromising quality. This project also made me more cognizant of the need to process research findings and then to translate them into practice. In doing so, I developed an in-depth understanding of the search process and strategies when searching databases, how to extract data that is noteworthy, and how to arrange them to get the most from them. My acquisition of this knowledge is in line with the AACN essentials for the DNP prepared nurse. This includes Essential II, to develop organizational system changes for quality improvement in healthcare delivery in response to local and/or global needs, and Essential III, which includes improving clinical scholarship and analytical methods while integrating bio-psychosocial, nursing and health theories, research, and evidence-based

practice that exemplifies professional nursing standards (Association of Colleges of Nursing, 2006).

Analysis and Evaluation of Self in the Role of Project Manager

The process of completing this project first required compilation of information that involved the needs in this community. Because so little has been documented both locally and nationally about this particular ethnic group, developing a team that would be able to contribute impactful information was challenging. As project manager, I had to hand pick each team member and convince them of the benefits of this project. Additionally, with the participation and input of all members of the team, my use of the logic model assisted with the development, structure, goals and evaluation of each step, which allowed for adjustments where necessary. The knowledge and expertise of the various disciplines of each team member was encouraged, acknowledged, and applauded during the process, which fostered total buy in, thus paving the way for improvements and education of the nursing staff. This process has open the door for my growth not only as a medical provider of evidence based care, but also as a researcher to produce evidence base resources that can elevate the quality of healthcare in our local and national communities.

Challenges, Solutions, and Insights Gained on the Scholarly Journey

I used the transcultural nursing theory to guide this project (see Leininger, 2001). This theory highlights the importance of the practitioner and/or caregiver having a sound understanding of the patient's background (ethnicity), what they believe in, and what is important or valuable to them, and then to tailor intentional education and care according

to findings without compromising quality. Additionally, I used the SCDNT, which holds that systems in nursing are formed to aid those who have a challenge or are limited in providing care for self. Understanding barriers to care was paramount in the completion of this project. The Middle Eastern community is one of those ethnic groups that has very limited researched information to build on. Orem's theory highlights the relationship between a person's ability and the necessary actions for effective self-care. Astute care should be taken to learn the culture of this community by the medical staff who care for them. This would encourage an interest of self-care and push the nursing staff to use Middle Eastern specific educational tools for educational purposes.

Summary

Heart failure is a progressive disease that affects people of all races, creeds, cultures and socioeconomic statuses (Agency for Healthcare Research and Quality, 2017). The Middle Eastern community, however, has been disproportionately affected by this chronic condition (AHA, 2017). The increase in this condition among this population may be directly or indirectly connected to socioeconomic factors and/or lifestyle choices that may be uniquely cultural in nature. The gap in nursing was that the patient education materials on heart failure were not tailored to the cultural beliefs and customs of this high-risk population. As America becomes more ethnically diverse, it is important to ensure that education materials take into account not only language, but also cultural beliefs and norms.

References

- Agency for Healthcare Research and Quality. (2018). Improving Data Collection across the Health Care System Rockville. Retrieved from <http://www.ahrq.gov/research/findings/final-reports/iomracereport/reldata5.html>
- Ajabnoor, G. M., Bahijri, S., Borai, A., Abdulkhaliq, A. A., Al-Aama, J. Y., & Chrousos, G. P. (2014). Health impact of fasting in Saudi Middle Easternia during Ramadan: Association with disturbed circadian rhythm and metabolic and sleeping patterns. *PLoS One*, 9(5): e96500. Retrieved from <https://international.davita.com/sa/en/clinical-leadership/ramadan-treatment-tools/the-health-impact-of-fasting-during-ramadan/12334/>
- Alomi, Y.A. (2016). *Update 2016 – Drug therapy during holy month of Ramadan*. Retrieved from https://www.researchgate.net/publication/303836239_Update_2016-_Drug_Therapy_during_Holy_Month_of_Ramadan
- ACCESS (1992). Executive summary of the Tobacco Cessation Report. Retrieved from: https://www.cdc.gov/tobacco/data_statistics/sgr/2000/executive_summary/index.htm
- Agency for Healthcare Research and Quality. (2017). Prevention quality indicators technical specifications, PQ#8 congestive heart failure (CHF) admission rate. Version 4.1. Retrieved from [http://www.qualityindicators.ahrq.gov/Downloads/Software/SAS/V43/TechnicalSpecifications/PQI%2008%20Congestive%20Heart%20Failure%20\(CHF\)%20Admission%20Rate.pdf](http://www.qualityindicators.ahrq.gov/Downloads/Software/SAS/V43/TechnicalSpecifications/PQI%2008%20Congestive%20Heart%20Failure%20(CHF)%20Admission%20Rate.pdf).

