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<u>Walden University</u>

College of Health Sciences

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Vanessa Palmer

has been found to be complete and satisfactory in all respects,
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Walden University
2019

Abstract

Staff Education Program to Promote Breast Cancer Prevention

Among African American Women

by

Vanessa Marie Palmer

MS, Franciscan University, 2001

BS, Franciscan University, 1987

Project Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Nursing Practice

Walden University

February 2019

Abstract

African American women living in rural Ohio have a history of low mammogram screening rates and a high incidence of breast cancer identification in the late stage of the disease, leading to mortality rates exceeding those of Caucasian women. The purpose of this doctoral project was to establish a breast health educational program for health providers in a local mammography center that did not provide such a program specifically targeted for African American women. Three theoretical frameworks, the health belief model, Knowles's learning theory, and the PEN-3 model, guided the development of a staff education program based on cultural appropriateness. The practice-focused question was whether or not the educational program would enable health care providers and staff to use an evidence-based approach to promote the message of breast cancer prevention in a population at high risk for breast cancer. A radiology specialist, nurse navigator and radiology supervisor reviewed the educational plan and the Komen Toolkit materials and graded the program as strongly supporting a cultural competency program. The education and experience of the three panel experts in mammography enabled them to serve as evaluators for this research project. The strategy to use faith-based leaders' as representatives of the African American patient population collaborating with providers supported cultural competency in health care. Mammography centers and faith-based organizations benefit from this project because of its focus on culture at the center of its development. Cultural competency supports positive social change in health care for an at-risk population.

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Dedication

I dedicate this research to my childhood friend who lost her life due to breast cancer a year ago.

Acknowledgments

I thank my husband for his support and love during my work regarding breast cancer research involving African American women. Also, family, friends, and colleagues whose interest in helping to promote health prevention and healthy behaviors in this population at risk has inspired completion of this project.

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Section 1: Nature of the Project

Introduction

Training health professionals in a culturally appropriate educational program that teaches the importance of breast cancer prevention can impact at-risk populations. When trained health professionals share knowledge gained from an educational program with women in a population at risk, women may develop behaviors that lead to healthy outcomes and may be empowered to care for themselves (Leeks, Hall, Johnson-Turbes, Kamalu, & Zavahir, 2012). It is crucial for women to understand factors that affect breast self-care, such as family history of breast cancer, breast exams, mammograms, and healthy eating and exercise, in order to facilitate healthy behaviors.

This doctoral project focused on developing an educational program on breast cancer prevention that health professionals can use in spreading messages regarding prevention among the target population of African American women. The research-based educational program emphasizes strategies to help facilitate early breast screening and breast cancer prevention behaviors among African American women, thus furthering the commitment to eliminate racial disparities.

Problem Statement

Local Nursing Practice Problem

In a rural county in Ohio, low mammogram screening numbers for African American women result in a high incidence of breast cancer in the late stage of the disease (Komen Foundation, 2015). African American women remain disproportionately affected by this disease, and the breast cancer survival rate for African American women

is lower than for any other ethnic group (Allicock, Graves, Gry, & Troster, 2013). Staff at the mammography center at a local hospital in this rural county recognize the need to help this aggregate group practice breast health prevention through early detection (Health System Source, n.d.).

The director at the mammography center located in a rural Midwestern county expressed the need to educate young African American women living in the county on breast health and breast cancer prevention. The director also expressed concern about the low numbers of African American women screened in the county, as well as the large numbers of African American women diagnosed with late-stage breast cancer (A. Smith, personal communication, December 12, 2016).

There was no nurse educational program that focused on breast health and the importance of awareness messages targeted for African American women regarding early breast cancer detection at my practicum site. Due to the lack of an appropriate educational program, health providers did not prioritize targeted promotion of the benefits of mammogram screenings specifically for African American women. One Komen branch, through the direction of the Komen Headquarters near this region, conducted a quantitative data report (QDR) that identified five counties that experienced disproportionate breast cancer diagnoses (Susan G. Komen , 2015); this doctoral project was developed in one of those five counties. The concept of training health professionals to spread breast health messages to this rural county's African American women in a culturally competent manner presents itself as a necessary effort to help this targeted group overcome a health disparity challenge.

Significance for Nursing Practice

Standard 5B of the American Nurses Association's (2010) Scope and Standards of Practice explains that the registered nurse uses education as a means of health promotion and includes strategies that enhance wellness. This standard of practice encompasses cultural competency, which involves the use of appropriate methods of care that reflect a patient's values, spirituality, beliefs, language preference, and socioeconomic status. Educating this targeted group about breast health can influence members' attitudes and perceptions regarding breast cancer and understanding of the chances of surviving this deadly disease (Bazargan et al., 2015). Perceptions about caring for one's own health, body image, and anxiety regarding mammography are some of the key points encountered when teaching breast health to ethnic groups (Foxall et al., 2011). Knowledge through health literacy empowers patients to manage health care and fosters positive patient outcomes (Egbert & Nanna, 2009). An educational project that incorporates cultural appropriateness increases the opportunity for populations at risk to understand the gravity of breast cancer prevention.

Purpose

Manning et al. (2013) explained that African American women's lack of knowledge regarding breast cancer risk too often results in late-stage diagnoses and increased mortality within this group. The purpose of this doctoral project was to establish a breast health educational program for health providers in a local mammography center that did not provide such a program specifically targeted for African American women. The project entailed adapting existing educational materials

from the Susan G. Komen Foundation in order to incorporate cultural appropriateness into health educational programming, increase providers' knowledge of medical barriers that limit mammogram screenings, and encourage faith-based participation to overcome the barriers and promote breast cancer awareness in African American women.

Practice-Focused Question

The practice-focused question for this project was the following: Will the development of a staff education program based on cultural appropriateness enable health care providers and staff to use evidence-based research to promote the message of breast cancer prevention in a population at risk? African American women respond to providers who are culturally sensitive and relevant in their messaging on breast cancer prevention (Leeks et al., 2012), and this project's educational program incorporated concepts of cultural appropriateness, spirituality, and family.

Nature of the Doctoral Project

Sources of Evidence

The National Center for Biotechnology (NCBI), a branch of the U.S. National Library of Medicine, a primary resource represented by PubMed, provides research information on breast cancer and studies designed to promote a better understanding of risk factors associated with African American women and the mortality rate from breast cancer affecting this population at risk. Researchers Allicock, Graves, and Troester (2013) conducted a quantitative study using descriptive analysis to examine African American women's knowledge of breast health, breast cancer, risk factors, and perceptions regarding the disease. The 57 African American women from North Carolina

who participated expressed a view of the disease as a “White disease” and revealed a poor understanding of risk factors. The study also emphasized the need for cultural appropriateness, better communication with health providers, and messaging for this targeted population that stresses prevention, especially for young women of color.

The scope of health disparities and their effect extends into the global domain. A qualitative study by Leeks et al. (2012) explored the dissemination of early breast screening messaging in the communities of Savannah and Macon, Georgia. The findings from the study suggested that messages of breast cancer prevention for African American women are most effective to promote early detection. Other factors that influenced survival rates included the support of religious faith and family connectedness (Leeks et al., 2012). The study provided information that may enhance future campaigns that involve spreading the message of early breast cancer screening in populations at risk (Leeks et al., 2012).

Breast cancer studies from the Cancer Prevention and Research Institute of Texas (CPRIT), a grant-funded organization that leads the United States in the campaign against cancer, were reviewed as primary sources that provided suggestions for enhancing treatment and knowledge regarding cancer prevention (CPRIT, n.d.). The research center offers women living in Texas the opportunity to learn about their risk factors and early detection (CPRIT, n.d.). The Institute’s understanding of the high risk factors and mortality rates for African American women supports working with this targeted group to increase members’ survival rate through cancer initiative programs that focus on cultural

barriers, financial problems of low-income women, and reducing health disparities (CPRIT, n.d.).

Approach to Organizing and Analyzing the Evidence

The evidence-based resources to support this program were analyzed following the process outlined by Fineout-Overholt, Melnyk, Stillwell, and Williamson (2010). The primary framework guiding this staff education project was from the toolkit of resources from the Susan G. Komen Foundation. Other sources of evidence that informed this doctoral project included the American Association of Colleges of Nurses, American Cancer Society, Breast Cancer Research, and Centers for Disease Control and Prevention (CDC), Clinical Breast Cancer. The review of evidence-based literature relevant to this project included various studies from the U.S. National Library of Medicine: National Institutes of Health database. Jones and Chilton (2002) supported the significance of addressing breast cancer in African American women. An article by Siu (2016), which detailed screening recommendations from the U.S. Preventive Services Task Force regarding the suggested age for an initial mammogram, provided guidance for the development of this project. The databases providing evidence-based articles from primary and secondary sources included ProQuest, Cochrane Library, CINAHL, and Medline.

Knowles's theory of adult learning, which he termed *andragogy*, played a pivotal role in developing an educational program. Knowles asserted that adults as learners need a reason to learn, that their self-direction motivates their learning, that their life experiences influence their learning, and that they respond differently from younger

students to intrinsic and extrinsic motivators (Nursing Professional Development Review Manual, n.d.). Knowles's adult learning theory represents cognitive learning, which includes the brain's mental and psychological features (Taylor & Hamdy, 2013). The educational program for this doctoral project was designed around these principles to allow health care providers to effectively reach their audience of adult African American women to communicate the benefits of early breast cancer screening (Hawkes & Hendricks-Jackson, 2017.).

The investigation of existing literature helped to establish the importance of an ethnicity-specific breast health educational program that providers may use to change African American women's perceptions of early breast cancer screenings. Synthesizing the literature provided the foundation for integrating evidence-based research into a nursing health educational program that uses Knowles's adult learning theory. Synthesizing relevant literature for my research project was an advantageous method of examining the research topic. Each journal article providing evidence-based material was crucial to the development of a breast health educational program that supports teaching health care providers the necessity of promoting early breast cancer screening in African American women.

Boyd (2015) explained that adult learning connects with life experiences. Therefore, Knowles's learning theory provides a basis for merging life experiences and new knowledge to produce a problem-centered approach to breast cancer detection in African American women. A positive relationship between the educator and learner fosters learning and enhances understanding of the material. According to Wang (2012),

a learning theory that supports interaction between humans represents a “good” theory. For example, andragogy involves the creation of a learning environment in which the teacher serves as facilitator, resource person, and manager of the process of new insights, rather than imparter of knowledge, so that the adult learner creates the meaning (Wang, 2012).

Strengthening collaboration among health care providers to promote a message of early breast cancer screening using a culturally competent method meets the challenge of reaching a population at risk (Rivera-col’on, Schutsky, & Garman, 2013). Culturally relevant methods of teaching the Komen Message to an intradisciplinary group of providers regarding early breast cancer screening in African American women assist in facilitating cultural competence in health care settings. The Komen Foundation explained that health disparities exist partly because of poor communication between health providers and patients, which leads to patients not receiving clear screening information (Susan G. Komen Foundation, n.d.). Moreover, provider assumptions, finances, and discrimination affect the provision of adequate health care to provide health prevention for underserved populations living in rural areas (Susan G. Komen Foundation, n.d.). Educational materials from the Komen Foundation stress the following messages in an effort to promote breast cancer awareness for all ethnic groups: Know your risk, get screened, know the body’s signs and symptoms of change, and make healthy lifestyle choices (Susan Komen Foundation, n.d.).

Connecting the Purpose to the Gap in Practice

In this doctoral project, I developed a staff education program that enables health care providers and staff to utilize evidence-based research on cultural appropriateness to promote the message of breast cancer prevention in a population at risk. Prior to the doctoral project, the absence of a nursing educational program at this practicum site diminished the opportunity to educate health providers and staff on the importance of communicating messages that would promote change in risky behaviors in an at-risk population. The implementation of evidence-based practice is a major accomplishment for health care providers because standards of care involve positive patient outcomes. The literature on education programs for health care providers to practice evidence-based research aligns with Knowles's adult learning theory, which emphasizes effective andragogical practices when teaching health professionals new knowledge (Taylor & Hamdy, 2013).

Significance

Identification of Stakeholders

The stakeholders involved in this research project included representatives from the target population, nursing interdisciplinary staff at the practicum site, African American community leaders, and the medical staff at the hospital's cancer center. Stakeholders provided crucial information regarding the program's significance to the community (CDC, n.d.-b). Incorporating a diverse group of stakeholders will enable the implementation of a breast educational program at this practicum site that meets the challenge of cultural appropriateness.

Potential Contributions to Nursing Practice

The potential contribution of this Doctor of Nursing Practice (DNP) project resides in the development of an educational program that enhances nursing practice by promoting breast cancer awareness and screening for African American women. Nurses as health educators serve in the role of patient advocate because the relationship developed between patient and nurse fosters trust and open dialogue that lends itself to positive patient outcomes. Doctorate-prepared nurses provide leadership and knowledge that enable them to address aggregate groups, work in community settings, and create programs whereby they can collaborate with other disciplines to help populations at risk.

Potential Transferability

The emphasis of this nursing educational project may transfer to other areas of care such as diabetic educational programs, hypertensive programs, and obesity programs based on the conceptual framework, which facilitates positive health behaviors. Members of other professions such as social workers, psychologists, and physicians who seek to promote health awareness for positive outcomes will be able to use these concepts in an educational program as a model for prevention. Health education is significant to interprofessional teams because it promotes preventive care for patients in a challenging health system (Nester, 2016).

The doctoral project can also potentially be transferred to providers working in gynecology who aspire to communicate health care prevention messages to influence positive health behaviors in women of color. According to Lee et al. (2014), the National Breast and Cervical Cancer Early Detection Program (NBCCEDP) promotes early

screening to detect cervical cancer in low-income, non-White women. The current doctoral project can serve as a model for gynecological health providers to create an educational program that promotes avoiding risky health practices and teaches low-income women and women of color that obtaining Papanicolaou (Pap) screenings decreases health disparities (Lee et al., 2014).

The Breast and Cervical Cancer Mortality Prevention Act, 1990 legislation by the U.S. Congress, directed the CDC to establish the NBCCEDP (CDC, n.d.-e). Organizations in partnerships with the NBCCEDP include the Susan G. Komen Foundation, American Cancer Society, and Avon Foundation. This doctoral project incorporated an educational program that supports interdisciplinary groups to promote a message of prevention using information from the project in their efforts to reach populations at risk (Sanders et al., 2014).

Implications for Positive Social Change

This doctoral project may influence nursing practice by reinforcing education as a means of improving patient outcomes. Nurses practicing as health educators help to impact the lives of patients by enhancing health behavioral changes. The quality of life for African American women improves when health disparities such as those involving breast cancer lessen in severity due to educational programs promoting health awareness. Nursing practices that provide educational health care programs promote patient empowerment that fosters social change, thus influencing the attitudes and perceptions of patients regarding health.

Summary

This evidence-based project entailed developing a staff educational program to address the need for breast cancer prevention in a culturally competent manner to reach African American women living in a rural community. The doctoral project filled a nursing gap at this practicum site by meeting the need for promoting breast health and awareness in a population at risk of breast cancer.

