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Colorectal Cancer Awareness and Screening Guideline for African American Populations

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This is to certify that the doctoral study by

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

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MSN, Walden University, 2015

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Project Submitted in Partial Fulfillment

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Abstract

Colorectal cancer is the 3rd leading cause of cancer-related deaths. Early screening provides the best prospects for preventing the morbidity and mortality associated with the disease. Nurses have the duty to promote health and prevent diseases. However, low rates of colorectal cancer screening continue to be reported, especially among African Americans who continue to suffer disproportionately from the disease. There is a need for a culturally-sensitive clinical practice guideline that nurses can use to educate patients appropriately on colorectal cancer. The practice focused question for this project was designed to explore whether a culturally-sensitive clinical practice guideline to increase colorectal cancer screening among African Americans could be developed using best practices. The health belief model informed the background, development, and implementation of this project. Evidence from peer-reviewed nursing literature was synthesized in a literature review matrix and then used to develop a clinical practice guideline to increase colorectal cancer screening. It is anticipated that this guideline will improve nursing practice by equipping nurses with the knowledge and skill to provide culturally-sensitive education on colorectal cancer and screening. Through the patient education and enhanced nursing practice stipulated in the clinical practice guideline, health care providers may work to eliminate disparities in colorectal cancer screening among African Americans.

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Dedication

I dedicate this work to my late husband, David Omenukor, who succumbed to colon cancer four years ago. Your memory will continue to remain in our hearts.

Acknowledgments

I thank the Almighty God for the privilege to attain this height in my academic pursuit. I am indebted to my professors who served in my project committee for their guidance. Particularly, I am grateful to Dr. Vitale, who has been with me all the steps of the way. Her valuable input and guidance have helped me to remain focused. You will continue to remain in my heart. I thank Dr. David Ukoha, my mentor and preceptor, for his tireless guidance. I thank the Walden Writing Center for the guidance during the development of this work. I am grateful to my children for the mental energy to move on. So many people contributed to the success of my academic achievements—my family, friends, relatives, and colleagues, and I thank them all for the role they played in helping me move towards my success.

Table of Contents

List of Tables

List of Figures

Section 1: Nature of the Project

Introduction

Colorectal cancer (CRC) is a cancer of the bowel that afflicts both men and women and is reported to be the third leading cause of cancer-related deaths in the United States (Patel & Kilgore, 2015). In 2013, a total of 51,813 people died of the disease, including 27,230 men and 24,583 women (Center for Disease Control and Prevention [CDC], 2017a). The American Cancer Society (2017) has estimated that 1 in 22 men and 1 in 24 women are likely to have the disease in their lifetime. CRC is a preventable, treatable, and curable disease; however, prevention is only possible with screenings and early detection (American Cancer Society, 2017). The practice guidelines developed by the U.S. Preventative Service Task Force (USPSTF, 2008) recommend CRC screening for adults aged between 50 and 75 years. Furthermore, the CDC (2017b) revealed that 33% of adults aged between 50 and 75 years did not get CRC screening. Low rates of CRC screening are rampant among African Americans who are disproportionately affected by the disease (DeSantis et al., 2016).

This Doctor of Nursing Practice (DNP) project is an evidence-based clinical practice guideline aimed to increase CRC screening among African American patients at my practicum site. For this project, I synthesized scholarly and clinical evidence to develop a culturally-sensitive clinical practice guideline to meet the rising demand for CRC screening within this population. The increased use of screening services is in line with the Healthy People 2020 goal of reducing the number of new cancer cases in addition to the illness, disability, and mortality caused by cancer (Healthy People 2020, 2017). Further, this project aligns with DNP Essential VII, which is focused on clinical prevention and population health to improve the nation’s health (American Association of Colleges of Nursing, 2006).

This doctoral project has the potential to affect positive social change by improving nurses’ ability to promote CRC screening among African Americans. Additionally, this project may result in the improvement of nurses’ roles in preventive health, leading to reduced morbidity and mortality associated with CRC in this population. The program may also create more awareness about CRC among African Americans and help to address some of the barriers to screening, including cultural and financial obstacles. The clinical practice guideline I developed provides information on the risk factors for CRC and available screening modalities. The guideline further directs nurse practitioners to inform patients about the resources available in their communities, including screening services for the uninsured and underinsured. Therefore, the project will help to eliminate healthcare disparities and promote access to health care services that focus on CRC.

Problem Statement

Local Nursing Practice Problem

Each year, preventable CRC deaths continue to occur among African Americans due to delayed screening and diagnosis of the disease (Ou et al., 2013). At the local practicum setting, the nursing director reported that a significant number of African Americans were diagnosed with advanced colorectal cancer in 2016. The local nursing practice problem was the absence of an organized method to educate this population about CRC. The diagnoses followed the persistent complaint of abdominal disturbances and rectal bleeding from patients who did not undergo screening in line with the recommendations of the USPSTF. Such cases justified the need for regular and early screening as recommended.

The Local Relevance of the Need to Address the Problem

My practicum setting is an internal medicine clinic in the southern part of the United States. The site provides various health services, including routine screenings and annual wellness examinations. The facility tasks nurses with the duty of ensuring that all patients who are eligible for screening or wellness exams receive them within the stipulated time. According to the current policy at the study site, the clinic staff is required to remind all patients aged 50 and above about CRC screening and physical examinations when those patients come in for scheduled appointments. However, there was no comprehensive approach to educating patients about CRC and the importance of early screening, or to addressing patients’ concerns about on CRC screening. These concerns included the lack of or inadequate insurance and previous unpleasant experiences that caused patients to distrust health care services. Furthermore, many patients faced logistical challenges, including poor transportation, cultural barriers, inadequate communication with health care providers, and restricted awareness about health care issues. Consequently, the nursing director reported that the numbers for CRC screening remained low, particularly among African American patients.

African Americans are disproportionately affected by CRC compared to other populations (DeSantis et al., 2016). The nursing director at the practicum site reported that most patients who agreed to take the fecal occult blood test kits did not return them, and the few who returned the kits refused to undergo colonoscopy. Medical records at the practicum site indicated a high rate of late diagnoses among African Americans. The current records at the study site showed that African Americans made up 60% of the patients who received care at the clinic; however, the rates of CRC screening for this population was less than 5%. My focus in this project was to identify evidence-based strategies for developing a culturally-sensitive clinical practice guideline to increase CRC screening in this population.

Cultural sensitivity in health care refers to the capacity to be fittingly receptive to the attitudes, stances, or contexts of groups of people who share a collective and characteristic ethnic, national, religious, dialectal, or cultural legacy (De la Cruz, n.d.). The United States has become linguistically and ethnically diverse. According to De la Cruz (n.d.), customized educational programs presented to several ethnic minority groups have increased CRC awareness among those groups, and consequently, the prospects of completing screenings. Clinical practice guidelines can be customized to match the views, knowledge, stage of willingness, or any blend of factors. Culturally-sensitive clinical practice guideline should also incorporate culturally relevant material in addition to user attributes (Agrawal et al., 2005). Therefore, a culturally-sensitive clinical practice guideline intended to detect and surmount barriers to CRC screening could improve the screening rates substantially for low-income and culturally diverse patients (Percac-Lima et al., 2009).

Significance for the Field of Nursing Practice

This doctoral project holds significance for nursing practice by enhancing nurses' role as patient educators. Nurses are expected to promote health and prevent disease through patient education (American Nurses Association, 2010). In *Nursing: Scope and Standards of Practice,* The American Nurses Association (2010) indicated that patient education is a valuable tool used by registered nurses to promote health and enhance wellness. Important aspects of this standard include cultural competency, which incorporates a patient's ideas, religion, views, language predilection, and socio-economics into care plans (American Nurses Association, 2010). Enlightening a patient population about CRC shapes its members' standpoints and opinions regarding CRC (Percac-Lima et al., 2009). Knowledge empowers patients to take charge of their health, thus fostering positive patient outcomes (Honein-AbouHaidar et al., 2014). The culturally-sensitive clinical practice guideline I developed through this project will improve nursing practice by allowing nurses to communicate effectively with eligible patients about CRC screening.

Purpose

Gap in Practice

Agrawal et al. (2005) reported a substantial difference in the incidence and mortality rates of CRC between African Americans and other ethnic groups, a finding which marks the gap in practice I addressed in this project. At the practicum site, there was a lack of an evidence-based clinical practice guideline to increase CRC screening among African Americans. Factors such as cultural perceptions, personal views, and socioeconomic barriers impeded the utilization of screening services, which contributed to the gap in practice. Therefore, there was a need to address the barriers that created this health inequality. Identifying the social determinants that resulted in undesirable patient outcomes in other populations could help in the development of clinical practice guidelines to tackle the disparities (Healthy People 2020, 2017). Nurses are instrumental in using culturally-sensitive clinical practice guidelines to guide eligible patients to undergo CRC screening and thus close this gap in practice (see Agrawal et al., 2005).

Practice-Focused Question

The practice-focused question for this project study was: Can a culturally-sensitive clinical practice guideline to increase CRC screening among African Americans be developed using evidence-based practices?

How the Project Addresses the Practice Gap

With this project, I addressed the causes for disparities in the incidence and mortality of CRC among African Americans and other ethnicities by developing a culturally-sensitive clinical practice guideline. The program would equip nurses and other health care providers to address the cultural as well as the financial barriers to CRC screening among this patient population at the practicum site while providing patient education. As a result, there would be an increase in the number of patients from this community seeking CRC screening.

Nature of the Doctoral Project

Sources of Evidence

The data sources and evidence I used to answer the practice question included current evidence-based literature. Some of the examples of relevant sources included the Guide to Community Preventive Services (The Community Guide, 2017) for creating education intervention programs and the American Cancer Society (n.d.), which provided current CRC statistics. Another source of evidence was the website ClinicalTrials.org (2017), which reported increased screening rates following the execution of an education intervention. I also reviewed primary and secondary peer-reviewed nursing articles to obtain evidence for the project using databases such as ProQuest and CINAHL, resources from the Cochrane Library, and the holdings of the Walden University Library.

Approach

Appraising all information from various sources was critical. My use of the Melnyk pyramid matrix ensured adequate evaluation of relevant data (see Melnyk & Fineout-Overholt, 2011). I determined the strength and cogency of various nursing research articles and used the information provided to develop a culturally-sensitive clinical practice guideline for African Americans. This strategy provided an avenue for integrating the strongest evidence-based research into a clinical practice guideline. This matrix also helped me determine the strength of the interventions and their applicability to the practice gap (see Melnyk & Fineout-Overholt, 2011).