- American Academy of Nursing. (2015). Implementing culturally competent care. Health policy brief. *Nursing Outlook*, 63(2), 227-229. Retrieved from:
www.kccca.org/guidelines-to-cultural-competency/
- Middle Eastern American Institute Foundation. (2014). Quick facts about American Middle Easterners. Washington D.C.: Retrieved from:
<https://d3n8a8pro7vhm.cloudfront.net/aai/pages/9843/attachments/original/1432919063/quickfacts.pdf?143291906>
- Bahrami, H., Kronmal, R., Bluemke, D. A., Olson, J., Shea, S., Liu, K. . . . Lima, J. A. C. (2008). Differences in the incidence of congestive heart failure by ethnicity: The multi-ethnic study of atherosclerosis. *Archives of Internal Medicine*, 168(19), 2138–2145. Retrieved from: <http://doi.org/10.1001/archinte.168.19.2138>
- CDC. (2015.) Division of Nutrition, Physical Activity, and Obesity. Retrieved from:
 CDC.gov: <http://www.cdc.gov/obesity/data/adult.html>
- Centers for Disease Control and Prevention. (2016). Heart failure fact sheet [Fact sheet]. Retrieved from http://cdc.gov/dhdsdp/data_statistics/fact_sheets/fs_heart_failure.htm
- Choi D., Nemi E., Fernando C., Gupta M., Moe G.W.(2014) Differences in the clinical characteristics of ethnic minority groups with heart failure managed in specialized heart failure clinics. Journal of American College of Cardiology Foundation. Retrieved from: heartfailure.onlinejacc.org/content/4/6/419
- Deena, Y. (May 3, 2015). "Palestinian flag-raising is highlight of heritage week in Paterson". North Jersey Media Group. North Jersey Media Group. Retrieved

from: https://howlingpixel.com/i-en/Palestinian_Americans

Department of Homeland Security. (2013). *2013 yearbook of immigration statistics*. Washington, DC: Author.

Douglas, M. K., Rosenkoetter, M., Pacquiao, D. F., Callister, L. C., Hattar-Pollara, M., & Lauderdale, J. (2014). Guidelines for implementing culturally competent nursing care. *Journal of Transcultural Nursing*, *25*(2), 109-121. doi:10.1177/1043659614520998

Dracup, K., Moser, D. K., Pelter, M. M., Nesbitt, T. S., Southard, J., Paul, S. M., & Robinson, S. (2014). Randomized, controlled trial to improve self-care in patients with heart failure living in rural areas. *Circulation*, *130*(3):256–264. doi: 10.1161/CIRCULATIONAHA.113.003542.

Go AS, Mozaffarian, D., Roger, V.L., Benjamin, E.J., Berry, J.D., Blaha, M.J., Dai, S., Ford, E.S., Fox, C.S., Franco, S., Fullerton, H.J., Gillespie, C., Hailpern, S.M., Heit, J.A., Howard, V.J., Huffman, M.D., Judd, S.E., Kissela, B.M., Kittner, S.J., Lackland, D.T., Lichtman, J.H., Lisabeth, L.D., Mackey, R.H., Magid, D.J., Marcus, G.M., Marelli, A., Matchar, D.B., McGuire, D.K., Mohler, E.R. 3rd, Moy, C.S., Mussolino, M.E., Neumar, R.W., Nichol, G., Pandey, D.K., Paynter, N.P., Reeves, M.J., Sorlie, P.D., Stein, J., Towfighi, A., Turan, T.N., Virani, S.S., Wong, N.D., Woo, D., Turner, M.B. Executive Summary. American Heart Association Statistics Committee and Stroke Statistics Subcommittee. Retrieved from: <https://www.ncbi.nlm.nih.gov/pubmed/24352519>
doi: 10.1161/01.cir.0000442015.53336.12.

American Heart Association Statistics Committee and Stroke Statistics Subcommittee.

Heart disease and stroke statistics 2014 update: A report from the American Heart Association. *Circulation*. 129(3):e60–96. Retrieved from:

<https://www.heart.org/en/about-us/heart-and-stroke-association-statistics>

Hadziabdic, E., & Hjelm, K. (2014). Middle Easternic-speaking migrants' experiences of the use of interpreters in healthcare: a qualitative explorative study. *International Journal of Equity in Health*, 13(1), 49-56. Retrieved from:

<https://equityhealthj.biomedcentral.com/articles/10.1186/1475-9276-13-49>

Hammad, A. and R. Kysia. (1990). Primary care and needs assessment survey for the low income Middle Eastern community of Southwest Wayne County, Michigan.