Section 2 consists of an investigation of evidence-based material, theories, models, and concepts that support a nursing breast health educational program. Additionally, the literature review justifies the importance of developing a nursing education program for health professionals serving African American women from a rural community.

Section 2: Background and Context

Introduction

Breast cancer remains second in mortality rates in the United States, and despite mammography screening technologies, young African American women die from aggressive tumors because of failure to practice early breast cancer prevention (Chabner, 2015). Factors that impact the racial disparity in the United States regarding breast cancer in African American women include poverty, lack of health insurance, quality of screening practices, and poor treatment; these factors are even more prevalent in larger cities and thus result in an even wider gap than the nationwide average (Avon Foundation, n.d.).This inequity results in African American women dying at an alarming rate and the Avon foundation revealed breast cancer mortality rates for African American women exceed Caucasian women living in the United States (Avon Foundation, 2015).. The national rate for African American women dying from breast cancer documents as 43 percent more likely then Caucasian women (Avon Foundation, 2015).

(Avon Foundation, 2015). An effect health-care response to this disparity requires action that includes awareness programs incorporating breast health education, promotion of early mammogram screenings, funding to support health insurance for screenings, and theoretical models that support interventions to help populations at risk. The development of a staff education program that enables health care providers to utilize evidence-based research on cultural appropriateness and community support to promote

the message of breast cancer prevention in a population at risk was the purpose of this doctoral project.

Concepts, Models, and Theories

In this project, I used cognitive-behavioral theories in developing the educational program. Cognitive-behavioral theories initially focused on individuals' actions but not on people's thinking processes (McEwen & Wills. 2014). An individual's perception of health behavior correlates with the personality of the individual in three respects: (a) a person's thinking regarding health affects his or her behavior; (b) knowledge plays a significant role in health practices, though it does not always influence behavior; and (c) a person's environment, thinking, skills, and motivation are pertinent to a change in health practices (McEwen & Wills, 2014). The linkage of thought processes and behavior supports cognitive-behavioral theories rather than the examination of a person's feelings. Components of three cognitive-behavioral theories discussed in the following sections served as models for this doctoral project.

Health Belief Model (HBM)

The health belief model (HBM) provides a conceptual framework for examining the health behaviors of an individual (Glantz, Rimer, & Viswanath, 2008). The three components of the model—(a) modified behaviors, (b) change in perceptions, and (c) prevention of harm due to unhealthy practices—help in setting goals for a person to change behaviors (Glantz et al., 2008). For example, a construct that defines a benefit from breast cancer screening is "Getting a mammogram helps me to practice healthy lifestyle choices" (Thompson, 2015.). The HBM is best utilized when applied to

programs that focus on clarity when defining a health problem (Hodges & Videto, 2011). Thus, this project used the HBM as a model to ensure full understanding of the problem and all of its factors.

PEN-3 Model

The PEN-3 model (in which the three elements are positive, extended family, and neighborhood) supports communicating health-prevention information in populations at risk by using a culturally appropriate approach to addressing health disparities (Iwelunmor, Newsome, & Airhinhenbuwa, 2014). The three domains of this model are Cultural Identity, Cultural Empowerment, and Relationships and Expectations (Iwelunmor et al., 2014). The theory may be applied to promote positive aspects of culture to influence African American women to avoid risky health behaviors (Iwelunmor et al., 2014). The PEN-3 model correlates with the HBM, which encourages individuals to change risky behaviors. The domains of the PEN-3 work together with the HBM to assist the individual in recognizing the harm of risky health behavior, understanding that a positive outcome becomes a reality if changes occur, and believing that a healthy lifestyle is an obtainable goal (Scarinci, Bandura, Hidalgo, & Cherrington, 2012). Both models provided a theoretical basis for the current doctoral project to develop an educational program to implement health prevention.

Knowles's Theory of Andragogy

According to Taylor and Hamdy (2013), adult learners build on their existing knowledge to gain new insights. Knowles, one of the most prominent researchers of adult learning, developed a theory he termed *andragogy*. Knowles's theory entails five

key concepts that differentiate adult learning from traditional younger students' learning: (a) the learner's need to know, (b) the learner's self-concept, (c) the learner's own experience, (d) the learner's readiness to learn, and (e) the learner's motivation (Knowles, 1988). The rationale for applying Knowles's theory to this DNP project was that this project ultimately resulted in an educational program that adult healthcare providers will be trained to use with adult women patients. An understanding that adults learn best in an environment that fosters mutual respect and agreement of inquiry on the part of the teacher and student will strengthen the program's effectiveness in reaching its intended learners: both providers who receive training and patients who receive breast cancer prevention awareness education (Knowles, 1998).

The acronym PEN-3 stands for *positive*, *extended family*, and *neighborhood* (Iwelunmor et al., 2014). The PEN-3 model and Knowles's (1998) adult learning theory provide additional conceptual basis to support an educational program for health care providers to use in communicating the importance of early breast cancer screening. All three models (i.e., HBM, Knowles's andragogy, and PEN-3) support the purpose of this doctoral project and provide a conceptual framework that directs the theoretical understanding of a culturally appropriate education program.

Terminology and Definitions

The term *andragogy* refers to the art or science relevant to teaching adults (Knowles, 1988).

Cultural identity is defined as the identification of groups of people or individuals relating to ethnicity, religious beliefs, language, and gender (“Culture identity”).

Cultural empowerment is the action of an individual to reject traditional social hierarchies that oppress minority cultures and instead strengthen those cultures’ identities through education and social justice. (IGI Global, n.d.).

Culture includes the customary beliefs, shared attitudes, set of values, and integrated knowledge of a particular group (“Culture,” n.d.).

The definition of *cultural competence in health care*, according to the Harvard Clinical Research Center for Cultural Competence (2010), encompasses awareness, responsiveness, safety, sensitivity, and appropriateness when taking action in the treatment of all patients. A critical aspect of high-quality health care is a focus on positive interaction between health care provider and patient for positive patient outcomes.

Relevance to Nursing Practice

A staff education program that incorporates ethnicity-specific breast health components meets the challenge of increasing breast cancer awareness in this targeted group (Foxall, Barron, & Houfek, 2011). Breast cancer awareness programs (BCAPs) provide structured educational material that focuses on mass public health education and incorporates the health needs of individual cultures (Darweesh, Hadi, Madani, & Mahsen, 2016).

Existing Scholarship and Research

A key quantitative research study assessed medical health providers' understanding of the importance of cultural competence and its value for positive patient outcomes in caring for African American women and breast cancer prevention (Palmer, Samson, Triantis, & Mullan, 2011). This study found that culture in health-care decision making is a necessary measure in communicating the message of prevention. Data analyzed from Palmer et al.'s study consisted of a comparison of pretest and posttest scores of health providers provided with cultural competency knowledge (Palmer et al., 2011). This research revealed that providers' knowledge about the use of health-prevention messaging in African American culture increased in the short term. The pretest and posttest differences indicated significant knowledge gained from the training program about cultural appropriateness and health disparities (Palmer et al., 2011). The statistical analysis revealed an average increase from 70% to 94% ($p < .001$) in knowledge from a web-based training program on cultural beliefs. The study concluded that providers recognized the importance of the educational program in promoting breast cancer screening in populations at risk (Palmer et al., 2011). The concluding results indicated that the need for further research remains paramount so that providers may effectively communicate the message of early breast screening to a population at risk (Palmer et al., 2011).

Additional empirical research from Holt et al. (2017) utilized a qualitative method to collect data through interviews of pastors of different denominations to determine the effectiveness of health ministry. The research indicated that faith-based organizations

(FBOs) play an integral role in health prevention and disseminating information about health disparities (Holt et al., 2017). An inductive qualitative research study in which pastors and church leaders were interviewed determined the importance of FBOs using evidence-based information in the implementation of religious leaders in health prevention (Holt et al., 2017). The purpose of the study centered on exploring evidence-based information facilitating health ministry and the opportunity to use technology to address health disparities (Holt et al., 2017). In conclusion, the research emphasized three key points about using FBOs: (a) researchers working with FBOs need to understand the strengths and the organizations' capacity to relate to their research, (b) it is important to support FBOs with health information that is evidence based and with delivery that is easily understood, and (c) collaboration with other disciplines is an essential approach in promote health prevention in targeted populations successfully (Holt et al., 2017). The Komen Foundation advocates using community resources such as FBOs to promote the message of breast cancer awareness to African American women (Susan G. Komen Foundation, n.d.). The educational toolkit provided by Komen incorporates breast cancer information that community leaders and health professionals working together can use to support a message of prevention (Susan G. Komen Foundation, n.d.).

The theoretical work of Airhihenbuwa, the developer of the PEN-3 model, centered on the application of cultural appropriateness and the HBM rather than the traditional medical model to deliver breast cancer messaging to African American women (Hall et al., 2015). This theoretical work provided crucial information for understanding the impact of culturally relevant staff training on the educational program

(Hall et al., 2015). In a qualitative study, African American women 35 to 65 years of age from the Houston, Texas area were placed into six focus groups and were interviewed on the subject of breast health, breast cancer, and perceptions of breast cancer services in their area of residence (Hall et al., 2015). One of the specific interview questions ("What would be the most effective way to let African American women know about breast cancer and available breast health services?") provided the researchers with information that supported utilizing cultural appropriateness, a facet important to the PEN-3 model (Hall et al., 2015). The study focused on African American patients' assessment of how health professionals educated in cultural competence contribute to African American women overcoming barriers to breast cancer prevention (Hall et al., 2015).

The research method in the Hall et al. (2015) study used inductive-deductive analysis to examine transcripts and explore emergent themes from the focus group interviews to obtain the full scope of the participants' understanding of their relationship with health professionals and health prevention. In conclusion, the findings revealed that the African American patients' perceptions of their health providers' cultural competence influenced the patients' decisions to practice healthy behaviors, and a lack of cultural competence hindered their relationships with medical providers (Hall et al., 2015).

Mistrust directed toward health providers can result from lack of respect and providers' inability to willingly understand patients' culture. For example, African Americans of low economic status expressed perceptions that professionals did not want to touch or interact with them (Hall et al., 2015). The PEN-3 framework in an educational program promotes medical professionals' behaviors aligning with enablers, an important

aspect of the model. This behavior of enabling supports professionals using positive behavior to culturally treat a population at risk (Hall et al., 2015).

Information from health care initiatives that support evidence-based research regarding breast cancer prevention entails national breast cancer initiatives, current breast cancer screening recommendations, breast cancer education programs, and FBOs. This information is a crucial aspect in current literature regarding early cancer detection, breast health education, and essential to helping populations at risk. Each aspect establishes an understanding of the importance of health disparities among African American women. The significance of recent literature revealing mortality and morbidity rates of African American women remains paramount in the challenge of helping this targeted group (Phillips & Cohen, 2011).

Strategies and Standards of Practice Previously Used

National breast cancer initiatives. According to the CDC (2016), the death rate due to breast cancer in African American women is 40% higher than in Caucasian women. The CDC also explained that among younger African American women, the rate of incidence is higher than among 60-year-old Caucasian females. The CDC's research indicated that a triple-negative cancer or aggressive tumor that returns after treatment is the type of breast cancer most often faced by African American women. Research from the American Cancer Society (2015) indicated that the health disparity between African American women and Caucasian women has widened largely as a result of the incidence of breast cancer in African American women.

Current breast screening recommendations. The most recent screening guidelines, according to Martin and Wingfield (2012), which specify recommendations for women ages 50 to 74, do not include populations at risk of dying at a young age from breast cancer. The U.S. Preventative Service Task Force (n.d.) changed the 2009 recommendations representing Category B, involving screening women ages 50-74 biannually, and Category C, determining if individuals should get screened. Conflicting information about screening times presents concerns for African American women. For example, in a study by Allen et al. (2013), an African American woman expressed concerns about mammogram screening, explaining that women in her community did not possess enough education to decide on their own whether a screening was necessary. Aragon, Morgan, Wong, and Lum (2011) explained that the odds of a diagnosis of early breast cancer among women of color were lower than for older Caucasian women. The exclusion of women ages 40-49 from mammogram screening disproportionately impacts non-White women and may result in diagnosis of more advanced breast cancer (Aragon et al., 2011). A cohort research study revealed that women in the age range 40-49 years who received mammogram screening and were diagnosed with breast cancer had smaller tumors and less nodular metastasis, which resulted in early treatment and improved survival, supporting screening at age 40-49 in the recommendations (Shen, Hammonds, Madsen, & Dale, 2011).

Ethnicity-appropriate and faith-based programs. The Komen Foundation provides ethnicity-appropriate breast cancer educational materials that were used for this doctoral project's educational program. The guidelines for the program include the

following: a goal; objectives; activities; and short-term, intermediate, and long-term outcomes. Each phase of program planning provides an assessment of the progress of the program. Using persons who are identifiably of the same ethnicity (e.g., nurses, health educators, and group leaders from an FBO) may help to attract African American women living in this rural community to participate in the program (Leeks et al., 2012). Research from Leeks et al. (2012) suggests that African American women may respond favorably to an educational program promoting breast health and breast cancer prevention when it is delivered by an African American woman; when this occurs, they may be enabled to practice healthy behaviors regarding health prevention (Leeks et al., 2012).

According to a study by Leyva, Nguyen, Allen, Taplin, and Moser (2015), religion plays an integral part in influencing African American women's screening practices due to the association between religious service and social support. Giarratano and Carter's (2003) quantitative study found that African American women who do not seek medical intervention for early breast cancer screening responded that their reason for delaying seeking medical care is a decision to "wait on God." The American Cancer Society (2008) explains spirituality and religion play a pivotal part in the conceptualization of cancer by the African American culture. The current study's involvement of faith-based organizations helps to support efforts to meet the challenge of reducing racial disparity in health care.

Existing Strategies for Promoting Breast Cancer Screening

According to Chabner (2015), the annual February celebration of minority health month as a means of attracting minority groups to focus on healthy behaviors to promote

prevention is not effective for long term outcomes in changing risk behaviors. Thus, in response to this health disparity, the CDC created a mass media campaign known as the African American Women and Mass Media Campaign (AAMM) to attract the interest of African American women regarding early breast cancer screenings (Chabner, 2015). The CDC's incorporation of the National Breast and Cervical Cancer Early Detection Program (NBCCEDP) campaign efforts added to the effort of promoting early screenings (Chabner, 2015).

Numerous foundations, including the Susan Komen Foundation, African American Breast Cancer Alliance, the Black Women's Health Imperative (BWHI), and the Sister Network, Inc., contribute funding, campaigns, and support for African American women challenged by this disease. These foundations' approach or mission in helping this targeted group centers on increasing breast cancer awareness and reducing morbidity and mortality rates (Staff, 2015).