Concise Statement of Purpose

The purpose of this project was to develop a culturally-sensitive clinical practice guideline. With this program, I aimed to increase CRC screening among African Americans to bridge the gap between the incidence of CRC among African Americans and those of other races. This project aligns with the purpose of DNP Essential VII, which is the clinical prevention and population health to improve the nation's health (American Association of Colleges of Nursing, 2006). Unhealthy lifestyles, the lack of relevant health information, cultural influences, and the underutilization of prevention interventions in healthcare settings contribute to more than 50% of preventable deaths in the United States (American Association of Colleges of Nursing, 2006). Cultural influences and the underutilization of preventive healthcare services are responsible for the high rates of CRC among African Americans (Agrawal et al., 2005). Therefore, a culturally-sensitive clinical practice guideline may inspire African Americans to make use of CRC screening services and reduce the incidence of CRC in this population. The expected finding from my analysis of evidence was that there would be adequate evidence-based information to improve CRC screening among African Americans.

Significance

Stakeholders

The key stakeholders of the project included the director of nursing and staff nurses at my project site. My development of a culturally-sensitive clinical practice guideline to alleviate the local problem of low screening rates would assist the director of nursing, nurses, nurse practitioners, and other providers in improving their patient education capacity and other approaches regarding CRC screening in African American populations. Similarly, the project would educate African American patients about various cultural, attitudinal, and financial aspects of CRC screening. Consequently, the project may influence these populations to undergo screening and reduce CRC deaths.

Potential Contributions to Nursing Practice

Preventive care is a crucial part of the future of healthcare. This doctoral project contributes to nursing practice by helping nurses to provide better preventive care to the African American population. Studies show that a provider's endorsement is the most compelling factor to increase cancer screening (Smith et al., 2015). Additionally, educating patients inspires their active involvement in making informed decisions about their health and increases the CRC screening rates among patients (McIlfatrick, Keeney, McKenna, McCarley, & McIlwee, 2014). Recent healthcare reforms have meant that nurse practitioners assume the bulk of the primary care needs (Martínez-González et al., 2014). A culturally-sensitive clinical practice guideline could improve the preventive care provided by the nurses and other providers by ensuring that eligible African American patients seek the recommended CRC screening tests.

Potential Transferability of the Doctoral Project to Similar Practice Areas

Information learned, and data collected from this project could also influence other areas of preventive health in nursing practice at the practicum site. Culturally-sensitive education can affect other areas of health, including obesity in children and adults, smoking cessation, and the management of diseases such as diabetes and hypertension. Culturally-sensitive clinical practice guidelines developed along evidence-based practice (EBP) guidelines for CRC screening in African Americans can be replicated to develop similar education programs to promote smoking cessation, improve diabetes care, and manage obesity in different patient populations.

Potential Implications for Positive Social Change

This DNP project can bring about positive social change for nursing practice by providing a remedy for the disparities in the access to and utilization of preventive healthcare services. The goal of nursing practice is to promote the physical, social, and emotional well-being of all patients (Hagan, 2014). Previous studies have shown that marginalized populations, especially African Americans who have little or no health insurance, tend not to seek preventive services such as cancer screening services (Agrawal et al., 2005; Honein-AbouHaidar et al., 2014). The proposed clinical practice guideline would empower nurses to inform patients about the importance of undergoing screening and the available community resources for those who were unable to afford screening services. In this way, the program would help healthcare professionals bring about social change for their patients by empowering the self-care of patients through the use of preventive health care services.

Summary

CRC is a leading cause of cancer-associated deaths that affects men and women as they advance in age (American Cancer Society, 2017). Most patients, especially African Americans, do not follow the screening recommendations, and this lack of compliance leads to high rates of CRC morbidity and mortality in this population (DeSantis et al., 2016). Staff members and managers at the practicum setting have also observed these trends in their patient population because of the lack of a suitable clinical practice guideline to resolve the knowledge gap and the cultural and socioeconomic barriers to screening in these populations. In this project, I developed a culturally-sensitive clinical practice guideline from my synthesis of evidence-based literature to improve awareness about the benefits of early screening among eligible patients and empower African Americans to utilize screening services. In Section 2, I explain the significance of the local problem to nursing practice as I look at the concepts, models, theories, and context that contributed to the development of this clinical practice guideline.

Section 2: Background and Context

Introduction

CRC is the third leading cause of cancer-related deaths in the world (Patel & Kilgore, 2015). Numerous cases of advanced-stage CRC continue to be identified due to the underuse of screening services. Additionally, there are insufficient clinical practice guidelines in practicum settings to increase CRC screening among African Americans. The practice focused question for this project was the following: Can a culturally-sensitive clinical practice guideline to increase CRC screening among African Americans be developed using evidence-based practices? The objective of this project was to develop a CRC clinical practice guideline to educate African Americans about the disease and subsequently increase CRC screenings in this populations. A clinical practice guideline would equip nurses, nurse practitioners and other providers to address the issue of CRC screening among African American patients by addressing and removing the barriers to screening.

In this section, I describe the concepts, models, and theories that inform the doctoral project. Another focus in this section is synthesizing primary writing by key theorists and seminal scholars related to the use of a clinical practice guideline for the promotion of CRC screening among African American patients. This section also includes a discussion of the importance of this project to nursing practice, the local background and context of the problem in my practicum setting, and my role as the DNP student in the entire project. There were no locally used terms or operational processes at the practicum setting other than those universally used and applied in nursing practice. Therefore, I have not included definitions of such terms.

Concepts, Models, and Theories

The Theory That Informs the Project

This study was founded on the health belief model (HBM), a psychosomatic health behavior changes that was created to account for and foretell health-related mannerisms, with regard to the utilization of health services (Alligood, 2014). The HBM was developed in the 1950s by social psychologists and is one of the best known and most commonly utilized theories in health behavior research (Pardeck, Murphy, & Longino, 2014). The HBM was used initially to account for the failure of the U.S. tuberculosis screening program. This model holds that individuals’ viewpoints about health complications, perceived gains from action and obstacles to action, and self-efficacy influenced their participation or lack of participation in health endorsing behaviors. A call to action may instigate the health-promoting behavior.

Synthesis of Primary Writings

The HBM includes four main insights as theoretical paradigms: apparent seriousness, professed vulnerability, perceived gains, and supposed obstacles. These perceptions can account for health behaviors, either individually or in combination with each other.

Modifications to the theory have included other constructs such as cues to action, inspiring factors, and self-efficacy (Rosenstock, 1974a).

The concept of *professed seriousness* involves an individual's conviction about the gravity or severity of a disorder. A patient's medical knowledge informs his or her understanding of the severity of illness. However, this comprehension may also stem from an individual's beliefs about the problems associated with the disease and its impact on his or her life (Rosenstock, 1974b). For instance, the flu is viewed by many as a minor illness that resolves on its own. For an asthmatic individual, however, the flu could lead to an emergency room visit. Such a person considers the flu a serious illness. Understanding the implications of suffering from CRC could impact people's perceptions about the seriousness of the disease, thus encouraging them to undergo screening to avoid the consequences of the advanced disease (Rosenstock, 1974b).

Individual risk or *vulnerability* is among the most influential perceptions in provoking people to take on healthy behaviors. The likelihood of participating in behaviors to decrease a risk is proportional to the magnitude of the professed risk (Alligood, 2014). This concept has been used to encourage gay men to receive hepatitis B vaccines (Vet, de Wit, & Das, 2015) and to use condoms to minimize their exposure to HIV (Andrew et al., 2016). Supposed predisposition inspires people to receive influenza vaccinations (Miller, 2014), to use sunscreen to prevent skin cancer (McWhirter & Hoffman-Goetz, 2016), and to floss their teeth to preclude gum disease and tooth loss (Hamilton, Bonham, Bishara, Kroon,

& Schwarzer, 2016). Overall, people are more likely to take measures to prevent a disease if they are aware that they are predisposed to the disease.

Regrettably, the opposite also occurs when people who believe that they are not predisposed to a disease live recklessly. For example, some elderly people do not believe that they are at risk for HIV infections. Therefore, they do not take precautions to protect themselves from HIV by practicing safe sex (Hughes & Alford, 2017).

In addressing the issue of awareness in relation to CRC, educating individuals about their risk for the disease is likely to improve their health behavior to reduce such risks and encourage them to undergo screening. When awareness of vulnerability combines with gravity, it leads to alleged threat (Rosenstock, 1974b). An alleged threat of a serious disease with high risk often leads to behavior modifications. Regarding this project, the perception of threat prompts behavior changes among colon cancer survivors (Haryanthi & Kautsar, 2016). Colorectal cancer is a severe disease with an elevated risk of recurrence (Primrose et al., 2014). Consequently, awareness of the threat of recurrence is what increases the chances of behavior alterations in people who have previously suffered from this disease. Reported changes among such individuals include eating healthy foods, exercising, and maintaining a healthy weight (Koehly, Morris, Skapinsky, Goergen, & Ludden, 2015).

Professed benefits involve an individual's perception of the value of a new behavior in lowering the chances of developing a disease (Rosenstock, 1974a). Rosenstock (1974a) asserted that there was a high likelihood that people would take on healthy behaviors when they had faith that a new behavior would decrease their chances of developing a disease. Professed benefits influence the adoption of secondary prevention behaviors, including screenings (Rosenstock 1974b). For example, informed patients may choose screening for colon cancer using colonoscopy as one of the screening methods. Prior to a colonoscopy, a patient must cleanse the colon by taking liquids followed by cathartics. Post-procedure recuperation requires a little time. Notwithstanding the troublesomeness, a colonoscopy is the best method for early detection of colon cancer (Young & Womeldorph, 2013). However, very few people above the age of 50 undergo the procedure, likely because they are unaware of the perceived benefit of early diagnosis from colonoscopy (Wong et al., 2013).

Change does not come easily to most people. The term *professed obstacles* refer to an individual's assessment of the barriers in the way of taking on a new behavior (Rosenstock, 1974b). The adoption of new health behavior requires the perception that the advantages of the new behavior outweigh the penalties of carrying on with the old behavior (Green & Murphy, 2014). Cues to action include events, people, or things that encourage people to alter their behavior (Aligood, 2014). These may include illness of a family member, media reports, campaigns, counsel from others, reminder messages from health care providers, cautionary health tags on products, or advice from medical providers. In this project, I sought to develop a clinical practice guideline as a cue to action to promote CRC screening among African American populations at the practicum site.

Relevance to Nursing Practice

History of the Problem in Nursing Practice

Patient education is entrenched in the extensive discipline of health promotion (Hoving, Visser, Mullen, & van den Borne, 2010). In 1974, the Lalonde report revealed that biomedical aspects of health care were not the only crucial determinants of health; citizens themselves played a substantial role in their health through behaviors linked to their lifestyles (Hancock, 1986). These factors included a healthy diet, adequate exercise, and minimizing exposure to noxious substances (Hancock, 1986).

Messages and actions in health promotion have evolved over time. Initially, there was an emphasis on knowledge transfer alone by health providers, which later changed to a multifaceted picture of health behavior. Health providers instituted and operationalized a methodical approach based on psychosomatic and interactive research that made use of concepts such as self-efficacy and social influences (Hoving et al., 2010). The formulation of interventions also depended on the use of theories and models such as the precede-proceed model (Gielen, McDonald, Gary, & Bone, 2008) and the intervention mapping protocol (Kok, Schaalma, Ruiter, Van Empelen, & Brug, 2004). Additionally, goals concerning quality of life replaced the aim of attaining good health at all costs, thereby signaling a shift in the focus of health-promotion efforts toward a person’s free will to receive health information and act on it. Patient education is also beneficial in attaining other objectives that are not necessarily linked to medical health.