Retrieved from:

https://www.accesscommunity.org/sites/default/files/documents/health_and_research_cente_21.pdf

Kulwicki, A. ACCESS Executive Summary of the Sahhat al-Jalia Project. Technical report prepared for the Office of Minority Health, Michigan Department of Public Health. Retrieved from:

<https://journals.sagepub.com/doi/abs/10.1016/j.ejcnurse.2010.03.002>

Hannan, A. (2014). "Hundreds of Palestinians rally in Paterson in protest of Israeli military campaign". North Jersey Media Group.

Retrieved from: <http://www.northjersey.com/news/paterson-s-palestinians-celebrate-annual-flag-raising-at-city-hall-1.10185092014-07-19>.

- Heidenreich, P.A., Albert, N.M., Allen, L.A. (2013). Forecasting the impact of heart failure in the United States: a policy statement from the American Heart Association. *Circulation Heart Failure*. 2013; 6:6:606-619
- Hekman, K., Weir, S., Fussman, C., Lyon-Callo, S. (2013). Health risk behaviors among Middle Eastern adults within the state of Michigan: Middle Eastern behavioral risk factor survey. Lansing, MI: Michigan Department of Health and Human Services, Lifecourse Epidemiology and Genomics Division and Health Disparities Reduction and Minority Health; 2015. Retrieved From: http://www.michigan.gov/documents/mdch/Health_Risk_Behavior_Full_Middle_Eastern_491350_7.pdf
- Hudson, A., Khurana, M. and R. Kysia. (1996). Middle Eastern Health in Michigan. Health Statistics Manual of the Studying and Improving Minority Health in Michigan Project. Produced by the University of Michigan, School of Public Health. Ann Arbor Retrieved from: https://www.researchgate.net/publication/277914489_Childhood_Obesity_and_Middle_Eastern_American_Youth
- Institute of Medicine, 2009, "Race, Ethnicity, and Language Data: Standardization for Health Care Quality Improvement"; American Hospital Association, 2013. Retrieved from: www.nationalacademies.org/hmd/Reports/2009/RaceEthnicityData.aspx
- Kershaw, K.N., Osypuk, T.L., Do, D.P., De Chavez, P.J., Diez Roux, A.V. (2015). Neighborhood-level racial/ethnic residential segregation and incident

cardiovascular disease: the multi-ethnic study of atherosclerosis. *Circulation*.

2015; 131(2):141-148. Retrieved from:

<https://experts.umn.edu/en/publications/neighborhood-level-raciaethnic-residential-segregation-and-incid>

Leininger, M. (2001). *Culture care diversity and universality: A theory of nursing*. New

York: National League for Nursing Press. Retrieved from:

<https://www.ncbi.nlm.nih.gov/pubmed/12113148>

Lipson, J. G., & Meleis, A. I. (1983). Issues in health care of Middle Eastern patients.

The Western journal of medicine, 139(6), 854-61. Retrieved from:

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1011016/>

Lovito, K. (2015). Middle Eastern-American Health Disparities. Retrieved from:

https://prezi.com/_vr5t79xolmu/Middle-Eastern-american-health-disparities/

Mahmood, L., Vasan, W. (2013). "The Framingham Heart Study and the epidemiology of

cardiovascular disease: a historical perspective" . *Lancet*. **383** (9921): 999–1008

Maude, Barry (2016). *Managing Cross-Cultural Communication: Principles and*

Practice. London: Macmillan Education. p. 249. Retrieved from:

<https://www.macmillanihe.com/page/detail/managing-crosscultural-communication-barry-maude/?sf1=barcode&st1=9781137507464>

Mayo Clinic Staff. (2017). Heart failure. [mayoclinic.org/diseases-conditions/heart-](http://mayoclinic.org/diseases-conditions/heart-failure/symptoms-causes/syc-20373142)

[failure/symptoms-causes/syc-20373142](http://mayoclinic.org/diseases-conditions/heart-failure/symptoms-causes/syc-20373142). Retrieved from:

<https://www.mayoclinic.org/diseases-conditions/heart-failure/symptoms-causes/syc-20373142>