Gap Filled by This Doctoral Project

The utilization of a faith-based organization to help African American women participate in awareness programs that focus on early breast cancer screenings and educational programs is an important motivational strategy that works to influence behaviors of this targeted group regrading health promotion and prevention (DeHaven, Hunter, Wilder, Walton, & Berry, 2004). According to a joint study by the National Center for Cultural Competence and the Department of Health and Human Services (2001), health care organizations' partnerships with faith-based groups provides a supportive foundation in caring for persons of color. Such partnerships provide

opportunities for preventive care, quality care, and self-management. Faith-based organizations help to provide access to health care by incorporating services in their programs that reach African American women (Department of Health & Human Services, 2001). Darnell, Chang, and Calhoun (2006) revealed African American women receiving communication about breast cancer screening, whether in writing or listening to presentations, were 15 times more likely to obtain mammograms. This doctoral project intended to fill a gap in the research by combining culture, spirituality, and awareness to develop and implement an educational program relevant to rural African American women to decrease their mortality rates from breast cancer.

Local Background and Context

The information below represents a 2015 community profile reported by the Komen Foundation of a rural Midwestern county (Komen Northeast Executive Summary Report, 2015). The data from the study presented in Table 1 below indicates this rural county has the highest level of unmet needs and is therefore mandated by Healthy People 2020 (2015) to decrease numbers of breast cancer in the late stage and decrease death due to breast cancer. The state of Ohio ranks fourth in the nation for overall deaths due to breast cancer (2015).

Table 1

Susan G. Komen Targeted County 2015 Profile

Jefferson County population	Total female population	Minority females	Rural areas	Medically underserved	No health insurance, ages 40-64
36,449	56.2%	7.1%	39%	11.3%	15.2%

Note. Adapted from *2015 Community Profile County Snapshot: Targeted County*, by Susan G. Komen, n.d. (http://komenneohio.org/wp-content/uploads/2014/12/Targeted-County.pdf).

The mammography center in this rural county works with the Komen Foundation to help women of populations at risk to receive help in screening services. The hospital includes a certified breast cancer center that provides radiological services for women of diverse backgrounds. The services include routine or diagnostic mammography, 3D breast imaging, ultrasounds, biopsies, and MRIs (Health System Source, n.d.). The mission statement for the local hospital reveals its focus on supporting patients with cancer and lessening the burden of the diagnosis of cancer and the treatments (Health System Source, n.d.).

Definitions of Key Terms

Racial disparity: Unequal treatment in health care experienced by minorities burdened with preventable diseases (CDC, n.d.-a).

Faith-based organizations (FBOs): As defined by the CDC, faith-based organizations are groups of faith representing churches, synagogues, temples, monasteries, mosques, and other places of worship that support emotional, spiritual, and physical health (CDC, n.d.-c).

Regulations Impacting the Problem

The governing of mammography screening procedures receives regulatory mandates from the Mammography Quality Standards Act (MQSA) and Section 263b part of an amendment of a federal law that regulates the certification of mammography centers (U.S. Department of Health and Human Services, n.d.). Healthy People 2020, a federal initiative, provides two objectives for the United States that include late stage breast cancers and deaths (CDC, 2015). The Ohio state law 1751.62 defines screening

mammography as a radiologic exam to determine if early breast cancer detection reveals cancer in an asymptomatic woman (Ohio Revised Code, n.d.).

Role of the DNP Student

I understand that health inequality in the United States dramatically affects African American women's opportunities to overcome the challenge of breast cancer because of lack of insurance, poverty, and poor understanding of breast cancer prevention. I recently experienced the death of a dear friend from breast cancer, and I began to wonder what measures of help that my professional work as a nurse offers to this rural community. My role in this DNP project encompassed the translation of evidence-based research to help a mammography center understand how to promote breast cancer awareness in a targeted group. My plan was to interact with a faith-based organization to facilitate a relationship with the mammography staff and translate the importance of the role of supporting African American women obtaining early breast cancer screenings. Also, my role was to work with leadership at this mammography site to organize a project team that incorporates inter-professional personnel who support cultural appropriateness in breast cancer messaging of early detection for this population at risk.

Role of Project Team

The Director of the mammography site, the ethics committee director, and other leadership personnel of the organization's Cancer Treatment Center formulated the project team to implement the staff education program. My work with the project team involved evaluating the pretest and posttest questionnaires results to help determine the

effectiveness of the information from Komen's Education Resources disseminated in the planned staff education program.

Summary

Prior to this doctoral project, there was no nurse educational program that focused on breast health and the importance of awareness messages targeted for African American regarding early breast cancer detection at this site. Due to the lack of an appropriate educational program, health providers did not prioritize targeted promotion and of the benefits of mammogram screenings specifically for African American women. Establishing the methods for using resources from the Komen Foundation to develop a staff education program is pivotal to the success of this program.

Section 3: Collection and Analysis of Evidence

Introduction

According to the *Susan G. Komen Targeted County Community Profile Report* (Susan G. Komen, 2015), the low mammogram screening numbers among African American women in this rural county in Ohio have resulted in a high incidence of breast cancer in the late stage of the disease. Research from the CDC (2015) revealed that African American women's mortality rates due to breast cancer exceeded rates among Caucasian women. Cancer is the second leading cause of death in the United States, and early detection remains the key to survival, along with treatment (Susan G. Komen, 2015). The behaviors and perceptions of African American women influence their decisions regarding health practices. To address this health disparity, the purpose of this doctoral project was to develop a staff education program that would enable health care providers to use evidence-based research on cultural appropriateness to practice cultural competency in breast cancer prevention.

Practice-Focused Question

The following practice-focused question guided the research: Will the development of a staff education program based on cultural appropriateness enable health care providers and staff to use evidence-based research to promote the message of breast cancer prevention in a population at risk? Low mammogram-screening rates for African American women living in a rural county in Ohio result in a high incidence of late-stage breast cancer (Susan G. Komen, 2015). An educational program that teaches health care providers the importance of implementing methods of prevention to influence health

behaviors of African American women to reduce morbidity and mortality rates may fill a nursing gap in the participating mammography center. Prior to this doctoral project, there was no nursing education program to teach health providers how to promote breast cancer awareness in African American women living in this rural county.

Clarification of Purpose

The purpose of this doctoral project was to develop an educational program and train healthcare providers in its use with the goal of increasing early screening rates within the target population. An interdisciplinary team approach to meet the challenge of increasing screening numbers of African American women living in this rural county requires understanding ethnicity and its role in cultural appropriateness (Hall et al., 2015). The understanding of unique attributes of a culture equips healthcare providers with cultural competence knowledge and aids them in caring for populations at risk (Hall et al., 2015). The team involved in this project consists of various community stakeholders in order to add validity and usability to the content, as each stakeholder's perspective will contribute best practices to engage the target population. Blending multiple community services, such as religious activities and health care practices, positively impacts the organization's ability to influence African Americans to choose healthy behaviors (Bopp, Baruth, Peterson, & Webb, 2013).

Operational Definitions

Faith-based organization (FBO): An established group of persons unified by religious beliefs "Faith-based organization".) The traditional concept of practicing religious beliefs in an organized group incorporates meeting the spiritual, social, and

cultural needs of group members. Church-affiliated groups offer support for health care agencies trying to find ways to implement health promotion in their ministries, which can enhance health care organizations' community intervention ("Faith-based organization," n.d.).

Mammogram screening: According to the CDC (n.d.), mammogram screenings entail using an x-ray picture of the breast to detect breast cancer. Screening recommendations from agencies such as the American Cancer Society and the U.S. Preventive Service Task Force (USPSTF) provide the public and health care providers with pertinent information regarding the significance of screening times (CDC, n.d.-e). The Academy of Family Physicians screening recommendations coincide with the USPSTF screening guidelines (Screening for Breast Cancer, n.d.).

Cultural competence: Diversity in the patients served by a health care system challenges providers to provide health equity for all patients (Cunningham et al., 2014). Cultural competence is shown by people and systems that respect people of all cultures, languages, classes, races, ethnic backgrounds, and religions (Culture Connections, n.d.). The reduction of health disparities is key to health equity and thus positive patient outcomes. According to Hall et al. (2015), medical mistrust exists because of cultural insensitivity and discriminatory behavior from health professionals. Improving patient-provider communication through educational programs that center on cultural appropriateness provides a strategy to reach underserved populations (Hall et al., 2015).

Sources of Evidence

Identification of Sources

The sources of evidence for this project included the evidence-based report developed by the Komen Foundation in a profile depicting health disparities among low-income and minority women living in a rural region of Ohio (Susan G. Komen, 2015). The Komen Foundation provides an Education Toolkit that presents culturally responsive breast health and breast cancer education, incorporating culture in all aspects of teaching. It creates a stronger connection between educators and learners and helps to bridge people of different cultural backgrounds. By being trained to use this toolkit in the educational program, the mammography staff will gain knowledge of how African American women learn about breast health and breast cancer and how they respond to breast screenings.

The components of the toolkit support culturally responsive health promotion strategies that help to communicate the importance of early breast cancer screenings for African American women. The materials in the toolkit include a video on the use of the resources available in the kit, evaluation materials, and training materials on the topics of health providers working with women of color and effectively communicating with African American women to overcome the barrier of mistrust. Research cited in the training materials includes statistical data on obstacles to trust in the health care system and factors that contribute to African American female patients' lower levels of trust in medical personnel compared to Caucasian patients. As an example, the training materials provide historical information that helps to explain this mistrust, including past clinical trials that exploited African American men such as the Tuskegee Syphilis Study.

Additionally, the toolkit's resource materials provide communication tips that providers can use to help African American women overcome their lack of confidence in medical professionals.

The evaluation materials in the toolkit are included to measure the outcomes of the educational program. Once the educational plan is implemented, pre- and posttests are included to measure participants' knowledge before and after the training, to determine if their understanding of the material has increased as a result of the training. The toolkit also includes sample surveys as well as instructions for toolkit users to create online surveys using the resource information. For this doctoral project, I modified the surveys to fit the target audience of providers and other stakeholders, to assess their understanding of the importance of providing culturally relevant breast health education to African American women. The Komen toolkit permits modification of questions to adapt the material to a specific audience in an educational program. Finally, the Komen Toolkit's Evaluation Tracking Tool, designed by Komen and included in the toolkit, allows providers to track survey data and follow up with participants as necessary using online technology. Additional evaluation tips from Komen for online surveys involve the use of SurveyMonkey, Wufoo, SurveyGizmo, and ProProfs. My role as a leader in the evaluation process was important to help track the healthcare providers' knowledge so that I can continue to support them as they implement the educational program to promote the message of breast cancer screening in this rural community.

Relationship of Evidence to Purpose

Evidence-based research regarding a health disparity in the target population supports the doctoral project's purpose of disseminating information by means of health education that produces positive outcomes in early breast cancer detection in African American women. Cultural appropriateness plays an essential role in research literature. Leeks et al.'s (2012) study found that African American women responded positively to culturally appropriate health care delivery regarding breast cancer prevention. The quantitative and qualitative research conducted by the Komen Foundation supports establishing educational programs that implement measures to promote change in health care's approach to reducing health disparities (Susan G. Komen, 2015).

This research remains crucial to the challenge of helping African American women achieve health equity (Susan G. Komen, 2015).

Collection of Data Restated and Analyzed

Integrated and systematic review of empirical research permitted the exploration of the data collected to yield the best evidence-based practice information to guide this research project. The research studies that informed this doctoral project were analyzed using a critical appraisal of evidence-based material, following the process outlined by Fineout-Overholt et al. (2010). The step in Fineout-Overholt et al.'s process that was most critical to the review and analysis of literature was Step 3, "Critically Appraise the Evidence" (p. 47). Critical appraisal allows the researcher to determine a level of evidence based on a hierarchy of categories of study design. The level of evidence

informs how useful other studies will be to serve as models for the current study. The levels are as follows:

- Level I: Systematic review or meta-analysis
- Level II: Randomized controlled trial
- Level III: Controlled trial without randomization
- Level IV: Case control or cohort study
- Level V: Systematic review of qualitative or descriptive studies
- Level VI: Qualitative or descriptive study
- Level VII: Expert opinion or consensus

Below, the most prominent studies that were used as models for this doctoral project are analyzed in terms of which of the above levels they fit into, in order to show that this project draws on a variety of kinds of research.

A systematic review by Jones et al. (2014) of studies of attitudes toward breast cancer screening in African American women found that barriers that prevent African American women from seeking early screenings include fear of screening results, poor relationships with health care providers, lack of family support, and lack of breast health knowledge. Jones et al. concluded that further studies are necessary in the areas of African American women diagnosed with breast cancer, fears of cancer expressed by this target group, and differences among diverse groups of African American women (Jones et al., 2014). The Fineout-Overholt et al. (2010) Level I rating indicates that the methodology used in the research reviewed by Jones et al. helped to inform the current study to help me understand the barriers to African American women's health-behavior

practices. The results of the study provide statistical analysis with charts to appropriately present the material (Jones et al., 2014).

Also analyzed and found of importance to this research project was the HBM, which has been used by health care providers to assess the willingness of African American women to practice healthy behaviors. A quantitative study revealed that health care providers who used health interventions to promote health behaviors reported a notable improvement in adherence due to the receptiveness of participants to changes in health care practices (Jones, Smith, & Liewellyn, 2015. The research meets Level I of the Fineout-Overholt et al. (2010) rating for a systematic review of the HBM. According to Step 3 in the Fineout-Overholt et al. process, my analysis of this article's research includes the abstract, which includes a concise statement defining the research study and concludes with the importance of the HBM in health promotion. Jones et al.'s data collected from the research supported the conclusion that perceived benefits and perceived barriers play an integral part in determining the importance of interventions. The research also explored primary prevention of disease as it relates to health promotion (Jones et al., 2014), a key component of this doctoral project. Early breast cancer screening is a preventive-health measure that falls in the category of primary prevention and is significant to reducing health disparities for African American women in relation to breast cancer.

Spiritual influence affects decision making regarding early breast cancer screening in African American women, according to Best, Spencer, Hall, Friedman, and Billings (2015). The authors conclude that that spirituality is a cultural aspect that plays an

integral part in early screenings. The research study conducted by Best et al. provides a synoptic abstract that explains three components to include in an intervention program using health messages as part of a spiritual approach in helping African American women practice healthy behaviors. Analysis of the study based on Fineout-Overholt et al.'s (2010) Step 3 revealed that the abstract briefly described the population and provided a concise statement for the article. The evidence applies to the Level V category, which is defined as a systematic study of qualitative work; in Best et al.'s research, the qualitative study incorporated interviews from African American women that revealed their perspectives on religion and spirituality and their relationship to early breast cancer screening. In the discussion, the authors expressed the limitations of the study based on a small sample size and the participants not socioeconomically representing the general population of African American women; however, the article concluded with a statement of the need for further work on spirituality, religion, and health communication in promoting breast cancer prevention (Best et al., 2015).