The role of the patient in capacity building and advocacy has evolved over time. For instance, before the 1960s, the doctor was the sole authority in charge of diagnosis and treatment of patients (Hoving et al., 2010). Health education for patients was not part of a broad health promotion plan; thus, patients played a passive role during the treatment process. Providers thought that informing the patient about the gravity of his or her condition would impair the patient’s coping process and recovery. Additionally, patients were expected to follow the physician’s treatment plans unreservedly because health care professionals were the experts and therefore better equipped than their patients to decide what was best for patients without accounting for the patients’ wishes (Hoving et al., 2010).

However, patient education gradually began to gain prominence in healthcare. In the Netherlands, the government encouraged the development of patient education facilities in hospitals and sponsored studies to evaluate the effectiveness of patient education (Visser, 1984). Similarly, in the United States, patient bodies, the nursing vocation, and studies of physician–patient communication triggered the advancement of patient education (Roter, Stashefsky-Margalit, & Rudd, 2001). The development of patient education materials, including brochures, did not follow a specific strategy, but followed what health care providers thought what was appropriate for each patient.

In the 1980s, the rising collective emphasis on patients’ rights and the evolution of patient activist groups led to the advancement of patient education. Several countries created decrees regarding patients’ lawful rights to facts about their health conditions and treatment options (Deccache & Aujoulat, 2001). In the 1990s, patients were actively involved in their health care and treatment plans and became empowered to make choices in treatment and treatment goals. Additionally, providers accepted the fact that patients spend the larger part of their lives outside interactions with health care providers (Van den Borne, 1998), which means that their actions away from healthcare facilities influence their overall wellbeing. Consequently, their day-to-day activities influence treatment outcomes.

An increase in migration rates for safety and economic purposes has diversified the cultural beliefs, attitudes, and religions of people in European and North American countries. Thus, the need has emerged for health care providers to alter their approaches when providing patient education. Cultural beliefs influence experiences with illness, and those beliefs can cause a patient to feel fear and apprehension or affect their communication of pain and other discomforts (Hoving et al., 2010). Therefore, the successful engagement of patients in relevant education activities requires that providers align educational activities with the patients' cultural values.

Patient education has been useful in the battle against all forms of cancer (Abuksis et al., 2001). However, patient-education approaches have placed more emphasis on individuals with a family history of cancer (Murff, Spigel, & Syngal, 2004). Consequently, patients received encouragement to undergo various recommended screening tests. However, with continuous research, it is evident that cancer may develop in individuals without a family history of cancer (Couch et al., 2014). Therefore, there is a need to develop clinical practice guidelines that target all potential victims, their family history notwithstanding.

Current State of Nursing Practice and Recommendations

The current nursing practice provides CRC screening based on an order from the primary care provider in combination with the patient’s completion of screening. In one study, Ouzounian (2016) executed and observed a homogeneous CRC screening procedure for 3 months. Two screening methods were used: colonoscopy and the fecal immunochemical test (FIT). Current evidence indicating that giving screening alternatives to patients elevates the efficacy of screening informed this decision (Ouzounian, 2016). Ouzounian (2016) also suggested that provider endorsement and discussion of CRC screening corresponded to higher screening rates. Therefore, the intervention combined these two methods. The evaluated outcome measures included regularity of screening orders for suitable patients, the time required to complete the screening, and the overall rate of screening at the facility. The frequency of screening orders rose from 16.2% to 22.1% at the end of 3 months following the execution of the intervention. The rate of completed patient screening increased from 31.6% to 49.1% (Ouzounian, 2016). On the other hand, the clinic’s general screening rate rose from 36.1% to 38.9%, and the mean time needed to complete the screening reduced from 20 to 18 days (Ouzounian, 2016). From this study, it is evident that provider endorsement and provision of alternatives can increase the rate of screening.

The American College of Gastroenterology (ACG) Committee on Minority Affairs and Cultural Diversity has updated the current CRC screening guidelines for African Americans (Williams et al., 2016). The updated guidelines require African Americans to begin undergoing screening at the age of 45 years rather than 50 years, the age at which screening is typically recommended for individuals of other ethnicities (Williams et al., 2016). Recent statistics show that CRC affects African Americans at disproportionately high rates compared to other races, which prompted the update to the screening guidelines (Rex et al., 2009). Offering additional information and guidance about the advantages of screening to patients who are reluctant to undergo screening can further improve the chances that these patients will undergo screening. Eliminating cultural misconceptions about screening and providing information about available resources for patients who are unable to afford screening costs would yield more benefits in terms of the number of patients undergoing CRC screening (Blumenthal, Smith, Majett, & Alema-Mensah, 2010).

Previous Strategies and Standard Practices

The 1995 U.S. Preventive Services Task Force (USPSTF) CRC screening recommendations previously endorsed screening for CRC in patients using fecal occult blood testing (FOBT) and periodic sigmoidoscopy or a combination of the two. At the time, there was insufficient evidence for or against colonoscopy or a barium enema (USPSTF, 2002). Screening was to begin at the age of 50 in men and women but was not to continue beyond 75 years of age. An update to the guidelines in 2002 proposed the use of colonoscopy as opposed to FOBT and sigmoidoscopy. However, colonoscopies were to be performed every 10 years (USPSTF, 2002). Shorter intervals of every 5 years were recommended for flexible sigmoidoscopy and double barium enema due to their lower sensitivity compared to colonoscopies (USPSTF, 2002). In 2008, the guidelines were amended to endorse the use of colonoscopies every 10 years and annual FOBT (USPSTF, 2008). Previously used practices to increase CRC screening included provider endorsements to eligible patients.

Known strategies that have been used to increase CRC screening include a team approach in which other providers share the responsibility for screening tasks to address physicians' lack of time for preventive care (Klabunde et al., 2007). With the introduction of electronic health records, the use of information systems helps to identify eligible patients and remind them when screening is due (Baker et al., 2015). Further, providers are engaging patients in decisions about their care to improve participation in screening. Providers are also making use of training opportunities concerning communication, cultural know-how, and use of information technologies to improve their proficiency in core elements of screening programs (Klabunde et al., 2007).

How the Doctoral Project Advances Nursing Practice

The present doctoral project advances nursing practice by providing a nurse-specific evidence-based clinical practice guideline to increase CRC screening among African American populations. In previously used strategies, medical professionals addressed CRC screening in general without paying attention to the distinctive needs of African American populations. African Americans may face special barriers to screening, including cultural misconceptions, limited education, and financial constraints. This project includes the development of a comprehensive clinical practice guideline to address these issues.

Local Background and Context

Summary of Local Evidence and Cultural Factors

The practicum clinic serves a multicultural patient population, many of whom were African American. Currently, very few eligible patients underwent CRC screening. Many patients were reluctant to collect the fecal occult blood test kits for stool collection, and the few patients who took the kits did not return them to the clinic for follow-up tests. Furthermore, patients were reluctant to undergo colonoscopies, perhaps because of the lack of a comprehensive standardized program to increase patients' awareness of the severity of CRC and the importance of early screening. The absence of this awareness justified the need to develop a clinical practice guideline to increase awareness about CRC and the importance of early screening among African Americans.

Institutional Context/Environmental Variables

The practicum site is in the southeastern part of the U.S. The institution provides health services such as caring for patients with chronic diseases, screenings, and annual wellness examinations. The populations served at this institution include African Americans, Africans, Hispanics, and Asians; therefore, it is a multicultural facility. The mission of the facility is to provide its community and environs with quality health care and help enhance their lives with healthful living strategies. The strategic vision of the facility is to help its patients live high-quality, fulfilling lives regardless of the challenges they encounter.

Definitions of Locally Used Terms or Operational Processes

There were no locally used terms or operational processes at the practicum setting other than those universally used and applied in nursing practice.

State and/or Federal Contexts Applicable to the Problem

All state and federally approved health care facilities are expected to follow the USPSTF recommendations for CRC screening. The recommended screening modalities are annual fecal occult blood tests and colonoscopies every ten years for men and women aged between 50 and 75 years (USPSTF, 2008). Also, the USPSTF recommends that federal, professional groups, and private insurers screen asymptomatic persons for pre-clinical disease (Levin, 2010). These procedures help medical professionals identify and eliminate benign precancerous colon adenomas, thus preventing cancers. They also enable medical professionals to discover and cure small, surgically treatable CRC in the early stages.

Role of the DNP Student

My Professional Context and Relationship to the Doctoral Project

I work as an advanced nurse practitioner in a family practice clinic, and I am also a home health nurse. My work responsibilities include assessing and evaluating patients' health status and recommending health services that promote health and wellbeing. As an advanced practice nurse, I order screening services and annual wellness examinations. The project was carried out at my practicum site, which is also an internal medicine clinic in the southern United States. The site offers a wide range of services such as annual physical examinations and screening for hypertension, diabetes, and other diseases. The populations served at the site include African Americans and, a smaller population of immigrants, including Africans, Mexicans, and Middle Easterners born outside of the U.S. (American Immigration Council, 2015). This site is not my place of employment. The DNP project had no relationship whatsoever to my employment responsibilities.

My Role in the Doctoral Project

My role in the doctoral project was to use evidence-based literature to develop a clinical practice guideline that would increase awareness about CRC and the importance of early screening among African American populations at the practicum site. However, my relationship with the institution was limited to completing my practicum hours at the practicum site. Additional roles included moving the project forward to completion, compiling the outcomes of my project, and submitting the final project report.

My Motivations for this Doctoral Project

Having lost my husband David to colorectal cancer, I was motivated to help other families and prevent them from suffering the same fate that befell David by promoting early screening for colorectal cancer. David became a victim of colon cancer in 2013 and because of the love and care he showed to his family while alive, the family decided to immortalize his name by establishing the David Omenukor Foundation as a platform to continue his battle against CRC. My experiences and findings since the foundation began its health outreaches have revealed that millions of African Americans, Hispanics, and other immigrant populations were facing similar problems highlighting the urgent need to take more critical steps to tackle this serious challenge. Therefore, I chose to use any opportunity to seek resources and information about CRC and to encourage individuals to undergo early screenings to avoid preventable deaths. My enrollment in the Doctor of Nursing Practice program at Walden University provided a perfect opportunity for me to develop a clinical practice guideline to promote awareness about the importance of timely CRC screenings, particularly among African Americans, who are reported to have low rates of CRC screenings.

Potential Biases

Due to my commitment to fighting against CRC through early screening, I was likely to have two forms of researcher bias: confirmation and culture bias. Confirmation bias happens when an investigator forms an assumption and uses respondents' data to corroborate the belief (Baack, Dow, Parente, & Bacon, 2015). Judging and weighing rejoinders that substantiate my suppositions as relevant and dependable while writing off evidence that did not back my hypotheses could also lead to this bias (Baack et al., 2015). There was a need to enlist the help of someone not related to my work; for example, my preceptor or a colleague to review my work for evidence of bias on my part and minimize DNP student potential bias.