Mozzafarian D, Benjamin EJ, Go AS, et al. on behalf of the American Heart Association Statistics Committee and Stroke Statistics Subcommittee. Heart disease and stroke statistics—2016 update: a report from the American Heart Association. *Circulation*. 2016; 133:e38-e360. Retrieved from: <https://www.ncbi.nlm.nih.gov/pubmed/26673558>

National Middle Eastern American Medical Association. (2015). Middle Eastern American physicians. Retrieved from: NAAMA.org: <http://www.naama.com/about/Middle-Eastern-american-physicians/>

National Collaborating Centre for Methods and Tools (2017). Framework to adapt evidence-based interventions: ADAPT-ITT. Hamilton, ON: McMaster University. Retrieved from: <http://www.nccmt.ca/resources/search/285>.

Norouzy, A, Salehi, M., Philippou, E., Middle Easterni, H., Shiva, F., Mehrnoosh, S. (2013). Effect of fasting in Ramadan on body composition and nutritional intake: A prospective study. *Journal of Human Nutrition and Dietetics* 26(s1) 2013. Retrieved from: https://www.researchgate.net/publication/236913620_Effect_of_fasting_in_Ramadan_on_body_composition_and_nutritional_intake_A_prospective_study

Orem, D.E. (1971). Orem's Self-Care Framework/Self-Care Deficit Theory of Nursing/the Self-Care Nursing Theory/A General Theory of Nursing. Retrieved from: <https://nursology.net/nurse-theorists-and-their-work/orems-self-care/>

- Ortman, J.M., Guarneri, C.E. (2014). United States Population Projections: 2000 to 2050. Washington, DC: US Census Bureau; 2009. Retrieved from:<http://www.census.gov/population/projections/files/analytical-document09.pdf>.
- Piña, I. L., and Ventura, H.O. (2014). Heart Failure in Ethnic Minorities, *JACC: Heart Failure*, 2, 4, (400), (2014). DOI: 10.1016/j.jchf.2014.03.012. Retrieved from: heartfailure.onlinejacc.org/content/2/4/400
- Rodriguez, C.J., Allison. Daviglius, M.L. (2014). American Heart Association Council on Epidemiology and Prevention; American Heart Association Council on Clinical Cardiology; American Heart Association Council on Cardiovascular and Stroke Nursing. Status of cardiovascular disease and stroke in Hispanics/Latinos in the United States: a science advisory from the American Heart Association. *Circulation*. 2014; 130(7):593-625. Retrieved from: <https://www.ncbi.nlm.nih.gov/pubmed/25098323/>
- Roger, V. L. (2013). Epidemiology of Heart Failure. *Circulation Research*, 113(6), 646–659. <http://doi.org/10.1161/CIRCRESAHA.113.300268>
- Rosadio, E. (2012). "Enhancing the Efficacy and Cultural Sensitivity of Heart Failure Education For Spanish-speaking Hispanic Patients at Hospitalization and Through Phone Follow-up." .Doctor of Nursing Practice (DNP) Projects. Retrieved from: https://scholarworks.umass.edu/nursing_dnp_capstone/18

- Salim, I., Al Suwaidi, J., Ghadban, W., Alkilani, H., Salam, A.M. (2013). Impact of religious Ramadan fasting on cardiovascular disease: A systematic review of the literature. Retrieved from: *Curr Med Res Opin.*; 29:343–54.
- Shishehgar, S., Gholizadeh, L., DiGiacomo, M., & Davidson, P. M. (2015). The impact of migration on the health status of Iranians: an integrative literature review. *BMC international health and human rights*, 15, 20. doi:10.1186/s12914-015-0058-7
- The Essentials of Doctoral Education for Advanced Nursing Practice (AACN, 2006).
- United States Census Bureau. (2016). Paterson New Jersey. Retrieved from:
<https://www.census.gov/quickfacts/fact/table/patersoncitynewjersey/PST045216>
- US Census Bureau. (2014). American Fact Finder. Retrieved from:
<http://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml>
- White, M., Garbez, R., Carroll, M., Brinker, E., Howie-Esquivel, J. (2013). Is "teach-back" associated with knowledge retention and hospital readmission in hospitalized heart failure patients? *Journal of Cardiovascular Nursing*. Retrieved from: <https://journalclub.wustl.edu/2013/08/06/is-teach-back-associated-with-knowledge-retention-and-hospital-readmission-in-hospitalized-heart-failure-patients/>
- Yancy, C.W., Jessup, M., Bozkurt, B., (2013) ACCF/AHA guideline for the management of heart failure: A report of the ACC/AHA Task Force on Practice Guidelines. *Circulation*. 2013; 128(16):1810-52. Retrieved from:
<https://www.ncbi.nlm.nih.gov/pubmed/23747642>