The literature review revealed that the relationship between health care providers and African American patients plays a pivotal role in the improvement of health outcomes and the effectiveness of health prevention and promotion (Susan G. Komen, 2015). In a research study by Hall et al. (2015), the level of evidence systematically rated the investigation as Level VI in assessing cultural competence in health care providers' approaches in treating African American women. The research provides a qualitative study of cultural competency in health care services involving compliance in mammography (Hall et al., 2015). The analysis of the article reveals that the abstract

identifies the population in the study and the purpose for the study. Additionally, the concluding remarks of the abstract indicate that the study determined that cultural appropriateness provides improvement in patient-provider relationships and supports incorporating a behavioral strategy into educational programs in underserved populations (Hall et al., 2015). The discussion in the article emphasizes the theoretical basis to develop understanding regarding African American women's perceptions of healthcare providers (Hall et al., 2015). The article incorporates strengths and limitations of the study, and this information may assist future research on this subject matter (Hall et al., 2015).

List of Databases and Search Engines

The research information collected from the following databases provided evidence-based articles from primary and secondary sources: ProQuest, Cochrane, Library, PubMed, CINAHL, and Medline. These databases, obtained through the search engines Google, MSN, and Yahoo, provided a wealth of information regarding breast cancer in African American women, mammography screening guidelines, spirituality and religion, and cultural appropriateness. Additionally, the searches resulted in articles on health behaviors of African American women and their perceptions of health care providers.

Key Search Terms

Fineout-Overholt et al. (2010) recommended beginning a search with key words from the practice-focused question and related vocabulary critical to the research. The search strategy utilized terms such as *breast cancer*, *mammography screenings*,

spirituality, *African American women*, *health providers*, *faith-based organizations*, and *cultural appropriateness*. Key terms were searched individually, and when appropriate, related terms were searched in combination to produce more focused results that integrated several of the key concepts relevant to the study.

Description of the Nature of the Data

The 2015 Susan G. Komen Community Profile Report supports the data for the doctoral project and describes the research for this report that explains the cancer disparity in a rural county affecting the African American women (Susan G. Komen, 2015). The practicum site for the doctoral project helped to assist with the data collection and analysis in the Community Report of the breast cancer disparity in targeted populations living in rural counties. The Susan G. Komen’s(2015) research incorporates 22 counties in this state. Komen efforts include investigation of the current status of breast cancer followed by education and programing targeting population groups. The Foundation conducts an exhaustive breast health needs assessment at the local level every four years, and this assessment directs the necessary strategic measures to support evidence-based programs (Susan G. Komen, 2015).

Relevance of Data

The quantitative data from the Komen Report explains a disproportionate hardship in five targeted “communities of interest” (COI) that indicates the need to explore why in these five COI in rural Ohio, breast cancer statistics are poorer than in the other parts of the state (Susan G. Komen, 2015). The county in which the practicum site is located is one of these poorer counties with breast cancer statistics that indicate a disparity among

diverse populations at risk such as the African American community. Data collected from institutions or organizations that provide services to COI include research information on screening, diagnostic, and treatment services, education and outreach programs, and survivor support programs (Susan g. Komen, 2015).

Description of Original Data Collection

A Breast Continuum of Care Model (CoC) explains how a woman moves through the system for breast care. The CoC Model determines if barriers such as finances, transportation, and long appointment wait times reveal statistically significant disproportionate health care (Susan G. Komen, 2015). Other potential barriers might include clinic hours not conducive for the patient, mammography center accessibility, language barriers, fear, and lack of correct information regarding screening information or misconceptions regarding screening (Susan G. Komen, 2015).

The Susan G. Komen Community Profile Report's data collection includes a qualitative study as well that utilizes the Social Ecological Model (SEM) to further investigate three target populations of the COI: women never diagnosed with breast cancer from the general population, breast cancer survivors, and health care providers or breast health leaders. The qualitative data methods of collection involve electronic and paper surveys, interviews, and focus groups (Susan G. Komen , 2015). The survey was used to gain understanding of the general population's perspective of health beliefs, breast health, and screening awareness to determine how women in communities of interest prioritize health prevention. A team of individuals trained to gather qualitative information concluded barriers to effective breast health, such as misunderstandings of

the importance of mammogram screening, as well as the lack of communicative messages, heightens the need for outreach services that support collaborative health care to meet the needs of populations at risk (Susan G. Komen, 2015). The Komen report correlates to the doctoral project educational program for providers promoting breast cancer prevention for a targeted group.

Description of Access to Evidence

The information from the Susan G. Komen (2015) Community Profile Report is accessible online and is open to the public. The online report gives a detailed description of the results of the research that includes purpose of the report, mission, data collection, and public health systems analysis (Susan G. Komen , 2015). The information is available for public knowledge and health care providers and lay persons have access to this report.

Participants

The health care participants in this doctoral project included 15 individuals from interdisciplinary professions encompassing physicians, nurse administrators, a nurse navigator, radiology staff, and secretaries at the participating mammography center. Essential VI's explanation of the importance of inter-disciplinary collaboration directs the DNP research that promotes reducing the targeted health disparity by unifying disciplines in the approach and implementation of health prevention and promotion (American Association of Colleges of Nursing, 2006).

Pastors from churches in the local community (eight to ten participants) and the Director for Community Development Urban Mission represent a selection of African

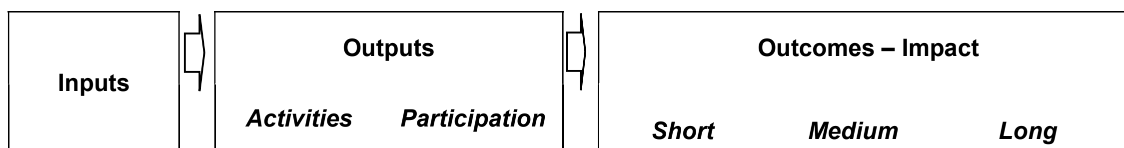
American pastors who collaborate with the Urban Mission for community support for their parishioners. The relevance of a faith-based organization to community health programs centers on the ability of spiritual leaders to provide a setting that is less intimidating and more supporting (Campbell, Hudson, Resnicow, Blakeney, Paxton, & Baskin, n.d.). Such church-based health promotion (CBHP) programs produce effective results in influencing African American behaviors regarding health because of the combination of spirituality and cultural contextually (Campbell et al., n.d.). The Director of the Urban Missions explained the organization's previous efforts to encourage early breast cancer screens did not provide positive outcomes for the various events planned to get African American women involved in health prevention and promotion efforts. The doctoral project practice-focused question supports the faith-based organization's interest in the research.

Procedures

According to the American Association of Colleges of Nurses (2006) Essential VII, one of the roles of the doctoral nurse is to apply leadership skills in health prevention and promotion by developing programs that address the health problems of targeted groups. The planning process of the Logic Model incorporates the use of theoretical conceptualization, service, practice, research, and evaluation (Lane & Martin, 2005). The model provides a thorough program design and outlines a path for related research (Lane & Martin, 2005). Utilizing materials from the Komen Foundation, the research project supports an educational program that teaches health providers the necessary messages that promote breast cancer awareness in African American women. The activities for the

educational program utilize the conceptual framework of the Knowles Adult Learning Theory, built on the premise that adult learners build on their knowledge base to gain new insights (Taylor & Hamdy, 2013).

The logic model provides a process for developing and implementing a program in a sequential pattern; the components of the model include (a) resources, (b) inputs, (c) outputs, (d) outcomes, (e) assumptions, and (f) external factors that contribute to the effectiveness of the program (Community Tool Box, n.d; Goldman & Schmalz, 2006). The explicit explanation of each of these components below results in a picture of the doctoral project's process. The strength of using a logic model as part of the evaluation plan is that it allowed me to individually assess each step in the development and implementation of the educational program and to assess the overall program. The intended result of using the model in this DNP project was to strengthen the voice of the community by building a relationship between health care providers and target populations. Figure 1 shows the logic model in detail.



• Funding/ Komen Grant monies • Mammography staff • Evidence-based research • Computer technology • Komen materials for culturally targeted population • Stakeholders (Faith-based organization)	• Create a diverse committee of stakeholders • Workshop on effective message promoting breast cancer awareness in African American women • Assessment of the 3 E's of this program: Education, environment, and evaluation Introduce the PEN-3 model and the health belief model as a key aspect of the educational program	• Physicians • Certified nurse navigator • Radiology techs • Mammogram center secretaries • Faith-based organization • Pastors from local churches	• Mammogram staff uses educational program to enhance provider-patient relationship • Staff, providers, and stakeholders understand the importance of cultural appropriate-ness in health prevention and promotion	• Health providers and faith-based organization work together to promote the message of early breast cancer screening to help reduce a health disparity	• Educational program benefits other ethnic groups • Screening scheduling by African American women indicates an increase at the center • Continual rebuilding of the educational program to enhance its use in health prevention • The relationship between provider and African American women dispels the barrier of mistrust

Figure 1. The logic model.

The objectives for this educational program were as follows:

1. To incorporate cultural appropriateness into health educational programming,
2. To increase knowledge of medical barriers that limit mammogram screenings,
3. To encourage faith-based participation to promote breast cancer awareness in African American women.

The following steps outline the procedures to develop and implement the educational program:

Step 1: Resources

The Susan G. Komen Foundation (n.d.) provides an educators' toolkit comprised of literature relating to the practice-focused question. The toolkit provides information

that supports the contextual basis for the study, which is to understand and overcome the barriers that prevent African American women from getting early breast cancer screens.

Step 2: Inputs

This step identifies the problem and the population at risk. The educational goal is to provide a program that supports promoting health providers with information that influences African American women's behavior toward mammogram screens. Step two's inputs also include human resources such as administrative staff, radiologists, radiology staff primary doctors, certified nurse navigator, and stakeholders from a faith-based organization. The Komen Project Manager for the practicum's site provides grant proposals that coordinate with outreach projects for populations at risk and provides the information from the Komen Northeast Community Profile Report (Susan G. Komen , 2015). The collection of Komen educational resources for the doctoral project is obtainable from the Susan G. Komen Breast Cancer Education Toolkits website (Susan G. Komen Foundation, n.d.).

Step 3: Outputs

The procedural planning involves the activities for the educational program. Although the doctoral project was not implemented, it is still appropriate to discuss what outcomes are provided in the educational toolkit. A pretest of true or false questions before the presentation of the educational program reveal health providers perceptions of reasons why African American women do not practice breast health behaviors. The pretest is included as Appendix A. A ten-slide PowerPoint presentation developed for health providers will deliver information from the Komen Educator Toolkit, thereby

disseminating evidence-based information including graphs, illustrations, and research to present the three categories of barriers (clinical, structural, and personal) identified as obstacles for African American women receiving early screens. Also, the utilization of the PEN-3 theory to explain the challenges that surround a cultural emphasis on behaviors of African American women is included in the PowerPoint slides (Iwelunmor et al., 2014). The faith-based organization activities comprise another part of the presentation, thus emphasizing the importance of a religious connection with health disparities and populations at risk (CDC, n.d.-c). The health belief model, along with the PEN-3 approach, is the theory on which the project is based.

A time frame to present these activities is a crucial part of delivering a message of working with vulnerable populations to promote health equity and reduce health disparities. The use of email to deliver the pretest and a short explanation for the presentation to participants lessens the time spent prior to the presentation. A posttest from the Komen Educators toolkit is part of the time set aside after the presentation.

The timeline of the doctoral project did not allow for implementation of the educational program, but I did develop a plan to present this information during Minority Health Month in April 2019. Research presented on poster boards using breast cancer awareness material from Komen will also help disseminate the information. The use of posters to present evidence-based research supports translating and integrating information (Forsyth, Wright, Scherb, & Gaspar, 2010).

The participants who will be trained following the conclusion of the doctoral project, serve as an integral part of the educational plan. These participants include

physicians, a certified nurse navigator, radiology staff, administrators, and secretaries at mammography center. Health care workers working to improve health outcomes in patients of populations at risk by incorporating cultural appropriateness supports reducing health disparities in their message of health prevention (Mobula, Okoye, Boulware, Carson, Marstellar, & Cooper, 2015). The Director of Community Development for Urban Missions identified eight to ten pastors from the local church community who plan to attend and participate in the health provider education program. The presentation supports the stakeholders' understanding where each group can support reducing health disparities among African American women, thus unifying all stakeholders in a successful health intervention (Goldman & Schmalz, 2006).

Step 4: Outcomes

When the implementation of the educational program occurs, the outcomes or impact of the educational program fall into short, medium, and long-term results that help to determine the effectiveness of the program (Goldman & Schmalz, 2006). To assess the outcomes, the logic model permits a sequential flow of events, allowing an efficient way to measure the completion of the service process and the outcomes (Kettner, Moroney, & Martin, 2017).

The short-term impact will be measured, once implemented, through the pretest and posttest scores of participants before and after receiving the training. The surveys will add an additional layer to the assessment of the participants' understanding of the importance of providing the educational program for African American women.

The mammography center's measurable outcome for the medium impact of this educational program entails quantifying the number of African American women who opt for early screenings after receiving information from health providers that utilize the faith-based organization as a means of increasing breast screen awareness. In order to measure this outcome, all women in the target demographic who receive early screenings at the mammography center will be asked whether they received the educational information from the faith-based organization or from some other source.

The long-term impact will be measured by the number of African American women utilizing the mammography center and receiving case management services as needed, before and after the implementation of the educational outreach program. Also, enhanced provider and patient relationships in the African American community based on providers' improved understanding of cultural appropriateness (Leeks et al., 2012) is a long-term outcome of the study. Finally, the ultimate long-term goal is a reduction in breast cancer disparity in this rural community.

All outcomes of this project reflect the Susan G. Komen Foundation's goal of ensuring that local communities receiving funding provide breast health services using evidence-based programs that target populations at risk. The following breast cancer metrics chart, Figure 2, shows the short-term, medium-term, and long-term outcomes for both the faith-based organizations and the providers.

ENABLERS	STRATEGY	OBJECTIVES		
		SHORT-TERM (pre/post program)	MEDIUM-TERM (Future Recommendation) (2 years post program)	LONG-TERM (Future Recommendation) (2-5 years post program)
Faith-Based Orgs	Measurably improve awareness, comprehension and outreach capability to enable faith-based organizations and providers sustainable community support resulting in lower mortality rates	Assess/improve breast cancer prevention awareness	# of age-relavant African-American women who opt for screenings over 2 years post study (against current baseline)	A) # of age-relavant African-American women registered at the Mammogram Center; B) # using case management services C) # show consistent visits
Providers		Assess/improve community and cultural competencies		

Figure 2. Breast cancer metrics.

Ethical Protections

Resnik (2015) defines ethics as a method, procedure, or a particular way of thinking that determines how to act and analyze complex problems and issues. The main ethical principles consist of honesty, objectivity, integrity, respect for intellectual property, confidentiality, and respect for colleagues (Resnik, 2015). The code of ethics that defines a health education profession encompasses responsibility to the public, profession, employers, delivery of health education research and evaluation, and professional preparation (Hodges & Videto, 2011). Article I of the code of ethics for a health education profession considers the public and responsibility to the public is an appropriate aspect of the planning of the program (Hodges & Videto, 2011).