Culture bias occurs when our cultural viewpoints on the scale of ethnocentricity or ethnic dependence influence postulations about incentives and influences. Ethnocentrism involves passing judgment on another culture mainly by using the ideals and paradigms of one's own culture. Cultural relativism is the assumption that other people need to comprehend a person’s beliefs in terms of that individual's culture. Culture bias was avoided by being open-minded and embracing cultural relativism. This was achieved by exhibiting unconditional positive consideration and be conscious of my cultural norms.

Role of the Project Team

The Use of a Project Team

All the evidence-based suggestions to develop the clinical practice guideline was presented to the key administration at the site for their input before I finalized the program. Other members of the project team included the director of nursing and staff nurses. I presented the developed project to the team for review. I then used their input for the final product.

Presenting Information to the Team Members

At the practicum site, I presented background information, evidence, and other forms of and summarized evidence in the form of PowerPoint presentations during meetings. I scheduled these meetings by sending email notifications to the concerned members at least two weeks to the presentation date. This approach enabled them to prepare any information that was useful in the development of my project.

Opportunities for Team Members to Share Insight

Regular meetings were organized with team members at the practicum site to provide them with opportunities to share their expertise and contextual insight regarding the DNP project. These meetings were scheduled at the beginning of the project, halfway through the project, and in the last phase. Feedback was provided during each of these meetings.

Timeline to Review and Provide Feedback

I expected the project team members to provide immediate feedback during the meetings. I incorporated input from the team members during these meetings and at the end of the project before compiling the final evidence. The director of the nursing ensured that all the input of the project team members was incorporated into the final program.

Summary

My practicum setting continued to report low rates of CRC screening despite the USPSTF’s recommendations for annual FOBT screening and colonoscopies every ten years. The low rates of screening were a consequence of the attitudes and perceptions of the public, as well as insufficient efforts by providers to deliver patient education about the benefits of early screening. The health belief model guided this project. Further, the health belief model guided the development and implementation of an evidence-based clinical practice guideline to transform the attitudes of the African American populations and increase screening rates. Patient education dates to the mid-19th century, when providers thought they were best placed to make healthcare decisions and influence patient behavior. Current efforts consider that patients are in charge of their own health and should be empowered to make the right health care decisions through patient education. In the next section, I provide the sources of evidence that I used to develop a clinical practice guideline to increase CRC screening among African Americans. I also discuss the analysis and synthesis of evidence to answer the practice-focused question.

Section 3: Collection and Analysis of Evidence

Introduction

CRC is the third leading cause of cancer-related deaths in the world (Patel & Kilgore, 2015). Numerous cases of advanced stage CRC continue to occur due to patient underutilization of screening services. The purpose of my project was to develop a culturally-sensitive clinical practice guideline to increase CRC screening among African Americans in my practicum site. Recent statistics have shown that CRC affects African Americans disproportionately compared to those of other races (Ou et al., 2013), which prompted an update to the CRC screening guidelines for African Americans. Each year, preventable CRC deaths continue to occur among African Americans due to delayed screening and diagnosis of the disease (Ou et al., 2013). In this section, I clarify the sources of evidence I used to answer the practice-focused question and identify the databases and strategies that I used to gather evidence. I also present the method that I used to ensure the exhaustiveness and comprehensiveness of my evidence, and the analysis and synthesis of the resulting data.

Practice-Focused Question

The practice-focused question for this project study was: Can a culturally-sensitive clinical practice guideline to increase CRC screening among African Americans be developed using evidence-based practices? There is a considerable disparity between African Americans and individuals from other ethnic groups in the incidence and mortality rates of CRC (Agrawal et al., 2005), which marks the gap in practice I studied in this project. The current statistics at the local practicum setting showed that a large number of African Americans were diagnosed with advanced CRC in 2016. The diagnoses followed the persistent complaints of abdominal discomfort and rectal bleeding from patients who did not undergo screening per the USPSTF recommendations. Factors such as cultural perceptions, personal views, and socioeconomic barriers impede African Americans' use of screening services (Williams et al., 2016), which has contributed to the gap in practice. Additionally, there was a lack of an organized method to educate this population about CRC. This lack marked the need for a clinical practice guideline to promote early screening as recommended.

Clarification of the Purpose

Throughout this project, I used evidence-based strategies to develop a culturally-sensitive clinical practice guideline to increase CRC screening among African Americans. The guideline addressed the causes of disparities in the incidence and mortality of CRC among African Americans. The guideline was also expected to equip nurses, nurse practitioners, and other providers to address cultural as well as financial barriers to CRC screening among this patient population at the practicum site while providing patient education. I designed the guideline with the intention of increasing the number of patients from this community seeking CRC screening.

Operational Definitions of Key Aspects

I have not introduced any new terms or aspects in this doctoral project. The definitions of terms used throughout the project are the same as those used in conventional nursing practice.

Sources of Evidence

Evidence to Support the Practice-Focused Question

I used current evidence-based literature to support the practice-focused question. The Guide to Community Preventive Services (The Community Guide, 2017) was useful for creating education subsection of the clinical practice guideline, and the American Cancer Society (n.d.) provided current CRC statistics. Another source of evidence was the MD Anderson Cancer Center's webpage on clinical trials (clinicaltrials.org, 2017), which has reported increased screening rates following the execution of education interventions. I obtained the actual evidence-based strategies to improve CRC screening from primary and secondary peer-reviewed nursing articles.

The Relationship of Evidence to the Purpose

The purpose of the project was to develop an evidence-based clinical practice guideline to increase CRC screening among African Americans. The gathered data included evidence-based strategies that health practitioners have used to increase African Americans' use of preventive health services. Therefore, I used the strategies noted in the sources of evidence to develop an appropriate clinical practice guideline targeting CRC screening among African Americans.

Evidence to Address the Practice-Focused Question

My strategy for evidence collection allowed me to gather wide-ranging evidence-based data from various databases to answer the practice-focused question. Appraising all information from various sources was critical to obtaining valid answers. My use of the Melnyk pyramid matrix ensured adequate evaluation of relevant data (see Melnyk & Fineout-Overholt, 2011). I determined the strength and cogency of various nursing research articles and used the information to develop a culturally-sensitive clinical practice guideline for African Americans. This strategy provided an avenue for integrating the strongest evidence-based research into a clinical practice guideline. This matrix also helped me determine the strength of the interventions and their applicability to the practice gap (see Melnyk & Fineout-Overholt, 2011).

Literature Search Strategy

The databases that I used in this study to find outcomes and research related to the practice problem included ProQuest, Medline, OVID, CINAHL, and the Cochrane Library. I also utilized the Walden University Library and the Google Scholar databases to access research articles. The key search terms included *clinical practice guidelines in CRC screening, CRC screening in African Americans,* and *improving CRC screening in African Americans.*

I limited my search of the literature to a range of 10 years following the last USPSTF CRC screening regulation in 2008. I used filters to limit the subject of the search results by study types to locate research based on the level of evidence. For instance, in the CINAHL database, the “show more” button on the left of the search set was used to find the “publication type” box to choose the desired type of study. The evidence I used was based on clinical trials, randomized controlled trials, and systematic reviews.

My search was exhaustive given that I used various key terms and combinations of search phrases that cover the practice problem and the target population. I evaluated and tested the search phrases using various strategies such as including or changing keywords and the ways they relate to each other. Narrowing the search to articles published within a range of 10 years also ensured the comprehensiveness of the search.

Analysis and Synthesis

I recorded the textual evidence and tracked it in an organized table. Details of the primary and secondary sources from which I obtained the evidence were included in the table. The evidence was analyzed by following the steps described by Melnyk and Fineout-Overholt (2011). My first step involved determining a cause-effect relationship followed by an evaluation of the sampling method. Articles with cause-effect relationships as well as random sampling were considered Level 2 evidence whereas those without randomization in the sampling approach were considered Level 3 evidence (see Melnyk & Fineout-Overholt, 2011). For articles without a cause-effect relationship, I examined the presence of any other relationships to distinguish between correlational studies (Level 4 evidence) and descriptive studies (Level 6 evidence). Articles depicting systematic reviews of randomized clinical trials were graded as Level 1 evidence. I then synthesized the ideas from the papers to answer the research question. My next step was to compare and weigh the evidence from the different papers and then use the evidence with the highest strength to develop a clinical practice guideline. I did not use any software for this purpose.

I assured the integrity of the evidence by evaluating each research article to ascertain that it was the best quality source for the project. This evaluation was conducted based on five categories: abstract, introduction, materials and methods, results, and discussion. Some of the questions I used to determine whether these subsections met the required criteria included: the clarity of the purpose of the study, the test population, the clarity of the methods, and the straightforwardness of the results. A proper check was made to ensure that the evidence was supported by statistical data and the conclusions were based on sufficient data. I did not expect to encounter outliers and missing information because I was not going to deal with numeric data for statistical comparison.

I categorized the evidence obtained from each research article based on the strength of the evidence. I then selected the strongest evidence to develop the evidence-based clinical practice guideline and used the recommendations from the articles and stakeholder input to compile a clinical practice guideline.

Summary

There was a need for an evidence-based, culturally-sensitive clinical practice guideline at the practicum setting to increase CRC screening among African Americans. My development of the guideline involved a review and synthesis of peer-reviewed literature published within the last 10 years. I documented the evidence manually in a table format, after which I synthesized the evidence using the Melnyk pyramid matrix to identify the strongest evidence. The evidence was then used to develop the clinical practice guideline. In the next section, I report the findings of my synthesis and analysis and discuss their implications for the practice-focused question.

Section 4: Findings and Recommendations

Introduction

CRC deaths continue to occur among African Americans because of delayed screening and diagnosis (Ou et al., 2013). At the local primary care clinic, a large number of African American patients aged 50 years and older were diagnosed with advanced CRC in 2016. The diagnoses followed persistent complaints of abdominal discomfort and rectal bleeding from the patients. The nurses, nurse practitioners, and other providers attributed the large number of advanced CRC diagnoses to the absence of an organized method to educate African Americans about CRC. Furthermore, the patients' medical history showed that they did not undergo CRC screening in line with the recommendations of U.S. Preventive Service Task Force (USPSTF) to commence screening at the age of 50 years. Delayed screening leads to late diagnosis and increases the likelihood of diagnosing CRC in advanced stages. This observation justifies the need for regular and early screening. The gap in practice at the study site was a lack of a culturally-sensitive clinical practice guideline to increase CRC screening among African Americans. There was a need to address the barriers to CRC screening that create health inequality, including cultural perceptions, personal views, and socioeconomic factors. The identification of the social determinants that result in undesirable patient outcomes in other populations can help in the development of clinical practice guidelines to tackle the disparities (Healthy People 2020, 2017). Nurses play a vital role in closing this gap in practice by using culturally-sensitive clinical practice guidelines to guide patients to undergo CRC screening (see Agrawal et al., 2005).