Appendix A: American Heart Association Heart Failure Measures

Heart Failure Measures
<ul style="list-style-type: none">• Activity Level 30 mins/day x 5 times/week• Diet; No added salt, Fluid restriction• Written medication list on discharge• Written follow up date• Daily weight measurements; when & how• Action plan for worsening symptoms

Appendix B: Heart Failure Education in English and Arabic

Heart Failure Education	القلب فشل
<p>Heart failure is a progressive disease that affects all people (Agency for Healthcare Research and Quality, 2017). This cause the slowing of blood flow slows and results in the buildup of fluid over the body. Patients will need to learn strategies to manage this condition if they want to live.</p>	<p>فشل حالة َفِي، الاحتقاني القلب بفشل ا القلب عضلة تضعف أيض المسمى القلب يتدقق. اللازمة بالقوة الدم ضخ عن وتعجز الرنتين في السوائل كمية وتزداد ببطء الدم ذلك يعني ولا. الجسم من أخرى أجزاء أي أو يمكن لا ولأنه. الدم ضخ عن توقف قد القلب معرفة يلزمك وفسس، القلب فشل من الشفاء حالتك مع التأقلم طريقة</p>
<p>Your Care</p> <ul style="list-style-type: none"> • Be compliant with taking medications • Weigh yourself and record, keep an eye on increases over 2 pounds in one day, bring list to doctor appointments • Cut out salt, cigarette and alcohol intake. • Be active and exercise in moderation and lose weight if overweight • Elevate legs when sitting to prevent independent swelling •Try not to miss or skip doctors' appointments. • Eat a heart healthy diet • Get the pneumonia and flu shot. • Follow fluid restrictions. Get help for excessive swelling, shortness of breath, increase in the amount of pillows needed to sleep or need to sleep sitting up, an increase in night coughing, congestion, tiredness, loss of appetite or confusion. . Get immediate help by calling 911 for shortness of breath at rest, chest pain, or syncopal episode 	<p>وفق بك الخاصة الأدوية تناول رعايتك في صباح كل نفسك ز. • الطبيب إرشادات. اليومية الأوز. • بسجل احتفظ. الوقت نفس الأظعمة في الصوديوم أو الملح نسبة اخفض أي ظهور عند الطبيب اتصل. والمشروبات في تتأخر لا. • - التالية الأعراض من. أحاسيس من يتأبئك بما اهتم. الاتصال يوميا الرياضية التمرينات ممارسة على حافظ تورم لمنع قدميك ارفع. الحاجة عند الراحة. مع مع المحددة المواعيد بجميع التزم. الكاحل. الطبيب. •</p> <p>في زيادة من تعاني كنت إذا وزنك بإنقاص قم تجنب. • التدخين عن توقف. • الوزن</p> <p>على حصل َطبيبك استشر. • الكحوليات على الحصول بشأ. • سنويا الأنفلونزا مصل إكثار من الحد. الرئوي الالتهاب ضد مصل. لذلك. الطبيب أرشدك إذا اليومية السوائل الحالات في الفور على بطبيبك اتصل أو رطلين قداربم وزنك زيادة: التالية</p> <p>في كيلوجرام 5. أيام. يوم في واحد كيلوجرام قدميك أو ساقيك تورم أو واحد3-5 أو أرتال 1-2 أو الحذاء بضيق. شعورك أو بطنك أو يدك أو. التنفس بضيق الشعور. الخاتم أو الحزام أو النوم أثناء الوسائد من العديد استخدام أثناء السعال. المقعد على النوم. إلى الحاجة احتقا. • أو السعال مرات عدد زيادة أو الليل الضعف أو التعب من بمزيد الشعور. الصدر بالدوار الشعور. • الغثيا أو الشهية فقد. •. التببول مرات عدد انخفاض. •. الارتباك أو برقم اتصل 911: حالة في الفور على فترات أثناء حتى التنفس بضيق الشعور أو الضغط أو الصدر في بألم الإصابة. • حة الرا</p>

	<p>القلب ضربات سرعة زيادة • الإغماء • الضيق /المريض أو الطبيب إلى تحدث. انتظامها عدم أو لديك كانت أو مخاوف أية ساورتك إذا الممرضة أسئلة أية</p>
--	---