To maintain ethical standards for this project, I plan to provide the mammography staff and stakeholders with a consent form that explains their participation in the doctoral project and ensures their anonymity. Providing this explanation in writing supports Section I of the Code of Ethics, which reveals the right of individuals to make informed

decisions on their consent to participate in the program (Hodges & Videto, 2011). This letter provides an explanation in writing that details the procedure for participation, explains that the project is voluntary, informs participants of the provision for privacy, and gives participants the opportunity to ask any questions about the study. Also, the letter explains that any stakeholder's decision not to participate will be respected, and participants may withdraw at any time. This letter will be sent to participants either in hard copy or by email, after permission is requested from the organization's communication officer to use email to communicate with the health providers regarding the doctoral project. Like the letter, the email to providers will include a request for consent or refusal, permitting the provider the right to decide whether to participate or not.

Finally, participants will be assigned a number to track their responses. No participants' names will be included in order to preserve the anonymity of their results.

Role of Walden University Institutional Review Board (IRB)

The purpose of the Institutional Review Board (IRB) is to ensure that research conducted at Walden University complies with its ethical standards and the United States Federal Regulations. The Walden University Institutional Review Board provides information regarding the ethical practice of research and its implications for the projects developed by students (Walden University, 2017). The research planning ethics worksheet outlines necessary questions for the student researcher to review and answer. The questions facilitate understanding of any potential ethical challenges that might hinder the approval of a research project.

Analysis and Synthesis

Software Systems Used for Research Organization

When collecting sources for the literature review and information from the research literature, I used a software tool called Zotero to record, track, and organize the writing. This technology automatically recognizes content in my web browser and allowed me to add the information to my library of evidence-based research for the project (Zotero, n.d.). The material is in alphabetical order and tags the most current date of publication, as well as the database selected for research material, and whether it is a primary or secondary source. The software's organization permitted me to make a comparison of the research and examine the content methodically to determine its applicability to my research project. Also, I stored the Komen Toolkit information found online using bookmarks in the web browser Google Chrome to reexamine at a later time. The analysis of this evidence-based material that supports explanations that focus on the cultural barriers African American women reveal as the rationale for not getting early breast cancer screenings is a part of the toolkit designed for the African American women.

Procedures to Ensure Integrity of Evidence

The testing and survey information developed from the Komen Toolkit supports the need for promoting breast cancer screening in a population at risk and using cultural appropriateness in the message. The Komen resources validation and reliability is evidence-based strategies from the Komen Foundation Community Profile Report, American Cancer Society, Intercultural Cancer Society, and National Cancer Institute.

Komen partnering with various experts in culturally-responsive health promotion helped to identify and select evidence-based strategies crucial in creating the Toolkit. The benefit of using research evaluated and proven successful ensures the integrity of the material utilized in the educational program.

Analysis Procedures to Address the Practice-Focused Question

The practice-focused question that guides this doctoral project was, Will the development of a staff education program based on cultural appropriateness enable healthcare providers and staff to utilize evidence-based research to promote the message of breast cancer prevention in a population at risk? Two sources of evidence were used to answer this research question: (a) surveys of mammography and breast cancer experts to gain feedback on the educational plan and (b) questionnaires with a rubric to evaluate the DNP candidate's role in the educational program. Once the project is implemented in April 2019, the participants' knowledge of the educational program material from the Komen Foundation will be measured by the difference between participants' pretest and posttest scores. Additionally, the participants' understanding that cultural appropriateness plays a pivotal role in health prevention and promotion is a key aspect of the education program. Follow-up surveys will assess their "buy in," or understanding of the importance of such an educational program in their outreach efforts. Survey data will also be used to assess participants' approaches to using the materials as a way of addressing the psychosocial barriers that prevent women in the target population from seeking mammograms.

Summary

According to Passmore, Williams-Perry, and Casper (2017), statistics reveal African American women as opposed to other women are receiving a diagnosis of breast cancer at a young age, at a late stage, and die from the disease. The design of this research doctorate project supports reducing breast cancer disparities in this rural county and enables African American women the opportunity to understand the importance of breast health and early screenings.

Section 4: Findings and Recommendations

Introduction

In a rural county in Ohio, low mammogram screening numbers for African American women result in a high incidence of breast cancer in the late stage of the disease (Susan G. Komen Foundation, 2015). Documentation indicates that African American women remain disproportionately affected by this disease, and the survival rate for African American women is lower than for any women of any other ethnic group (Allicock, Graves, Gry, & Troster, 2013). The staff of the mammography center at a local hospital in this rural county recognize the need to help this aggregate group practice breast health prevention through early detection (Health System Source, n.d.). The educational program was not implemented at this site of practice; however, it was introduced as an educational program for the staff and providers. I collected and analyzed data from surveys and questionnaires from the project team, which consisted of mammography and breast cancer experts, to gather feedback on the educational plan and on my role in the project.

The Gap in Practice

Prior to this DNP project, there was no nurse educational program that focused on breast health and the importance of awareness messages targeted for African American women regarding early breast cancer detection at my practicum site. Health providers did not prioritize targeted promotion of the benefits of mammogram screenings specifically for African American women. Therefore, the purpose of this DNP project was to

establish a breast health educational program for health providers and staff in a local mammography center.

Practice-Focused Question

The primary practice-focused question for this project was the following: Will the development of a staff education program, based on cultural appropriateness, enable health care providers and staff to promote breast cancer prevention to the targeted population at risk? The deidentified data from the mammography site supported this question. Demographically, the Komen Community Profile Report (2015) revealed that the total number of females living in this rural community was 36,449, and 7.0% of the total population was composed of non-White females. The data from the 5-year period of 2013 to 2018 indicated that the total number of African American women registered for mammogram screenings was disproportionate to the total African American population, as only 5.3% of mammogram registrations were African American women (Health System Source, 2018). The number of African American women and Caucasian women ages 40 and over living in this rural county and screened at this site over the 5-year period was 13,165. See Table 2 and Figure 3 for mammogram screenings and demographics from 2013 to 2018 at this site (Health System Source, 2018). Out of the 13,165 women screened at this site, only 4.8% were African American (Health System Source, 2018). According to the Susan G. Komen Foundation (2015), African American women's screening rates may equal those of Caucasian women; however, the mortality rates for African American women reveal delays in follow-up screenings after an abnormal mammogram, resulting in increased death rates. Low mammogram screening

numbers for African American women living in this region result in a high incidence of breast cancer in the late stage of the disease (Susan G. Komen Foundation, 2015).

Table 2

Screening Results of African American Women Versus Caucasian Women

Year	2013	2014	2015	2016	2017	2018	Median over a 5-year period
Caucasian	672	1,036	1,155	1,437	3,717	2,151	**1,296**
Af-Am	33	54	56	77	199	118	**67**
TOTAL	705	1,090	1,211	1,514	3,916	2,269	**1,363**
Caucasian	95.3%	95.0%	95.4%	94.9%	94.9%	94.8%	95.0%
Af-Am	4.7%	5.0%	4.6%	5.1%	5.1%	5.2%	5.0%

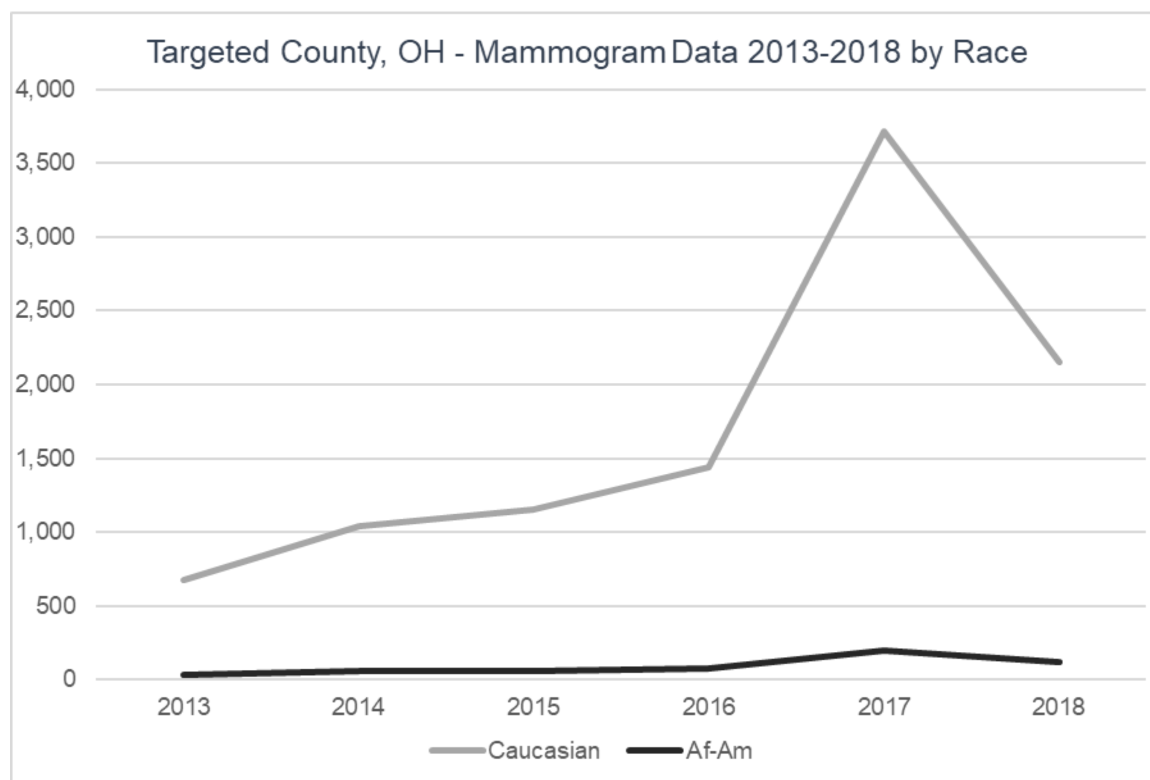


Figure 3. Mammogram screenings and demographic information of women screened at the practicum site, 2013-2018.

The Purpose of the Doctoral Project

The purpose of this doctoral project was to establish and implement a breast health educational program for health providers in a local mammography center that did not provide such a program specifically targeted for African American women. The educational plan entailed adapting existing educational materials from the Susan G. Komen Foundation in order to incorporate cultural appropriateness into health educational programming, increasing providers' knowledge of medical barriers that limit mammogram screenings, and encouraging faith-based participation to overcome barriers and promote breast cancer awareness in African American women.

Summarized Sources of Evidence

Cultural competence practiced by health providers caring for African American women supports positive health outcomes (Susan G. Komen Foundation, 2015). A qualitative research study by Hall et al. (2015) found that cultural appropriateness improves patient-provider relationships and supports educational interventions to promote health prevention. Results from a research article that determined the effectiveness of cultural competency training for health care providers concluded that differences between pretest and posttest show a significant increase in knowledge from 70% to 94%; $p < .001$ (Palmer et al., 2011). The research also emphasized the importance of cultural competency in reducing health disparities and increasing cultural understanding in health care practice (Palmer et al., 2011). In another study, evaluation of the outcomes of competency training for health providers and staff revealed a notable

change in the participants' knowledge and skill regarding cultural appropriateness in health care (Khanna, Cheyney, & Engle, 2009). The statistical work using a comparative descriptive design provided pretest/posttest evidence that supports research indicating that cultural competency training remains an important strategy for reducing health care disparities (Khanna et al., 2009).

Analysis of a research study by Best et al. (2015) indicates that spiritual influence plays a role in communicating messages about early breast screenings and breast health in an intervention outreach program and influences the behaviors of African American women. The qualitative research included interviews from African American women expressing their perspectives on religion and spirituality in relation to breast cancer prevention (Best et al., 2015). Additionally, the study indicates that further work on spiritual and religious influences on outreach intervention programs remains necessary (Best et al., 2015). Statistical evidence from Leyva, Nguyen, Allen, Taplin, and Moser (2015) revealed that the impact of religious service attendance on recent mammogram screening was significant and associated with higher receipt of screening.

The critical appraisal of the current literature related to health education programs for at-risk populations helped to inform and guide the direction of this project. The analysis of the literature followed the process outlined by Fineout-Overholt et al. (2010). Because the goal of the study was to increase participants' knowledge regarding cultural competency in order to disseminate a message concerning the importance of early breast cancer screenings for African American women, a panel of leaders from the practicum site reviewed the educational materials in order to provide feedback on their potential use

in the mammography center. The educational materials include a pretest and posttest (see Appendices A and B) for the health providers and staff in order to measure the educational program's projected outcome. These pre- and posttests were provided in the Komen Education Toolkit and approved by project team members. They were designed to measure each participant's knowledge before and after the training, and to determine if participants' understanding of the material increased as a result of the training. In the staff education sessions, resources will be provided to assist in outreach to and education of FBOs regarding the messaging about early breast screenings for African American women. These resources are located in Appendix C, which includes the educational plan along with a website to retrieve materials from Komen's Breast Cancer Educational Toolkit for African American women (Susan G. Komen Foundation, 2015).

Findings and Implications

Development of the Education Program

The project team, which was composed of three experts in the area of mammography and breast cancer, served as a panel of experts to review the educational program. The panel received an evaluation packet to provide me with feedback on the doctoral project. The members of the project team were stakeholders in the organization that served as the research site and worked in the areas of mammography, diagnostic testing, and cancer prevention. Their knowledge base in this area of health care allowed them to provide a qualified assessment of the educational plan and its materials. The participants submitted a consent form giving their permission to participate in the review of project materials.

Program Evaluation by the Project Team

An educational plan, included in Appendix C, was structured in three sections for the panel of experts to review. Section 1 provided an overview of the development of the educational plan for staff and providers. The theories used in the development of this educational project—the PEN-3 model, HBM, and Knowles's theory of andragogy helped to create a program that allows adult learners to gain knowledge regarding cultural competency and how it influences the practice behaviors of African American women.

The following information summarizes the structural outline for an educational workshop.

Part 1. I researched demographic information using the 2015 Komen Community Profile Report. Specifically, I looked at the demographics of the total female population in this rural county that included age, race, economic status, education, and insured versus noninsured. All of these components have integral roles in laying a foundation for understanding the targeted population. For example, the Komen Foundation explained that low-income and uninsured patients remain a troubling point in health care prevention of breast cancer (Susan G. Komen Foundation, 2012). Other research involved during Part 1 of the project included a discussion of religious influence from an FBO and its role as presented in the PEN-3 model, which helps to emphasize the theory's conceptual view of the importance of spiritual influence in the life of the African American family. The educational program included research from the Pew Research Center on Religion and Public Life in the United States, which revealed that, in comparison to Caucasians living in the United States, a larger percentage of African Americans view religion as central to

their lives and express their belief in God as profound (Masci, 2018). The FBO in this community is composed of pastors from various denominational faiths in this rural county. The dominant faith is Baptist, and the total number of ministers representing the various faiths is 11. The educational materials from Komen's Toolkit provide strategies for "Pink Sunday" to help providers and ministry work together to reach African American women, and the informational material from the toolkit helps to guide the teaching of breast health and breast cancer prevention in a congregational setting or worship place.