The practice-focused question for this project study was: Can a culturally-sensitive clinical practice guideline to increase CRC screening among African Americans be developed using evidence-based practices? The purpose of the project was to develop a culturally-sensitive clinical practice guideline. The guideline will equip nurses and providers to provide education and address barriers to CRC screening among African American patients. As a result, there may be an increase in the number of patients from this community seeking CRC screening.

Sources of Evidence and Analytical Strategies

I used the following databases to gather materials for this study: ProQuest, Medline, OVID, CINAHL, and the Cochrane Library. I also utilized the Walden University Library and the Google Scholar databases to access research articles. The key search terms were *clinical practice guidelines in CRC screening among African Americans, CRC screening in African Americans,* and *improving CRC screening in African Americans.* The search included literature within 10 years following the last USPSTF CRC screening regulation in 2008. Filters were used to limit the subject of the search results by study types and level of evidence. I utilized evidence from clinical trials, randomized controlled trials, and systematic reviews. I then used the Melnyk pyramid matrix to evaluate relevant data adequately (see Melnyk & Fineout-Overholt, 2011), determine the strength and cogency of various nursing research articles, and develop a culturally-sensitive clinical practice guideline for African Americans. The Walden University *Clinical Practice Guideline Manual* was useful in developing the clinical practice guideline (Walden University, 2017). The clinical practice guideline was then developed using the Appraisal of Guidelines Research and Evaluation (AGREE) II framework. The AGREE II framework is a generic tool created to guide the development of clinical practice guidelines and evaluate the procedural standard of the guidelines. The framework consists of 23 key criteria arranged within 6 domains (AGREE II, 2013). The 6 domains and the related 23 items include: scope and purpose, stakeholder involvement, rigor of development, clarity of presentation, applicability, and editorial independence (AGREE II, 2013).

Findings and Implications

Findings

I conducted a thorough literature review as indicated in the previous subsections. The details of the literature search are indicated in Appendix B. Overall, I noted that the low rates of CRC screening and disproportionately high rates among African Americans were linked to several problems that could be grouped into three classes: patient obstacles, provider issues, and system-level problems. Patient obstacles to CRC screening included fear, inadequate knowledge of CRC risk, and low apparent benefit of colonoscopy (James, Daley, & Greiner, 2011). Provider-level issues included failing to recommend screening and insufficient knowledge regarding guidelines and impediments to screening. Examples of system barriers included financial problems, lack of insurance, and the inability to access care.

There is a need to ensure equitable access to prevention, early detection, and high-quality treatment in the fight against cancer (Desantis et al., 2016). Therefore, clinical practice guidelines should include these three areas. Appropriate patient education strategies should address patient fear, knowledge, and attitudes regarding CRC and screening (Bromley et al., 2015). Physician problems should be addressed through appropriate staff development or education measures, whereas system issues should be tackled by improving access to healthcare services (Bromley et al., 2015).

It is important to seek community input with respect to patient education and development of CRC screening (Makoul et al., 2009). Multimedia versions of patient education programs are useful in this regard. The success observed when community input is incorporated into multimedia patient education programs implies that when developing patient education programs, providers need to obtain the input of the intended audience. This approach ensures the effective delivery of information to people of a specific ethnicity and increases ownership of the program as well as the chances of success for the program (Makoul et al., 2009). Additionally, community input may highlight crucial areas which could have been overlooked. However, community input should not be used as a substitute for patient-provider communication.

Providers need to develop interventions aimed at reducing barriers to increase the rates of CRC screening among African Americans. Effective education is crucial to this endeavor. The effectiveness of the education is determined by the ease with which patients grasp the content. Consequently, the type of medium used to convey information should match the literacy levels of the audience. For example, printed communication should be avoided when targeting low literate adults for CRC screening (Von Wagner, Semmler, Good, & Wardle, 2009). Effective patient education should cover all the factors that play a role in CRC screening. Clinicians, patients, and policymakers need to consider different social, cultural, and fiscal issues related to CRC screening in African-American communities (Ward, 2008). Apart from being comprehensive, an effective education approach needs to portray the reality of the situation. The framework that guided this study was the health belief model, which holds that professed risk is crucial to promoting a change in health behaviors (Alligood, 2014). Providers need to stress the risk of CRC among African Americans to address the issue of low professed risk. Providers can emphasize the magnitude of CRC among African Americans by quoting disparity research, which are studies showing the prevalence of CRC among various ethnicities. However, the reporting of disparity research can affect the attitudes and intents of African Americans by providing a sense of helplessness in the fight against CRC (Nicholson et al., 2008). The concept of professed benefits also promotes the adoption of healthy behaviors. By highlighting the benefits of CRC screening, providers promote the theme of hope that African Americans can overcome the burden of CRC through timely screening. Understanding the benefits of CRC screening increases African Americans’ responsiveness to customized educational messages and mediations meant to surmount professed barriers to CRC screening such as cultural and financial obstacles (Ward, 2008).

When educating patients, providers should consider different approaches. For example, researchers have found that face-to-face communication and group education are effective in increasing CRC cancer screening rates among African Americans (Blumenthal, Smith, Majett, & Alema-Mensah, 2010). African Americans who had a family history of CRC reported lower screening rates compared with individuals without a family history (Griffith, McGuire, Royak-Schaler, Plowden, & Steinberger, 2008). It is necessary to consider barriers and facilitators of CRC screening among African Americans with a family history of CRC (Griffith et al., 2008). A culturally-directed faith- or community-based educational mediation improves CRC knowledge, reduces cancer defeatism, and increases CRC screening among African Americans (Morgan, Fogel, Tyler, & Jones, 2010). Pessimistic viewpoints and personal assessment of the advantages and obstacles to screening play a significant role in the decision to undergo CRC screening (Philip, DuHamel, & Jandorf, 2010). Paying more attention to these patient factors is likely to increase CRC screening rates for this community.

System problems can be addressed by system- and policy-level interventions that target vulnerable populations to reduce underuse of CRC screening services (Holden, Jonas, Porterfield, Reuland, & Harris, 2010). Providers can attain continued patient education through frequent patient reminders. Therefore, posted cues to patients are an effective tool to promote CRC screening (Sequist, Zaslavsky, Marshall, Fletcher, & Ayanian, 2009). The high rates of CRC among African Americans indicate that national CRC screening guidelines should consider the race of individuals and lower the initial CRC screening age among African Americans (Carethers, 2015).

Provider-problems, on the other hand, can be addressed by emphasizing the importance of CRC screening recommendations to patients. Providers should be more vigilant in providing CRC screening recommendations to eligible African American patients (Coleman, Baltrus, Wallace, Blumenthal, & Rust, 2013). Since CRC screening requires cooperation between patients and providers, electronic physician reminders may increase screening among adults with frequent primary care visits (Sequist et al., 2009).

Unanticipated Limitations or Outcomes

Most of the research proceeded as anticipated. However, there was one unexpected limitation in the literature search. There were adequate studies indicating culturally-sensitive evidence-based strategies that focused on patient factors to increase CRC screening among African Americans. However, there were very few studies that addressed the provider-level and system-level strategies that could be used to increase CRC screening in this population. Therefore, there is a need for additional studies on these specific topics.

Implications Resulting from the Findings

The literature search findings indicated that there was a large body of evidence in the research that needed to be adapted into clinical nursing practice. Evidence-based practice depends on the effective translation of research evidence into clinical practice guidelines, which consist of systematically developed statements to guide practitioner and patient decisions regarding the appropriate health care for clinical situations. Clinical practice guidelines have the potential to improve the quality or process of care in addition to patient outcomes (Smith et al., 2017). For example, the fact that African Americans tended to take advice regarding CRC screening seriously if it came from their providers implied that providers should take an active role in passing this information (Griffith et al., 2008). The identified barriers against CRC and screening among African Americans indicated the need for more elaborate and well thought out patient education strategies. Face-to-face communication between the patients and providers helps to clarify misconceptions and yield positive outcomes. Additionally, providers could use group education sessions to provide CRC education. The input of community partners has also been shown to influence the attitudes of African Americans on CRC and screening. Religious leaders could also be influential in changing the attitudes and beliefs of African Americans about CRC and screening (Morgan et al., 2010). Therefore, providers need to partner with community leaders as well as religious leaders to provide patient education about CRC and screening.

Potential Implications to Positive Social Change

The suggested recommendations address an array of cultural, social, and economic factors that influence CRC screening among African Americans. These findings could bring about positive social change for nursing practice by addressing the disparities in the access to and utilization of preventive healthcare services. For example, certain disparities in the use of screening services were attributed to the complexity of the patient education materials because of limited literacy (Von Wagner et al., 2009). Consequently, tailoring patient education materials to match the literacy level of patients could improve patients' knowledge regarding CRC and screening, thus improving screening rates. Earlier studies had indicated that marginalized populations, especially African Americans who had little or no health insurance, tended not to seek preventive services such as cancer screening services (Agrawal et al., 2005; Honein-AbouHaidar et al., 2014). My findings in this project corroborated this observation (see James et al., 2011; Ward, 2008). The proposed clinical practice guideline should include the available community resources for those who were unable to afford screening services. In this way, the program would help healthcare professionals bring about social change for their patients by empowering the self-care of patients with preventive health care services. The overall outcome would be a reduction in the morbidity and mortality rates associated with CRC among African Americans.

Recommendations

The clinic needs to think of system- and policy-level interventions that target vulnerable populations to reduce the underuse of CRC screening services (Holden, Jonas, Porterfield, Reuland, & Harris, 2010). These interventions should aim at reducing barriers to CRC screening. The socioeconomic status of African Americans plays a significant role in their utilization of CRC screening services. Therefore, another useful recommendation is conducting research about available community resources or organizations that offer subsidized CRC screening services. This way, patients who cannot afford to pay for CRC screening can access CRC screening services, thus eliminating health inequalities.

Providers should improve the health literacy of patients to encourage them to engage in CRC screening (Von Wagner et al., 2009). However, the forms of literacy material should match the literacy levels of the target population. For example, when educating patients with low literacy levels, oral presentations are likely to be more effective than printed communication. Providers should also post reminders about CRC screening to patients. The electronic health record systems should also be set to remind physicians about CRC screening when eligible patients visit the clinic for medical help (Sequist et al., 2009).

Clinicians, patients, and policymakers should consider the social, cultural, and monetary factors that affect CRC screening in African American communities (Ward, 2008). This information could be obtained by tailoring the process used to obtain patients' history.

For example, developing specific probing questions to collect pertinent data regarding the family history and financial capacity of patients.

When providing patient education regarding CRC, providers should emphasize the risk of CRC among African Americans. However, providers should demonstrate optimism to help the patients to overcome professed barriers to screening (Ward, 2008). Providers should also consider group education approaches to increase the knowledge of CRC and improve screening rates (Blumenthal et al., 2010). Healthcare provider advice influences the decision to undergo CRC screening. Therefore, providers should ensure that they set aside some time to advise their patients about CRC and screening before discharging them (Griffith et al., 2008).