The deidentified data representing the women screened at the site are part of Section 1, and this evidence enables the staff and providers to comprehend the seriousness of the health problem. The revelation of low screening numbers of African American women living in this rural county intensifies the need for intervention. The pretest given to the participants before the educational program is aimed to provide an understanding of the participants' knowledge base before the program. Evidence-based research shows that factors that influence African American women in their decision to adopt early breast cancer screening practices include structural and personal barriers. It is important that staff and providers recognize the unique culture and perspectives of African American women in order to provide them with culturally relevant care.

Part 2. Part 2 of the educational plan involved sharing with the project team the theoretical concepts from the PEN-3 model and HBM, both of which support the need to understand how to motivate behavioral change in a population at risk. The Komen Toolkit for African American women provides handouts to educate African American

women about mammography and its importance, breast health bookmarks for African American women, breast self-awareness messages for African American women, and racial and ethnic differences (Susan G. Komen Breast Cancer Education Toolkits, 2015). Another Komen Education Toolkit resource is the My Family Health History Tool, which encourages dialogue between providers and African American women about key factors that impact the women's lives based on family history. A posttest planned for implementation at the end of the program evaluates the knowledge participants gained after taking part in a cultural competency program.

In this part of the educational plan, my goal was to help the faith-based organization representatives understand the materials from the Komen Toolkit. Additionally, Part 2 included collecting stakeholder input on the objectives of the program and project team members' thoughts regarding cultural beliefs of African Americans and health practices. This portion of Part 2 ended with sharing with stakeholders the Breast Cancer Continuum of Care (COC), which provides messaging methods to use in motivating a change in breast cancer prevention through follow-up care and yearly routine screenings.

Part 2 provided the following information for the panel's review and feedback:

- The logic model, which provided the doctoral project's established goal, objectives, activities, and short-term, intermediate, and long-term outcomes. The logic model's purpose focuses on providing an educational program that reinforces PEN-3 theory, which brings together African American women and their family, community, and provider. The concept of cultural

appropriateness used in healthcare supports the educational program's basis for influencing an increase in early breast cancer screening in the African American women living in this rural county. The logic model is significant because it assesses each step in the development and implementation of the educational program. I explained to the panel of experts that if changes are necessary to improve the program's effectiveness, the logic model's design provides a means of strengthening the program and enhancing cultural appropriateness.

- Deidentified data from the mammography site incorporate screening numbers representing African American women and Caucasian women receiving mammogram services. This information supports the local nursing practice problem and demonstrates the gravity of the health problem in the low numbers of African American women in comparison to Caucasian women screened over a 5-year period. The permission from the director and radiology supervisor to collect information from the mammography site's database made it possible to gather a substantial amount of evidence, and the use of a plotted graph and table with the screening numbers revealed the need for intervention and change to help this population at risk.
- A Gantt chart provides a visual of project parameters and project timeline as well as a schematic diagram explaining the problem, solution, and positive outcomes of the cultural competency component of the doctoral project. This chart reveals a realistic approach to the local health problem at the

mammography site. I discussed with the panel the relevance of using a Gantt chart to map out plans for implementing the educational program.

Part 3. Part 3 of the educational plan emphasizes sustaining the change in health practice by advocating African American women to adopt proactive behaviors. The importance of collaboration between providers and stakeholders is part of the discussion based on the information previously disseminated. Part 3 includes introducing new employees working at the mammography site to the educational program and the continual use of Komen materials as evidence-based research to support the educational program's goal. A main component of Part 3 was an evaluation of the educational program's value through Survey Monkey surveys (provided in the Komen Toolkit) by the organizational leadership, providers, staff, and stakeholders. Those survey results assessed the program's effectiveness and informed change as necessary. In addition to the evaluation of the program's effectiveness, Part 3 included questionnaires and a rubric for the panel of experts to evaluate me and my role in developing the project and provide feedback on my leadership. I personally distributed the evaluation packets to the project team members at the organizational site, with instructions to complete their evaluation of the program within a 2-week period.

Results of the Evaluation

The questionnaires included in the packet of educational program materials served as the evaluation tool. The formative evaluation was a questionnaire that assessed the development of the staff education program, deidentified data, and evaluation plan. The rubric accompanying the questionnaire used a 5-point Likert scale, with which

respondents rated their perspective on the program. A rating of 5 indicated strong agreement and excellence in meeting criteria for a successful program, and a rating of 1 indicated complete disagreement or not meeting criteria for an educational program on cultural competency. The summative evaluation was a verbal discussion in which the rubric was used to provide feedback on my role and the overall doctoral project.

Section 1 findings. The panel of mammography leaders reviewed and rated each section of the evaluation packet. Section 1 addressing the educational program had three parts, which pertained to understanding the African American community, changing risky behaviors, and sustaining change within a population at risk. The delivery of the educational program included the use of PowerPoint presentations, handouts from the Komen Toolkit, and group discussions.

The first question asked whether the purpose of an evaluation plan addresses a cultural competency program. All three survey respondents rated the question with 5 (*strongly agree*). Response to the question regarding whether the deidentified data support the need for a cultural competency program and support the practice-focused question received a rating of 5 (*strongly agree*) from all three panel members. The panel evaluated the deidentified data as supportive because of the calculated numbers of screening comparisons indicated that 537 African American women versus 10,168 Caucasian women, or 5.3% of African American women, registered for screenings over the 2013-to-2018 period. The panel found this statistic significant, requiring an intervention to increase early breast cancer screening and reduce health disparity in a targeted population. In the summative evaluation after the panel completed its

questionnaire, panel members expressed verbally the low mammogram numbers for African American women living in this rural community, revealed the gravity of the problem, and rated this information as a 5 on the rubric, which corresponded with "Content is quality work and addresses the need for a cultural competency program and the use of Komen's materials." Additionally, the rubric contains a criterion that represents the importance of the PEN-3 and HBM in forming the program: "The program's training provides the opportunity to improve one's knowledge of cultural competency and practice in the clinical setting." The implication of the findings from the rubric is that the purpose of the program supports the need to understand the African American community and diversity. The organization's staffing and providers lack diverse representation and need to learn about the culture of another population, which, according to the theorist Airhinhenbuwa, begins the journey toward cultural competency in practice (Iwelunmor et al., 2013).

Another criterion the panel reviewed consisted of the role of the faith-based organization in the educational plan. According to the Komen Education Toolkit (Susan G. Komen Foundation, 2018) the development of the educational program incorporating the collaboration between the staff, providers, and faith-based organizations plays a pivotal part in strategizing the success of the program. The mammography site's leadership rated the educational information on stakeholders' involvement as five or the creativity of the program in implementing a faith-based organization's input in the short-term and medium-term outcomes. In the short-term outcome, the role of the spiritual leaders working with the providers will result in developing a positive relationship with

African American women and establishing trust between the provider and patient. One of the barriers discussed in the education program is African American women interacting with health providers for positive outcomes. This barrier results from lack of trust, as historical mistreatment of African American patients (such as in the Tuskegee study and Henrietta Lacks) continues to impact African American trust of the health care system. The panel's assessment of the medium-term project outcomes revealed that the panel agreed with reviewing data after a three- to six-month period to examine the initial success of the educational program based on increased numbers of African American women registering for screens compared to prior registration numbers. The panel rated the overall doctoral project a five, indicating that the panel finds the development of an educational plan using resources from the Toolkit to reach out to the community to be innovative and noted the evidence-based research from Komen supports working in an educational setting that helps to understand different ethnic groups. According to a Director of the Cancer Treatment Center, the organization does not provide services that educate health providers or staff in this manner and that the intensity of such a program supports change in the organization.

During the summative evaluation, the panel members expressed verbally their concerns regarding the time to participate in the educational program; however, as facilitator I explained that the Gantt chart's estimated project parameters and timeline allows the opportunity for flexibility in the amount of time required for planning and implementation. After that explanation, the panel agreed on a rating of five for plausibility of the project. The director of the mammography site expressed that the

program outlines a strong direction in its objectives in developing an educational program that incorporates cultural competency and explained his readiness to incorporate the educational plan in the site's patient care. The Director communicated he wanted additional understanding regarding the relationship between the providers and the faith-based leaders. I explained that empirical research supports using a spiritual influence to better relate to the African American culture and help providers communicate the importance of early breast cancer screens because of the influence from the church leaders.

The panel rated the program's influence on their perspective of practicing cultural competency a five and also responded that they strongly agree (rating of five) that they would recommend this program to another organization teaching cultural competency to staff and providers. Their review of the educational program received the rating of five for the entire educational program, representing their support for high quality work that promotes an important message regarding breast cancer prevention for a population at risk. The panel's knowledge of Komen's resources varied, and the Toolkit for diverse ethnic groups necessitates time to understand the material with enough depth to help populations at risk understand the importance of breast cancer prevention. I explained that the educational plan has potential for transferability, providing the opportunity for the program to be used with other ethnic groups.

Section 2 findings. Section 2 of the educational program entails the use of surveys of the staff, providers, and faith-based leadership. Because the educational program was not implemented, the survey was not actually conducted during the course

of this DNP project. However, the panel of experts reviewed the survey materials and provided me with feedback on the potential usefulness of the surveys. The Komen resources provide examples of surveys for participants, which this doctoral project's evaluation plan will to assess the program's effectiveness during and after implementation. Conveniently, the Toolkit permits the creation of customized surveys using Komen's resource material, which may prove useful as the educational program changes. The Toolkit provides a tracking system for the electronic surveys that users can access on devices such as phones, tablets, computers, or laptops. Once the program is implemented, the surveys and tracking system will generate real-time feedback that can be used to make immediate changes and adjustments to the educational program.

For the section two evaluation, the panel was asked to assess my role in helping the project team understand the Komen Toolkit and its resources. Based on time management concerns, the panel expressed that the online tracking system helps to expedite the flow of information. The panel rated this method of surveying and my role a five.

Section 3 findings. My goal of developing a staff education program designed to provide culturally competent services proved successful based on the responses on the questionnaires and the rubric evaluation. Ratings of 5 in all three sections of the program signaled that the panel members strongly agree with the development of the program. The rating on the objectives of the program, to incorporate culturally-appropriate practices into health educational programming, to increase knowledge of medical barriers that limit mammogram screenings, and to encourage faith-based participation to promote breast

cancer awareness in African American women, reveals that the panel felt positively about the outcomes of the development of the program. The panel members rated my role as facilitating the program and providing evidence-based research to support this educational program a 5. My role as a change agent and leading the project team also scored a 5, which supports the panel's acceptance of a cultural educational program. Criterion five on the rubric required panel members to assess whether information in the educational program addresses major points of cultural competency in health care, and the panel in its entirely agreed that the samples of the pretest and posttest on cultural competency knowledge rates a 5. The information on project outcomes and timeline correlate to the activities developed in the Logic Model, and the panel rated the description of these workshop events positively in terms of the impact of a cultural competency program.

The panel's input, based on the questionnaire responses and the rubric rating of the evaluation packet, provided the opportunity for the mammography center's leaders to offer suggestions for improvements or changes that benefit the medium- and long-term outcomes. The panel emphasized their concern that time management plays an important part in the educational program dissemination. This process of change influences health care and the panel readily expressed that this program provide the possibility for reducing the health disparity in the targeted at-risk population.

Unanticipated Limitations

Kotter (2007) explains that change in organizations involves a process, and transformation requires time because each step is critical to the success of a program. The

leaders of the organization involved in the change process influence the other members of the organization. The Project Team's leadership plays a pivotal role in communicating the vision of change and practicing cultural competency at this organization. Poor response from the leaders lessens a positive outcome for the educational program. For example, as I was recruiting the panel of experts, two members of the organization's cancer treatment center expressed their inability to adequately review the evaluation packet, and their not wanting to serve as panel participant determined my decision to utilize only three panel experts instead of the larger panel that I had anticipated.

Another limitation not anticipated was during the actual data collection during a trial delivery of the educational program. Health providers and staff who participated in the training did not complete the surveys due to misinterpretation of the instructions on the survey. Incomplete surveys because of technical difficulties resulted in inability to assess the data from the pretest and posttest. Therefore, the trial delivery was not included in this dissertation. Finally, the Hawthorne effect (participants altering their responses and behavior because they knew they were being studied) was another limitation. According to Anderson (2010), in survey research, participants do not always express the truth and instead often communicate what they think that the researcher wants to read.

Implications Resulting From Findings

The results of the evaluation of the staff educational program provided positive feedback from the panel of experts regarding the importance of a cultural competency program for staff and health providers and my role as a change agent and facilitator. The de-identified data helped to reveal the seriousness of low mammogram screenings by

African American women over a five- year period. The panel's willingness to review the program and the overall rating of 5 out of 5 on its development implies that there is value in cultural competency training for healthcare practice and significance in using the Komen Toolkit in the program. Conversations with leadership in other departments of the health organization, such as the oncology department, revealed that previous attempts by the organization to reach out to African American women in the community to message early breast screening failed in the delivery. The positive feedback from the panel encouraged me to converse with the individual representing the Komen Northeast region of Ohio about the staff educational program's purpose and rationale based on the Komen 2015 Community Profile Report and de-identified data. The representative commented that this type of educational project promotes the goal of reducing health disparity and promoting health equity in prevention. The transferability of the educational project motivated the panel to express the potential of using this project to help the LBGT community. One implication of the findings that may potentially result a change to the program was the concern of the panel regarding time management. Time plays a pivotal role in the educational program, as revealed in the panel's views about the project's timeline and concerns about staff and providers' ability to take part in a ten-week program. That feedback was important in my reflection and may require modification as I prepare for the implementation.

The panel readily agreed with the participation of the faith-based organization as an influential stakeholder in promoting the messaging of early breast cancer screening in the African American churches. The research supporting this concept of spiritual

influence is a central theme in the doctoral project. Research indicates the projected outcome from the short-term objectives have proven successful in improving providers' skills when they have collaborated with faith-based organizations, resulting in better responses from African American women about their health practices. The short-term evaluation for this research project indicated that there is a correlation between providers and staff developing relationships with pastoral leadership and providers and staff practicing cultural awareness in messaging early breast cancer screening. Hodges and Videto (2011) explain that the short-term goals and objectives assess factors relating to the program, such as behavioral changes, environment, predisposing, reinforcement, and enabling cultural considerations in outreach programs. My role as facilitator helping the project team foster interactions among providers and church leadership reinforces the theorization of the PEN-3 model and health belief model, which emphasize communicating the need to centralize an educational program that incorporates culturally-relevant practices.

The outcome evaluation focuses on whether intermediate and long-term objectives reach attainable goals (Hodges & Videto, 2011). The panel and I discussed strategies for the intermediate and long-term outcomes that will help to clarify measurable project outcomes. The measurable project outcome for the mid-term and long-term will be an increase in registration of mammogram screenings by African American women due to the influence of spiritual leaders working with providers. The executive director of the faith-based organization meets monthly with the Valley Pastors Network, and communication between these community stakeholders and providers

should prove effective based on the recommendations from the Komen Toolkit on outreach and education to faith-based organizations. Komen's outreach interventions such as "Pink Sunday" and First Ladies support an opportunity for the providers to discuss with the faith leaders when to disseminate information on breast cancer screening and breast health. Based on the interaction with the faith leaders and providers, the team developed a plan for the outreach events center during the month of April, which is Minority Health Month. The intermediate objective is for providers to target three distinct groups of age relevant African American women, ages 18 -29, 30-49, and over 50, to disseminate information on breast health during Minority Health Month. A positive outcome of this objective will be that cultural competency training in health care will be effective in developing positive relationships with a population at risk. The long-term objective evaluates the program's effectiveness based on increased screening numbers by African American women and increased follow-up appointments to address possible disease processes that could lead to death.

The providers' interactions with the community stakeholders has already begun to effectively communicate positive health outcomes based on the emphasis on understanding barriers African American women face when deciding to practice healthy behaviors. The providers' understanding the role faith leaders play in African American communities has caused providers to encourage patients to talk to their family members who do not attend church to practice early breast cancer screening. According to Khanna et al. (2009), to promote medical adherence and reduce ethnic disparities, avoiding miscommunication in messaging health prevention necessitates more cultural

competency training in health care. Evaluating the communication between the providers and faith leaders supports an educational program that has begun to prove effective in health prevention in a targeted population.

Potential Implications for Positive Social Change

The American Nurses Association (ANA, 2010) explains that education provides a means of health promotion to strategize wellness interventions and supports a culturally competent standard of practice that leads to reductions in health disparities for populations at risk. This doctoral project influences nursing practice by reinforcing education as a means of improving patient outcomes. Nurses practicing as health educators help to impact the lives of patients by promoting healthy behavioral changes. Nursing utilizes educational programs to empower patients and foster social change. As change agents, doctoral nurses implement DNP Essentials in their practice of care. Essential VI, interprofessional collaboration for improving patient and population outcomes, and Essential VII, clinical prevention and population health for improving the nation's health, both apply to this research project (American Association of Colleges of Nursing, 2006).

Recommendations

Description of Recommended Solutions to Potentially Address the Gap in Practice

After reviewing the de-identified data from the mammography site, I realized this health problem poses grave health outcomes for a specific population, and I understand that closing the gap in practice is paramount in saving lives of African American women living in this rural community**.** The translation of evidence-based research into practice

incorporates three necessary components: awareness, acceptance, and adoption (Green & Seifert, 2005). The health care provider's educational preparation first builds knowledge about a particular subject, and then the awareness of essential practices guides acceptance of the information and decisions on how to address it (Green & Seifert, 2005). The ability to adopt the information into practice determines if preventive measures become beneficial for positive patient outcomes (Green & Seifert, 2005). The Essentials of a DNP education recognizes the importance of closing the nursing gap by translating evidence-based research into practice to facilitate competency in patient care (American Association of Colleges of Nursing, 2006). As an example, the DNP's leadership and knowledge helps to integrate health services that promote prevention in populations at risk (2006). The educational program in this doctoral project serves as a recommended solution to the lack of awareness in the African American community of the importance of breast screenings.

The goal of Healthy People 2020 is to reduce the current number of breast cancer deaths by 50 percent in the United States by 2026 (Susan G. Komen Foundation, n.d.). The provision of resources to conduct educational outreach for targeted groups of the population is a critical piece of reducing health disparities in at-risk populations. As such, the Komen Foundation offers grants for community projects during the 2018-2019 fiscal year for counties in the Northeast region of Ohio, and the rural county represented in this research project is a community listed as eligible for funds to conduct breast health and breast cancer prevention programs (Susan G. Komen Foundation, n.d.). Funding

eligibility depends upon educational programs that demonstrate significance to counties with a great need for intervention targeted at populations at risk.

The Susan G. Komen Community Profile Report correlates with the Ohio health policies regarding health equity and cultural competency. The state of Ohio's definition of cultural competency is the building of knowledge, awareness, and skills related to a specific culture in order to develop effective programs and services that identify, understand, and respect the unique beliefs, values, customs, languages, abilities and traditions of all Ohioans (Ohio Department of Health, 2016). The Ohio Department of Health created 22 standards of cultural competency practices in seven categories (Ohio Department of Health, 2016). The seven categories consist of the following: leadership, directives and governance, reporting and accountability, training and development, staff, service climate, and community involvement (Ohio Department of Health, 2016).

Recommended Solution 1: Ohio health policies that direct health equity. The Office of Health Policy and Performance Improvement incorporates the following programs: Rural Health, Patient Centered Medical Homes, Health Equity, Cultural Competency, Disability & Health, Accreditation, the State Health Assessment, the State Health Improvement Plan, and Strategic planning (Ohio Department of Health, 2016). Health Equity supports policy in Ohio that incorporates projects that involve cultural competency to address health disparities (Ohio Department of Health, 2016). Ohio recognizes the need for cultural competency and its role in health care and understands the face of Ohio continues to diversify (Cultural Competency Title V & Title X. doc, n.d.)

Recommended Solution 2: National standards for culturally and linguistically appropriate services (CLAS) in health care. The standards of CLAS represent input from a wide range of stakeholders that include hospitals, community-based clinics, managed care organizations, physicians, nurses, and other providers (OMH CLAS, 2001). The fourteen standards include the following:

- Understandable and respectful care
- Diverse staff and leadership
- Ongoing education and training
- Language assistance services, right to receive language assistance services
- Competence of language assistance
- Patient-related materials
- Written strategic plan
- Organizational self-assessments
- Patient/consumer data
- Community profile
- Community partnership
- Conflict/grievance processes
- Implementation (2001)

Standard number 3 necessitates that organizations ensure staff at all levels and across disciplines receive ongoing education and training in cultural competency (2001). The National Center for Cultural Competence's (NCCC) mission statement promotes

health equity for increasing diversity and persistent disparities (Ohio Department of Health, 2016).

Recommended Solution 3: American Nurses Association (ANA). The ANA's role remains essential in improving health care for all persons (American Nurses Association, n.d.). The agency works with legislation to promote health equity and utilizes its voice in areas involving Centers for Medicare and Medicaid Services (CMS), CDC, Federal Drug Administration (FDA), and Health Resources and Services Administration (HRSA) (American Nurses Association, n.d). This organization advocates for health policy that affects all persons and works directly with policy makers (n.d.).

Recommended Implementation and Evaluation Procedures

Procedural steps for implementation of a program center on planning that focuses on connecting to its audience (Hodges & Videto, 2011). The first step in the planning involves establishing a project team that consist of representatives from a diverse group of disciplines to address cultural competency. The second step is to identify the practice-focused question and the purpose for the project, and third is to choose community stakeholders that identify with the audience in need of assistance and establish a rapport with stakeholders to relate to a population at risk. Fourth, conducting research from local, state, and national resources is necessary to provide educational materials for project. Step five is to develop training workshops to educate health providers on information pertinent to problem identified. Next, step six requires researching grant funding that possibly could contribute to the project's financial support. Step seven is evaluation, and Hodges and Videto (2011) explain that this phase of the procedure considers the

implementation, the effectiveness, cost-effectiveness, and the ability of the program to result in positive outcomes.

Contribution of the Doctoral Project Team

Project management requires skillful steps during the planning phase of the project, and understanding the purpose of the project enables leadership to promote change (Gertner et al., 2010). Working with the project team began with building their understanding of the educational program, followed by their evaluation of its potential impact from the questionnaires and the rubric to determine the effectiveness of the Komen Toolkit. The leadership at the organization, which included the director of mammography, the ethics committee director, and other administrators, share the goal of communicating the vision of practicing cultural competence in health care. The leadership's role as change agents empowers the members on the team to promote change by helping to create strategies to realize the vision (Kotter, 2007). Members of the team served a critical role in evaluating and providing feedback on the doctoral project, which will ultimately result in a stronger implementation of the project. In order to conduct the evaluation, they first needed to familiarize themselves with the purpose and objectives of the educational program. Then, using a rubric and a questionnaire, they reviewed the resource material from the Komen Foundation on cultural competency and working with African American women and breast cancer prevention as well as my role in the project. The members of the project team's understanding of the importance of working with community faith leaders to implement change for a summative impact is a crucial element for the success of the program. According to Kotter (2007), the establishment of

a sense of urgency helps to propel the concept of change, and members of the team recognizing the imminent need for cultural competency to reduce health disparity is a powerful guide toward transformation.

Project Team's Role in Developing the Final Recommendations

The project team played an important role in assessing the material from the Komen Foundation as well as the educational program as it will be implemented in this organization. Their input will be used to modify the program as necessary to maximize its impact. Their evaluation and final recommendations also provided criteria for funding an educational program for breast health and prevention. Funding is available from the 2018-2019 Community Grants Program for counties considered a high risk for breast cancer (Susan G. Komen, n.d.). The community grants awarded to organizations must specify funding priorities, and this organization's funding priority includes the data from the 2015 Komen Northeast Community Profile Report (Susan G. Komen, n.d.). The team's evaluation of this project justifies the need for an education program for the African American women living in a rural county in the Northeast region of Ohio, a population that has been designated as high risk by the Community Profile Report.

Plans to Extend the Project Beyond the DNP Doctoral Project

First and foremost, this project was not implemented during the scope of the DNP program, so the first priority is the implementation planned for April 2019. Communicating the subject of cultural competency in health care outside of this doctoral project will involve continuing to work with my colleagues and serve as a change agent. Nursing remains the largest body in health care and delivers a wide range of services

(American Association of Colleges of Nursing, n.d.). According to the DNP Essential III, the improvement of health outcomes due to new phenomena and knowledge becomes generated through evidence-based research (American Association of Colleges of Nursing, 2007). Also, I plan to increase the influence of this project by submitting articles on this topic to professional nursing journals as well as supporting legislation that supports cultural competency practices in health care.

Strengths and Limitations of the Project

Strengths

The research project's strength is that it implements cultural competency as a practice change. Patients benefit when providers and staff can interact and connect with them in a way that is meaningful to their culture and beliefs. In the long term, such positive interactions can improve relationships between patients and providers and overcome barriers to minority populations receiving life-saving healthcare. The research provides a wealth of evidence-based information that supports an educational program for staff and health providers practicing cultural competency in healthcare settings. Also, the project supports health care providers and staff developing relationships with community stakeholders to strategically reach out to populations at risk.

Limitations

One limitation of the project is that it entails a time-consuming process. If implemented with fidelity, the process takes 10 weeks, and the panel of experts expressed their concerns about the organization's ability to devote that much time to staff education. Without fidelity to the educational program, practice may not change significantly. The

impact is rewarding; however, the impact is not immediate and recruiting sufficient numbers of staff and providers to participate may prove challenging. Another limitation is the lack of evidence supporting the long-term impact on patients. Khanna et al. (2009) assert that more research remains necessary to determine the patient satisfaction when providers practice cultural competency.

Recommendations for Future Projects

The Komen Foundation provides cultural competency information that relates to other ethnic groups such as Latino, Asian, and Arab women (Susan G. Komen Foundation, n.d.). The culturally relevant educational program helps to reduce ethnic disparities and encourages community support in building understanding within a particular culture. Attempts to address health-related issues such as violence in communities involving different ethnic groups or infant mortality in African American families related to sudden infant death syndrome (SIDS) would benefit from training of health providers practicing cultural competency. The theoretical framework of this project utilizes two key theories, health belief model and the PEN-3 Model, which both support this particular type of project to promote understanding of different cultures and the perceptions of diverse ethnic groups.

Section 5: Dissemination Plan

Introduction

White (2012) explained that the process of dissemination plays a vital role in the translation of evidence-based research necessary for the development of new ideas that result in change in health care. The dissemination process entails communication of clinical, research, and theoretical findings to translate new knowledge into patient care (White, 2012). The plan to disseminate the findings from this doctoral project to the participating organization involves three stages: dissemination of awareness, dissemination of understanding, and dissemination for action (Harmsworth & Turpin, 2000; Rees & Pell, 2001). The mammogram center leaders' willingness to evaluate this project based on their awareness of the health problem and understanding of the need to help a population at risk supports the activities and outcomes in the doctoral project (Harmsworth & Turpin, 2000; Rees & Pell, 2001). The change in practice involves the implementation of educational materials and information regarding cultural competency. The goal of the change in practice is to influence the organization's leadership to take action and use the educational program to help create change in messaging practices regarding early cancer breast screenings in African American women (Harmsworth & Turpin, 2000; Rees & Pell, 2001).

Description of the Plans to Disseminate

The Dissemination Planning Tool developed for the Agency for Healthcare Research and Quality (AHRQ) provides six components that are useful in describing the implementation of an evidence-based research project (Carpenter, Nieva, Albaghal, &

Sorra, 2005). The six steps of the tool build upon each other to establish a plan that presents a comprehensive program that is a product helpful in an educating staff and healthcare providers. The purpose of the Dissemination Planning Tool is to provide a means for those developing programs to evaluate the best ways to communicate information and use dissemination partners to boost efforts to reach user communities (Carpenter et al., 2005). The tool provides a dissemination plan that researchers can use to determine how to share their findings in ways that increase the real-world impact of their research. Below are Carpenter et al.'s (2005) steps for developing a dissemination plan:

1. Research findings and products—What is going to be disseminated?
2. End users—Who will apply it in practice?
3. Dissemination partners—Individuals, organizations, or networks through whom you can reach end users
4. Communication—How you convey the research outcomes
5. Evaluation—How you determine what worked
6. Dissemination work plan—Where you start

First, Carpenter et al. (2005) recommended selecting one finding to disseminate and completing the tool multiple times if the research resulted in multiple findings. For this doctoral project, the major finding for dissemination was that mammography leaders found the curriculum for the culturally relevant educational program to educate staff and providers to be valid and useful for the mammography center to improve its outreach to the targeted audience. Specifically, the finding to be shared is the mammography leaders'

strongly agree rating on the overall importance and effectiveness of a cultural competency educational program.

For Step 2, I identified end users as health care professionals and delivery organizations that could benefit from the educational program. The project's finding from the mammogram leadership's evaluation that revealed the educational program's influence on positive health outcomes will be most useful to these end users because leaders in the delivery organizations will be the ones considering program changes, and the health care professionals will go through the educational program and use the Komen materials to strengthen their communication of the importance of breast health with women in their communities.

Third, the partners identified to help in disseminating the project include the panel of experts that reviewed the educational program, which was instrumental in communicating the use of a cultural educational program for staff and providers. Additionally, the Komen Foundation grant program, which provides intervention measures for ethnic groups representing at-risk populations, will be a major partner in disseminating the doctoral project's findings. The Komen representative for the Northeast region of Ohio expressed interest in this doctoral project with the possibility of sharing the cultural competency program with other organizations in the Northeast region. The purpose of the cultural competency program aligns with the expert panel's and the Komen Foundation's goal of promoting the message of prevention to increase early breast cancer screening in African American women. Additionally, the hospital organization community outreach program's willingness to partner with the FBO

promotes partnerships between two organizations that might not otherwise work together; thus, the FBO will serve as another dissemination partner. The relationship between the hospital and the FBO will help to integrate the project into this health system to promote the practice of cultural competency.