Factors such as the lack of knowledge, low professed risk, and attitudes about CRC screening can improve CRC screening rates in low-income groups (James et al., 2011). When informing African American patients about the incidence, morbidity, and mortality of CRC, providers should be careful to positively affect patients' attitudes and intents (Nicholson et al., 2008). Providers should emphasize reports showing progress in the fight against CRC to boost the morale of the patients and encourage them to follow suit. Additionally, positive progress alleviates medical mistrust among this patient population.

Proposed Secondary Products

The goal of this project was to develop a clinical practice guideline for providers to use in promoting CRC screening among African Americans. The guideline was developed based on the AGREE II criteria (AGREE II, 2013; Walden University, 2017). I used the findings and implications shown in Appendix B to develop the clinical guideline whose details are included in Appendix C.

Implementation and Evaluation Procedures

The proposed clinical practice guideline could be implemented by conducting staff education sessions where the contents of the guideline are presented to staff members. Additionally, a copy of the guideline should be given to each staff member to be used for reference whenever needed. The effectiveness of the guideline could be evaluated by comparing the frequency of CRC screening among African Americans before and after the implementation of the guideline. Statistical tests such as a *t* test could be used to compare the two data sets to determine whether the guideline has a significant impact on CRC screening rates among African Americans. The clinic should strive to involve religious leaders in improving CRC awareness and screening. This approach reduces cancer defeatism and increases CRC screening among African Americans (Morgan et al., 2010). Providers need to pay attention to patient factors such as pessimistic stances, perceptions of benefits and shortcoming of CRC (Philip et al., 2010). When developing multimedia tools meant to convey important health information is important for effective delivery of information to people of a specific ethnicity, providers should seek the input of community members (Makoul et al., 2009). However, providers should not substitute multimedia programs patient-provider communication.

Contribution of the Doctoral Project Team

Roles of the Project Team

The doctoral project team included the key administration at the site, the director of nursing, and staff nurses. In the initial stages, I presented the background information of the practice problem and other forms of summarized evidence to address the problem in the form of PowerPoint presentations during meetings. The meetings were scheduled by sending email notifications to the concerned members at least 2 weeks to the presentation date. This approach enabled them to prepare any information that was useful in the development of my project. I presented the developed project to the team for review and used their input, which was provided immediately, for the development of the final product. I used a PowerPoint presentation, shown in Appendix D, to summarize and present the project information to the team.

Plans to Extend the Project Beyond the DNP Doctoral Project

Project team members unanimously agreed that the low rates of CRC screening at the site was a significant problem. The development of a culturally-sensitive clinical practice guideline would be beneficial in addressing this problem. Since the DNP doctoral project did not include the implementation of the project, the nurse leader made plans to use the resulting clinical practice guideline to increase CRC awareness and emphasize the importance of screening among African Americans receiving care at the site. The efficiency of the guideline would be determined by comparing the rates of CRC screening before and after the implementation of the guideline.

Strength and Limitations of the Project

The main strength of the project was that it made use of evidence from peer-reviewed articles to develop the clinical practice guideline with patient education key points. The studies I used were conducted recently, which implies that the information was up-to-date. In addition, the bulk of the reviewed evidence comprised Levels II, III, and I, which carried significant weight. Also, I developed the guideline to adhere to the standards of the AGREE II framework, which ensured the reliability of the guideline.

One major limitation of the project was my inability to determine the effectiveness of the guideline in improving staff knowledge about CRC and screening among African Americans. I attributed this limitation to the scope of DNP projects at Walden University, which do not include the implementation of DNP projects. Therefore, it was impossible to collect data on the final outcome of the guideline.

Recommendations for Future Projects

Future researchers addressing similar problems using similar methods could consider conducting pre- and post-tests using simple questionnaires to determine the level of staff knowledge regarding improving CRC and screening among African Americans. Such studies could compare the CRC screening rates in this population before and after the implementation of the guideline. Researchers could also consider obtaining first-hand information from African Americans regarding unique challenges that they face concerning CRC screening. Qualitative data would be useful in this regard because it would provide personal views that may not be captured through quantitative studies. Some of the techniques that could be used to obtain this information include written questionnaires or face to face interviews with the patient population.

Section 5: Dissemination Plan

Dissemination Plan

I disseminated my findings and recommendations to the site’s administration, director of nursing, and staff nurses at the practicum site during a meeting using a PowerPoint presentation (see Appendix D). This dissemination was done following the AGREE II framework preconditions. I incorporated the suggestions provided by the audience into the final DNP product, and they were approved for further dissemination by the nurse leader. The nursing leaders agreed that I would be given an opportunity to present my findings to other nurses during regular staff meetings. The final clinical practice guideline will also be printed out and made available to nurses and providers at the site.

Based on the nature of the product, additional audiences that would be appropriate for this plan include physicians who are instrumental in providing health care services to patients. Therefore, this plan can also be disseminated throughout the healthcare community. Consequently, I have been asked to prepare for a brief oral presentation or poster presentation during a Nurses’ and Physicians’ Conference to be held in July 2018. I am also working towards sending an abstract to the World Cancer Congress to be held in Malaysia in October 2018. Finally, the clinical practice guideline will be developed further into a manuscript for submission to be considered for publication in a peer reviewed journal.

Analysis of Self

The last 3 years have provided substantial spiritual, academic, and professional growth for me as a DNP student. I have spent many hours on team meetings, screening meetings, and staff meetings, which have given me experiences with real people regarding the barriers to CRC screening among African Americans. I have also spent a significant amount of time researching and reviewing evidence about CRC screening among African Americans. The development of the clinical practice guideline to increase CRC screening in this population has enhanced my knowledge, skill, and capacity to bring about change in the clinical area.

As a family nurse practitioner, I work with many adult patients. I am tasked with responsibilities such as providing independent health assessment, physical examination, consultation, and patient education. I am also involved in quality improvement activities. This DNP project has presented me with an opportunity to make quality assurance changes founded on evidence in the literature. One of these changes is developing a clinical practice guideline to direct nurses, nurse practitioners, and other providers to increase CRC awareness and screening among African Americans. This intervention aligns with the AACN (2006) Essential III of applying clinical scholarship and analytical methods for evidence-based practice. The intervention also aligns with DNP essential VII of clinical prevention and population health to enhance the nation’s health. I have been able to apply evidence-based knowledge to design a clinical practice guideline to promote positive health outcomes among African Americans. This DNP scholarly project has helped to prepare me for the next phase of my career as a nursing faculty member by providing a platform to disseminate my findings to nurse leaders and clinic administration.

Project Completion

One of the challenges of this DNP project was my inability to obtain first-hand information from African American patients at the site regarding their knowledge and barriers towards CRC screening. The project mainly involved reviewing peer-reviewed literature in the development of the guideline. Future studies could consider obtaining first-hand information from African American patients. The literature has shown that low health literacy is a leading cause of most health problems (Berkman, Sheridan, Donahue, Halpern, & Crotty, 2011; Schumacher et al., 2013). However, most studies focus mainly on patients rather than providers. Patients should understand health instructions and adhere to them to attain better health outcomes. A useful insight I gained during the completion of this project is that even though patient participation in their own health influences the overall health outcomes, health care providers also play an important role in this equation. Nurse practitioners are a primary source of health education for patients. Therefore, they require adequate training, knowledge, and evidence-based guidelines to handle patients’ health literacy needs and promote better health outcomes. This project shows the need for staff guidance in increasing CRC awareness and screening by developing a culturally-sensitive clinical practice guideline.

Summary

African Americans are disproportionately affected by CRC when compared to individuals of other ethnicities. Studies show that timely CRC screening facilitates the early diagnosis of the disease and effective treatment, which lowers CRC-related morbidities and mortalities. Nevertheless, the rates of CRC screening among African Americans are very low. With this project, I aimed to develop a clinical practice guideline to increase CRC awareness and screening among African Americans. I identified three main areas as crucial in increasing CRC awareness and screening: patient factors, system factors, and provider factors. Patient factors mainly included fear and inadequate knowledge about the disease and the benefits of screening. The HBM holds that knowledge regarding the severity of the disease and the benefits of screening would encourage African Americans to engage in CRC screening, which emphasizes the importance of patient education in promoting CRC screening. Provider factors included recommending CRC screening and reminding patients to undergo screening. On the other hand, system-level factors included financial obstacles, lack of insurance, and the inability to access care. Therefore, the proposed clinical practice guideline addressed these three areas. I anticipate that implementing the recommendations indicated in the clinical practice guideline will bring positive change by reducing the morbidities and mortalities associated with CRC among African Americans.

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Appendix A: HBM Modified and Adapted for CRC Screening

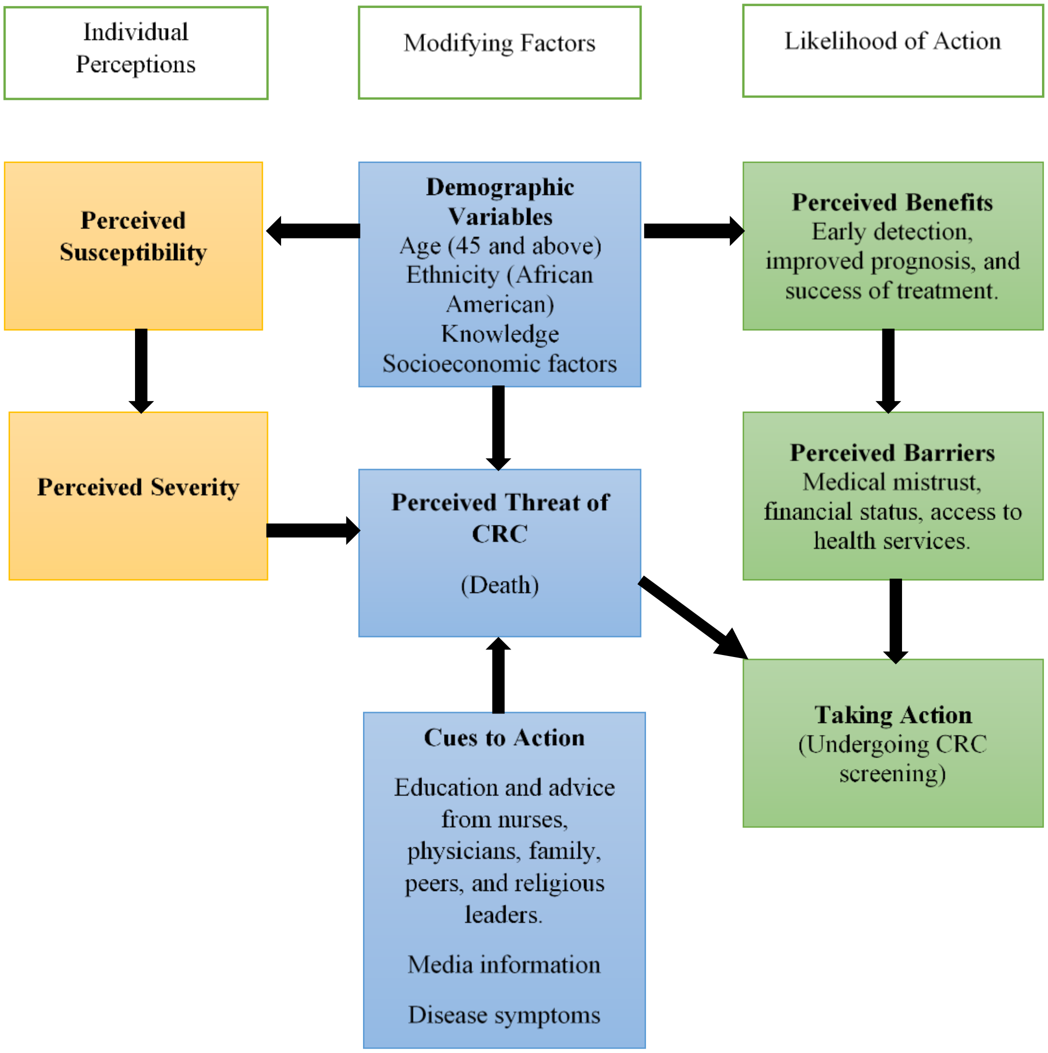


Figure 1.HBM adapted and modified for CRC and screening among African Americans.

Appendix B: Literature Search Findings

Table 1: Review of evidence

	Type of Study Setting	Intervention	Findings	Key Concepts	Evidence Level
Makoul, G., Cameron, K. A., Baker, D. W., Francis, L., Scholtens, D., & Wolf, M. S.	RCT. The objective was to evaluate a multimedia patient education program on (CRC) screening	270 Subjects aged between 50 and 80 years took part. Two versions of multimedia programs that	The education materials led to a substantial increase in knowledge of anatomy and key terms in CRC, the available screening options, risk, and readiness for	Using community input to develop multimedia tools meant to convey important health information is important for effective delivery of information to people of a	Level II

(2009). A multimedia patient education program on colorectal cancer screening increases knowledge and willingness to consider screening	that was made purposely for the Hispanic/ Latino community, using the input of community members.	began with a positive or negative introductory appeal were used. Patients were randomly assigned each category. Relevant knowledge including anatomy, risk of	screening. The positive and negative introductory appeals did not have a significant impact on these factors.	specific ethnicity (Makoul et al., 2009). However, multimedia programs should not be regarded as a substitute for patient-provider communication. They should be used to prep the subjects for productive discussions of CRC screening.

among Hispanic/Latino patients. *Patient Education and Counseling, 76*(2), 220-226.	CRC, screening alternatives, and screening behavior were examined using structured interviews. Other factors such as the readiness to ponder over screening options, discussing CRC screening with the

		physician, and response to the multimedia patient education program were also noted.			
Holden, D. J., Jonas, D. E., Porterfield, D. S., Reuland, D., & Harris, R. (2010). Systematic	A systematic review of relevant randomized controlled trials. The objective was to recap evidence on factors that	Articles were obtained from databases such as MEDLINE, the Cochrane Library, and the Cochrane Central Register of	There was evidence of concurrent underuse, overuse, and misuse of CRC screening and inadequate clinical discussions about CRC screening. Patient factors that reduced the use	System- and policy level interventions that target vulnerable populations are needed to reduce underuse (Holden, Jonas, Porterfield, Reuland, & Harris, 2010). Interventions aimed at	Level I

review: Enhancing the use and quality of colorectal cancer screening. *Annals of Internal Medicine*, *152*(10), 668-676.	affect CRC screening and strategies that increase the proper use, quality, and discussions of CRC screening.	Controlled Trials. Studies were conducted in the United States between January 1998 and September 2009.	of CRC screening services included low income, low levels of education, being uninsured, ethnicity for instance, being Hispanic or Asian, inadequate acculturation into the United States, and limited access to care. Solutions such as patient reminders, face-to-face communications involving patients, and	reducing barriers by making the screening process easier are likely to be effective.

			nonphysician clinic staff were beneficial. The elimination of structural barriers, e.g., improved access to fecal occult blood test kits enhanced the use of CRC screening services.		
Von Wagner, C., Semmler, C., Good, A., & Wardle, J. (2009). Health	This study aimed at recording the link between health literacy and readiness and	Ninety-six subjects aged between 50 and 69 years took the British version of	Low health literacy was linked to less information-seeking, greater reading effort, and less self-efficacy for CRC screening.	Health literacy affected information seeking behaviors and confidence to engage in CRC screening. Printed communication may not be	Level III

literacy and self-efficacy for participating in colorectal cancer screening: The role of information processing. *Patient Education and*	capacity to find information about the CRC screening program in the UK. The impact of health literacy on professed confidence to engage in screening was also examined.	the Test of Functional Health Literacy in Adults (TOFHLA). The time taken on each link was used to measure the reading effort. The understanding and self-efficacy to take part in		effective when targeting low literate adults for CRC screening (Von Wagner, Semmler, Good, & Wardle, 2009).

Counseling, *75*(3), 352-357.		screening were evaluated.			
Sequist, T. D., Zaslavsky, A. M., Marshall, R., Fletcher, R. H., & Ayanian, J. Z. (2009). Patient and physician reminders to	The study is an RCT of patient and physician reminders in 11 ambulatory health care centers.	The participants included 21 860 patients from 50 to 80 years who were late for CRC screening and 110 primary care physicians. Patients received	Patients who received the intervention package reported higher CRC screening rates than those who did not. This effect was more pronounced with age. Electronic reminders increased screening rates. Patient mailings increased	Posted cues to patients are an effective tool to promote CRC screening. Electronic physician reminders may increase screening among adults with frequent primary care visits (Sequist, Zaslavsky, Marshall, Fletcher, & Ayanian, 2009).	Level II

promote colorectal cancer screening: A randomized controlled trial. *Archives of Internal Medicine*, *169*(4), 364-371.	educational pamphlets, fecal occult blood test kit, and instructions for direct booking of flexible sigmoidoscopy or colonoscopy. Physicians were randomly allocated to	the detection of adenomas and physician reminders.

		receive electronic prompts when the patients made office visits.			
Ward, S. H. (2008). Increasing colorectal cancer screening among African Americans, linking risk	A systematic review of all relevant randomized controlled trials. The objective was to elucidate CRC screening patterns	Summaries of major findings from 2000 to 2007 in relevant databases.	Risk perception was an important driving force in patients’ decision to begin preventive health action. Risk perception was influenced by beliefs about disease risk and severity. African Americans often	Clinicians, patients, and policymakers need to take into consideration the array of social, cultural and fiscal issues related to CRC screening in African-American communities (Ward, 2008).	Level I

perception to interventions targeting patients, communities and clinicians. *Journal of the National Medical Association*, *100*(6), 748.	for African Americans.		miscalculate their CRC risk and do not value screening. Obstacles to screening include the fear of cancer, the system and screening processes, and inadequate knowledge about screening. Pessimism and mistrust also influence CRC screening. Hope and perceived accuracy about the CRC screening process and	Providers need to stress the risk of CRC among African Americans. Providers should use hope and accuracy themes to enhance the awareness of customized educational messages and mediations meant to surmount professed barriers.

	disease process were important facilitators. Fatalistic beliefs included the inability to detect cancer early enough, losing hope once the disease was diagnosed, and that surgeries worsened the condition. Mistrust of the health system entailed the fear of being used as “guinea pigs” to try out	Interventions to enhance CRC screening in African Americans should: 1) be directed at entire communities 2) provide individual patient education or guidance in an outpatient or community setting, 3) educate physicians (Ward, 2008).

unverified procedures. Inadequate insurance and financial resources to access screening services contributed to low screening rates. Motivators for screening included the desire to be a good example to family members, adhering to religious beliefs that the body is God’s temple, minimizing worries,

			adhering to physicians' recommendations.		
Blumenthal, D. S., Smith, S. A., Majett, C. D., & Alema-Mensah, E. (2010). A trial of 3 interventions to promote colorectal cancer screening	RCT. The authors tested 3 interventions meant to increase the rate of CRC screening among African Americans.	Individualized education, group education, and reducing out-of-pocket costs. 369 African-American men and women (mean age 50 years) were recruited.	257 subjects completed the intervention and were available for follow-up 3 months to 6 months afterwards. The group education cohort reported higher rates of CRC screening at the end of the follow-up period.	Group education is effective in increasing CRC cancer screening rates among African Americans (Blumenthal, Smith, Majett, & Alema-Mensah, 2010).	Level II

in African Americans. *Cancer*, *116*(4), 922-929.	Participants met a health educator met in person for 3 sessions each lasting 45 minutes sessions over 3 weeks. The sessions involved going through educational materials on CRC risk and screening.

The curriculum included depictions of CRC symptoms, diagnosis, treatment, screening tests, and recommendations.

In the second intervention, the educator met

subjects in groups of 5 to 14 individuals over a 4-week period to go through the education material as in the first group. Subjects received financial compensation up to $500 for

		expenses sustained for CRC screening.			
Griffith, K. A., McGuire, D. B., Royak-Schaler, R., Plowden, K. O., & Steinberger, E. K. (2008). Influence of family history	A descriptive study to determine the factors that influence the participation of individuals with a family history of CRC in CRC screening.	A secondary analysis of clinic data revealed predictors of CRC risk and used them to compare adherence to CRC screening in a group with high	In patients without a family history of CRC, predictors of screening included a recommendation for FOBT and sigmoidoscopy/ colonoscopy, moderate/ vigorous activity, and PSA screening history. Conversely, in individuals	Healthcare provider advice and activity level were important forecasters of CRC screening notwithstanding the family history. African Americans who had a family history of CRC reported lower screening rates compared with individuals without a family	Level IV

and preventive health behaviors on colorectal cancer screening in African Americans. *Cancer*, *113*(2), 276-285.	risk with a group with low CRC risk. The predictors included age, sex, family history, mammogram or prostate-specific antigen (PSA) screening, BMI, activity, fruit/vegetable	with a family history, recommendation for sigmoidoscopy/ colonoscopy and vigorous activity were found to be predictive of screening. African Americans who had a family history were less likely to screen compared to their white counterparts and African	history (Griffith, McGuire, Royak-Schaler, Plowden, & Steinberger, 2008). It is necessary to look into barriers and facilitators of CRC screening among African Americans with a family history of CRC (Griffith et al., 2008).

	consumption, alcohol intake, smoking, professed risk of cancer, education level, employment, access to insurance and healthcare provider, and healthcare provider	Americans at average risk for CRC.

		commendation of FOBT and sigmoidoscopy, or colonoscopy.			
Purnell, J. Q., Katz, M. L., Andersen, B. L., Palesh, O., Figueroa-Moseley, C., Jean-Pierre, P., & Bennett, N.	The authors looked at the connection between socio-cultural factors such as traditional acculturative tactic, group-based medical distrust,	Hierarchical multiple regression was used to test different models of the socio-cultural factors.	High group susceptibility was associated with low levels of mistrust in and greater screening intents in subjects receiving care from African American physicians.	Including social and cultural factors in behavioral interventions to increase CRC screening among African Americans has beneficial effects (Purnell et al., 2010).	Level III

(2010). Social and cultural factors are related to perceived colorectal cancer screening benefits and intentions in African Americans. *Journal of*	physician origin, and group-level discernments of vulnerability and professed benefits, supposed barriers, and CRC screening intents among African Americans.