The fourth step consists of effective communication of the doctoral project to increase end users' access to the project. Dissemination channels will include media exposure such as academic journals, publications and conferences from the National Black Nurses Association, regular newspapers, workshops, and/or conferences. Any communication means used by the dissemination partners will also be integral to the distribution of this project's findings. For example, the FBO suggested using April, Minority Health Month, for the initial unveiling of the project, and the Komen representative expressed interest in sharing the project with other organizations in the region. Further, the findings will be communicated through informal professional networks such as African American social organizations, National Association of Colored Women's Clubs, Black Women's Health Imperative, National Council of Negro Women, and Black Women for Wellness.

The fifth stage involves evaluating the success of the dissemination efforts by soliciting input from the dissemination partners and the end users with whom the results are shared. The evaluation may be formal, occurring through surveys and interviews, or informal, occurring though conversations. The goal is to gain insight into the methods for communicating the effectiveness of the educational program and to learn about possible barriers that may arise due to resistance to change or other obstacles. The assessment

provides realistic perspectives on the development of the program regarding resources and commitments to the project plan.

Finally, the creation of a dissemination work plan permits the project team and facilitator access to the resources and financial involvement in the program. For this doctoral project, the work plan aligns with the logic model plan's outline for intermediate and long-term action steps that identify timeframes and people who are involved in the program.

Clarification of the Audiences, Venues, and Broader Nursing Profession

The audiences appropriate for the dissemination of this research project include an FBO that involves local ministers as part of an outreach program targeted to African American residents in the community at risk for diverse health problems. Also in the audience are healthcare providers and staff in mammography centers. Finally, African American women living in this rural community are part of the target audience for the educational program. The mammography director expressed that senior high school girls who are 18 years of age may benefit from a cultural competency-based educational program as it helps to spread the message of the importance of early breast cancer screening.

Venues such as church fellowship halls, community centers, and the community room at the mammography center may provide space for the dissemination of educational program materials. Additionally, the public library, which provides local residents and organizations a public space to meet, can be a venue for disseminating information

important to the public. The local community college is a venue that permits outreach programs to use the site to educate a diverse group of professionals and stakeholders.

The broader nursing profession requires reconceptualizing the expanded roles of nurses to enhance the health care system by assuming leadership roles and engaging in collaboration with other health professionals. Nurses play a vital role in promoting patient-centered care by using their education to develop programs that provide attainable, high-quality environments for patients that reduce health disparities in the 21st-century health care system (Institute of Medicine, 2011).

Analysis of Self

I realize the importance of implementing this research doctoral project that supports reducing breast cancer disparities in this rural county. The information in this doctoral project may enable providers to reach African American women living in this rural community and emphasize the need for breast health and early screenings. Prior to conducting research on this health problem, I did not fully understand the significance of health inequity or the gravity of the mortality rates of African women exceeding Caucasian women due to breast cancer. My doctoral experience prepared me for the role of change agent in the health care field.

Role as Practitioner

According to the DNP Essentials, the role of the doctoral nurse as practitioner encompasses leader, change agent, collaborator, evaluator, and program developer in practicing nursing skills based upon educational abilities to influence positive outcomes in the health care system (American Association of Colleges of Nursing, 2006). The

evidence-based research aspect of DNP preparation requires innovative strategies that focus on intervention to influence health outcomes (American Association of Colleges of Nursing, 2006). Developing a provider and staff educational program that centers on cultural competency to meet the challenge of helping a population at risk to reduce health inequity and health disparity correlates to Essential VII, Clinical Prevention and Population Health for Improving the Nation's Health. The roles of change agent and leader describe my part in introducing concepts that elicit new strategic measures to address this significant health problem.

Role as Scholar

Professional development entails a lifelong process of learning that nurses engage in to maintain competence, enhance professional nursing practice, and provide support for career goals (American Nurses Association, 2010). My goal to specialize in nursing at the doctoral level means increasing my knowledge of evidence-based practices that support a better quality of health care. I understand from this doctoral experience that my clinical practice alone does not help me to meet the challenges of the 21st century, and I must continue my professional learning throughout the remainder of my career, not just though the end of this doctoral program, in order to stay current in this changing field.

Role as Project Manager

As the project manager for this educational program, I found that the logic model guided my process in leading the project. Identifying and following the steps for the inputs, outputs, and outcomes that lead to a successful program kept my focus on the important components of this doctoral project. On the ground level, in implementing the

project in the mammography center, my project management role included working as a facilitator to help the project team stay focused, identifying possible issues or obstacles impeding progress, and frequently communicating with the team to problem solve as needed.

Project Experience

My project experience afforded me the opportunity to meet health care professionals working in another clinical setting that I never knew before this experience. Operating as a change agent in an organization accepting the concept of cultural competency supports a positive social change to respond to a health disparity affecting African American women and breast cancer. The experience created a pedagogical process in working with staff and leadership by introducing an educational program that supports participants using evidence-based information to convey messages regarding the importance of early breast cancer screening.

Present State

The organization and faith-based stakeholders have revealed that they plan to wait for the completion of the project before they determine their readiness for the implementation of the program. The FBO endorses the use of the Komen Foundation and its resources. The Northeast regional representative from the Komen Foundation finds the doctoral project to be an asset to this region of the state, which rates as high risk for women dying due to breast cancer. Once the final dissemination of the results is complete, then both organizations will plan for full implementation of the educational program and outreach efforts.

Long-Term Goals

There are three long-term goals for the program. The first long-term goal is to improve relationships between healthcare providers and African American women and to remove the barrier of mistrust. Cultural competency in healthcare practice will be a major factor in reaching this goal. The second long-term goal is to increase the number of scheduled screenings by the African American women living in this rural area. Finally, it will be important to continue to revise and refine the educational program as needed for long-term sustainability. This will be accomplished through continuation of assessments and revision of the educational program based on the assessments. It is also important for long-term sustainability that new employees participate in the staff education program.

Description of Project Completion

My synergistic relationship with leadership and staff members from the participating mammography center encouraged my efforts to complete the project. The project checklist has played a pivotal role in ensuring that this doctoral project meets the criteria for designing an appropriate educational program. As of this writing, the final section of the DNP Scholarly Project Proposal writing has yet to be approved by my chair and committee members; once approved, the summative evaluation and interpretation of the results collected will be considered complete. The scheduling for the final oral defense and acceptance by the chair will be the final steps toward completion of the entire DNP process. The approval of my University Research Reviewer (URR) for the DNP Scholarly Project and the Chief Academic Officer's approval of my final abstract will conclude the writing process.

Challenges

One of the challenges that I encountered during this process was meeting deadlines for completing the DNP project, partly due to some inaccuracies in interpreting the DNP Project Checklist criteria and making sure that the dissertation sections addressed each component of the multiple steps. Additionally, I faced a challenge in finding sufficient evidence-based research supporting cultural competency in health care practice in order to develop a program that addresses the local gap in practice problem. In the feedback from the expert panel, a previously unanticipated challenge that emerged was the amount of time required for implementation of the educational program with fidelity. Because of the time required, health organizations may struggle to accept the change to implement a culturally competent educational program. Fortunately, each step of the logic model allows flexibility and discussion in order to build buy-in for accepting change for all persons affected by the educational program.

Solutions

The challenge of meeting deadlines for the completion of the DNP project was solved through consistent, open dialogue with my chairperson. In order to find appropriate evidence-based research to support a doctoral project, I conducted an extensive literature review and was able to find sources that I had previously not seen. Finally, the theories used in the development of the doctoral project provide a basis for emphasizing the urgency of an educational program to address a health disparity for a population at risk. Even though the mammography center was resistant to the amount of

time required for training and implementation of the educational program, leaders were able to prioritize the use of time for appropriate training.

Insights From Scholarly Journey

The process involved in obtaining a DNP degree requires diligence and understanding that the journey is not a rushed undertaking; thus, maintaining focus toward the goal is a must. My interest in this health problem regarding African American women dying due to breast cancer at a rate greater than their counterparts of other races influenced my decision to choose this topic for a doctoral project. My preceptor for my practicum experience understood the importance of practicing cultural appropriateness and supported my efforts to accomplish this DNP project. The African American women living in this rural county are members of many of the denominational faiths that I am associated with and attended services in various churches in the county. The faith-based organization in this rural county expressed their interest in this educational program due to the inability to get health care providers and their organization to work together to help message early breast cancer screening in African American women. The evidence-based research regarding the importance and applicability of cultural appropriateness in health care ensured me that my desire to embark on this scholarly journey was a worthwhile decision.

Summary

In order to reduce health disparities, cultural competence remains a necessary component in addressing health care challenges present in reaching out to African American women. Breast cancer remains second in mortality rates in the United States,

and despite mammography screening technologies, young African American women die from aggressive tumors because of failure to practice early breast cancer prevention (Chabner, 2015). Many African American women have a fatalistic perspective of breast cancer. This misconception in the female African American community, combined with my interaction with numerous African American women from various economic, social, and educational status in this rural community, encourages me to promote the practice of cultural competency in health care based on the research that shows the mortality rates of this targeted group being greater than their counterparts. This research project has further strengthened my desire to change the fatalistic perception by promoting education of African American women that screenings and early detection can save lives.

The utilization of health education that focuses on cultural competence as a means to communicate the importance of early breast cancer screening empowers the African American women with knowledge that promotes healthy behaviors that help to reduce morbidity and mortality rates due to breast cancer. The project's endeavor involves community and health care working together to help a population at risk and promotes social change by implementing the concept of cultural competency in health care.

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Appendix A: Pretest for Healthcare Providers

1. Understanding the diverse nature of Black and African-American populations living in the U.S. is crucial to promoting breast cancer awareness in this community True or False
2. The Urban Mission a faith-based organization part of this community will help you learn more about the community you serve and potential partners True or False
3. The three categories of barriers that affect the behavior of African American women receiving early screens are clinical, structural, and personal. True or False
4. Cultural appropriateness is an important aspect to include in the treatment of diverse groups of women True or False
5. The Komen message for women regarding breast cancer awareness are know your risk, True or False
   get screened, know what is normal for you, and make healthy lifestyle choices. True or False
6. Breast cancer is an active area of ongoing research, and it is a field where change in our knowledge and practice can occur True or False
7. The Komen Foundation resources on breast cancer are available to health providers and their patients. True or False
8. Is it important to discuss with an African American patient how breast cancer affects Black and African-American women as compared to white women True or False
9. African American women perceptions regarding breast cancer influences their health behavior practices. True or False
10. Collaboration with diverse disciplines provides a means for addressing breast cancer in populations at risk. True or False

Appendix B: Posttest for Healthcare Providers

***Please circle the answer of choice**

1. Komen' breast cancer research studies examine the reason for differences of the disease process in diverse ethnic groups True or False
2. Providers should explain to African American women all women are at risk for breast cancer. True or False
3. Pink Sunday and First Ladies are community events that faith-based organizations can utilized in their congregations to help promote the message of breast cancer prevention. True or False
4. Breast cancer is the second leading cause of cancer death in Black women in the U.S, exceeded only by lung cancer. True or False
5. Black and African-American women are more likely than white women to be diagnosed with breast cancer under the age of 40.True or False
6. Providers should encourage African American women to speak about their family history. True or False
7. The Komen Foundation provides women with Mammography/Clinical Breast Exam reminder tool. True or False
8. A barrier that African American women may express focusses on confusion regarding the age to begin breast screening. True or False
9. African American women express fatalistic views regarding breast cancer. True or False
10. It is important for African American women to understand the need for both clinical breast exam and mammogram is necessary in promoting the message of breast cancer prevention. True or False

Appendix C: Structural Outline for Workshop Material for Cultural Competency

Educational Program

The objectives for this educational program are as follows:

1. To incorporate cultural appropriateness into health educational programming,
2. To increase knowledge of medical barriers that limit mammogram screenings,
3. To encourage faith-based participation to promote breast cancer awareness in African American women.

Teaching tools include power point presentations, handouts from Komen's Toolkit, and posttest after presentation

Part I

I. Understanding the African American community
   A. Jefferson County demographic2015 Komen Community profile report
   B. total female population, age, race, economic status, education, rural area, insured vs non-insured)
   C. Religious Influence/Stakeholders
   D. Pew Research Center on Religion and Public Life /Ohio
   E. Purpose for cultural educational program
      1. Discussion of the de-identified evidence of breast screens at the mammography site
      2. Project parameters and timeline discussed
      3. Discussion of the pretest

II. Perceived Barriers:
   A. Structural
      1. African American women reasons why screening is not a priority
         a. Finances
         b. Transportation
         c. Poor communication between patient and Provider
   B. Clinical
      1. Prior negative experience
      2. Definitions:
         a. Cultural knowledge- Knowing about a culture
         b. Cultural awareness- Understanding other groups
         c. Cultural sensitivity- Knowing differences exist, but not assigning values
         d. Cultural competence- Includes previous stages; adds operational effectiveness
      3. Building trust

4. Ethnic social history (slavery, Tuskegee research study, racial disparities)
5. Effective communication (personal greeting, not condescending, respectful, eye contact, avoid slang using familiarity in word usage, acknowledge the person's emotions in clinical encounters, their knowledge and beliefs

C. Personal
1. Susceptibility- African American women perceptions
2. Views on crossing cultural and ethnic lines Providers/African American women
3. Behavior plays a significant role in this aggregate group
4. emotions, and beliefs of this group, and use of culturally appropriate classroom materials helps to increase stakeholders' involvement
5. Understanding of mammograms and purpose of screening measures

III. African American Women Perspectives
A. Fatalistic views
B. Spiritual influence
C. Family influence

Part II

IV. Motivation to change risky behaviors
A. Health belief model/ PEN-3 model
B. Utilize Komen Toolkit for African American women (web address for access to Komen Educational Materials, https://ww5.komen.org/BreastCancer/KomenEducationalMaterials.html
C. Providers' knowledge of the cultural helps to set the stage for use of the Toolkit provides materials that help to teach information to stakeholders
D. Providers collaboration with stakeholders involves assessing their knowledge base of breast health and breast cancer prevention
E. The stakeholder's input in establishing objectives regarding a breast health educational program and breast cancer awareness program influences their behaviors and addresses cultural traditions that affect the behavior
F. Breast Cancer Continuum of Care (COC) part of the Toolkit to help African American women understand the importance of breast heath and follow-up care

Part III

V. Sustaining the change
   A. Stakeholders collaborating with Providers for follow-up times scheduled on calendar for reiterating early breast cancer screens
   B. Introduce the educational program to new staff employed to work at mammography site
   C. Continue to use Komen's Resources

VI. Evaluation of educational program
   A. Surveys for organizational leadership
   B. Stakeholders survey
   C. Posttest