Behavioral Medicine, *33*(1), 24-34.					
James, A. S., Daley, C. M., & Greiner, K. A. (2011). Knowledge and attitudes about colon cancer screening among African	A qualitative study to explore knowledge and attitudes of CRC screening among African American patients.	Subjects were aged 45 years and older and were obtained from a community health center serving low-income and uninsured patients. The study	The majority of subjects who were eligible for CRC screening were nonadherent. The noncompliance was attributed to limited CRC knowledge, low professed norms, and many obstacles to screening among other screening beliefs.	Improving CRC screening rates in low-income African Americans should target factors such as the lack of knowledge, low professed risk, and attitudes about CRC screening (James, Daley, & Greiner, 2011).	Level V

Americans. *American Journal of Health Behavior*, *35*(4), 393-401.		involved 7 focus groups and 17 semi-structured interviews.			
Nicholson, R. A., Kreuter, M. W., Lapka, C., Wellborn, R., Clark, E. M., Sanders-	A randomized study. The goal was to determine the reaction of minority groups on public information that	Emotional and behavioral reactions to four versions of the same CRC information were	Participants that received disparity articles reacted negatively to the message and were less inclined to screening compared to other groups. Articles depicting	The reporting disparity research in the media can affect public attitudes and intents (Nicholson et al., 2008). Reports depicting progress influence positive	Level II

Thompson, V., . . . Casey, C. (2008). Unintended effects of emphasizing disparities in cancer communication to African-Americans. *Cancer*	emphasizes racial disparities in cancer.	compared. The presentation involved mock news articles to 300 African-American adults. The articles varied in the framing and interpretation of race-specific CRC mortality data and	the progress of African Americans in the fight against CRC yielded better responses and motivated the subjects to be screened.	progress. This aspect is important in patients who mistrust the medical system and are unlikely to use it. This strategy can be used successfully in health promotion advertising.

Epidemiology and Prevention Biomarkers, *17*(11), 2946-2953.		other racial comparisons.			
Morgan, P. D., Fogel, J., Tyler, I. D., & Jones, J. R. (2010). Culturally targeted educational	RCT. The goal is to make use of culturally targeted educational intervention to augment CRC knowledge, reduce	Churches and community-based organizations were randomly assigned to intervention and control categories. The treatment	539 African American men and women aged 50 years and above took part in the study. The intervention group reported higher numbers of colonoscopies three months following the	A culturally-directed faith or community-based educational mediation improves CRC knowledge, reduces cancer defeatism, and increases CRC screening among African	Level II

intervention to increase colorectal health awareness among African Americans. *Journal of Health Care for the Poor and Underserved*, *21*(3), 132-147.	cancer pessimism, and increase the use of colonoscopy for CRC screening among African Americans in North Carolina.	group underwent one and a half hours of culturally directed educational program on colorectal health. Both groups completed questionnaires before and after	intervention than the control group. There was a substantial increase in CRC knowledge as well as a reduction in cancer fatalism attitudes.	Americans (Morgan, Fogel, Tyler, & Jones, 2010).

		the intervention.			
Philip, E. J., DuHamel, K., & Jandorf, L. (2010). Evaluating the impact of an educational intervention to increase CRC screening rates	The objective was to appraise the impact of a print-based educational mediation on screening behavior and related patient-based factors such as cancer	118 participants who had not been screened were enlisted from clinics in New York City. Patients received instructive print materials on the subject of the	25% of the participants underwent screening three months following the intervention. Cancer-associated anxiety was alleviated in all subjects. There was a significant reduction in pessimism and an increase in decisional balance.	Pessimistic viewpoints and personal assessment of the advantages and obstacles to screening play a significant role in the decision to undergo CRC screening (Philip, DuHamel, & Jandorf, 2010). Paying more attention to these patient factors is likely to	Level III

in the African American community: A preliminary study. *Cancer Causes & Control*, *21*(10), 1685-1691.	knowledge, defeatism, and anxiety.	importance of screening, the screening procedure, and the advantages of routine CRC screening.		increase CRC screening rates for this community.	
Resnicow, K., Zhou, Y., Hawley, S., Jimbo, M.,	RCT. The goal was to evaluate the impact of customizing CRC	Subjects were assigned to minimally tailored or enhanced	Screening rates in the slightly and enhanced customized groups were	Providers should consider customized communications when conveying CRC screening info.	Level II

Ruffin, M. T., Davis, R. E., ... Lafata, J. E. (2014). Communication preference moderates the effect of a tailored intervention to increase colorectal	screening messages for African Americans	tailored print newsletters about CRC. The Self-Determination Theory was used in the customization as well as patient data as available in the EHRs.	17.1% and 25.9%.

cancer screening among African Americans. *Patient Education and Counseling*, *97*(3), 370-375.					
Bromley, E. G., May, F. P., Federer, L., Spiegel, B. M., & van Oijen, M.	A systematic review. The goal is to understand factors that influence CRC	The review evaluated barriers to colonoscopic CRC screening in African	Patient obstacles to colonoscopy comprised fear, inadequate knowledge of CRC risk, and low apparent benefit of colonoscopy.	Most CRC screening barriers among African Americans are modifiable factors. There is a need to address patient fear, patient and physician	Level I

G. (2015). Explaining persistent under-use of colonoscopic cancer screening in African Americans: A systematic review. *Preventive*	disparities and appropriate interventions.	Americans. The findings were patient-, provider-, and system-level obstacles based on a conceptual framework. Potential solutions were also identified.	Provider-level issues included failing to recommend screening and insufficient knowledge regarding guidelines and impediments to screening. Examples of system barriers included financial problems, lack of insurance, and the inability to access care.	knowledge regarding barriers, and access to healthcare services.

medicine, *71*, 40-48.					
DeSantis, C. E., Siegel, R. L., Sauer, A. G., Miller, K. D., Fedewa, S. A., Alcaraz, K. I., & Jemal, A. (2016). Cancer statistics for African	A systematic review.	A review of cancer statistics by organizations such as the American Cancer Society provides, NIH among others regarding new cancer cases, risk factors, and	Blacks have a significantly lower five-year relative survival rates compared to whites for most cancers at each stage of diagnosis. These disparities reflect unequal access to health care among other factors.	There is a need to ensure equitable access to prevention, early detection, and high-quality treatment in the fight against cancer.	Level I

Americans, 2016: Progress and opportunities in reducing racial disparities. *CA: A Cancer Journal for Clinicians*, *66*(4), 290-308.		mortalities among blacks in the U.S.			
Carethers, J. M. (2015).	A review of literature.	A review of literature on	Several factors cause CRC disparity for African	National CRC screening guidelines should consider	Level IV

Screening for colorectal cancer in African Americans: Determinants and rationale for an earlier age to commence screening. *Digestive Diseases and*	factors that affect CRC screening in various populations.	Americans, for example, a low socio-economic status, inadequate insurance coverage, low education, poor access to medical care, especially preventive services, low use of CRC prevention and screening services, heavy consumption of diets that are conducive to CRC development, high obesity rates and sedentary	race of individuals and lower the initial CRC screening age among African Americans.

Sciences, *60*(3), 711-721.			lifestyles, high rates of tobacco use, lower use of hormone replacement therapy linked with low rates of CRC, generational distrust of the U.S. health system, and disparities in the biology of the cancer and/or metastasis.		
Wallace, D. A. C., Baltrus, P. T., Wallace, T.	RCT.	To determine whether there are Black-White	More Whites aged between 50 and 74 years reported to have received physician	Providers should be more vigilant in providing CRC screening recommendations to	Level II

C., Blumenthal, D. S., & Rust, G. S. (2013). Black white disparities in receiving a physician recommendation for colorectal cancer screening and reasons for not undergoing	differences in receiving a physician recommendation for CRC screening and reasons for going through screening.	recommendation for CRC screening than Blacks. Approximately 33.3% do not receive physician recommendation.	eligible African American patients.

screening. *Journal of Health Care for the Poor and Underserved, 24*(3), 1115-1124.

Appendix C: CRC and Screening Among African Americans Clinical Practice Guideline for Nurse Practitioners and other Providers

COLORECTAL CANCER AWARENESS AND SCREEENING EDUCATION FOR AFRICAN AMERICANS

Clinical orientation: Clinical conditions

Clinical purpose: Education and screening among African Americans

Complexity: Medium

Format: Free text and table

Intended users: Nurses, nurse practitioners, and other providers

In 2008, the USPSTF updated colorectal cancer (CRC) screening recommendations. All individuals aged 50 years and above are required to be screened for CRC. The two commonly used screening modalities are annual fecal occult blood tests and colonoscopies every five years. However, African Americans are disproportionately affected by CRC compared to other ethnicities. These observations are attributed to low rates of screening among this population. Also, factors such as inadequate education about screening, low economic status, and socio-cultural influences have contributed to low rates of screening in this population. A literature review on ways of improving CRC screening among African Americans indicate that there are three major obstacles to overcome: patient obstacles, provider barriers and system-level barriers. It is also evident that patient education is the most appropriate approach to overcome the patient-directed factors. Advanced nurse practitioners should strive to create and assess new practice approaches based on nursing theories and promote evidence-based practice according to DNP "Essential I Scientific Underpinnings for Practice" and "Essential III: Clinical Scholarship and Analytical Methods for Evidence-Based Practice" (AACN, 2006). The purpose of this clinical guideline is to direct nurses, nurse practitioners and other providers on ways of promoting CRC screening among African American patients by addressing these barriers. The recommendations included herein can be updated based on systematic reviews of current evidence-based studies that indicate the efficiency of the proposed strategies. The development of these recommendations was not biased as there were no conflicting interests.

The stipulations of the AGREE II framework for the development of clinical practice guidelines were adhered to in the development of this guideline. AGREE II is a valid and reliable made up of consists of 23 key criteria arranged within 6 domains (AGREE II, 2013). The 6 domains and the related 23 items include: scope and purpose, stakeholder involvement, rigor of development, clarity of presentation, applicability, and editorial independence.

The scope and practice domain address the overall aim of the guideline, the precise practice question, and the targeted population (African Americans). Stakeholder involvement (Domain 2) is demonstrated by presenting the proposed guidelines to the stakeholders for their input before the creation of the final guideline (Appendix D). Rigor of development (Domain 3) is indicated by the literature search and review process indicated in sections 3 and 4 of this document. The guideline has been developed in clear, simple language as stipulated in Domain 4.

Recommendations

Table 2: CRC awareness and screening guidelines

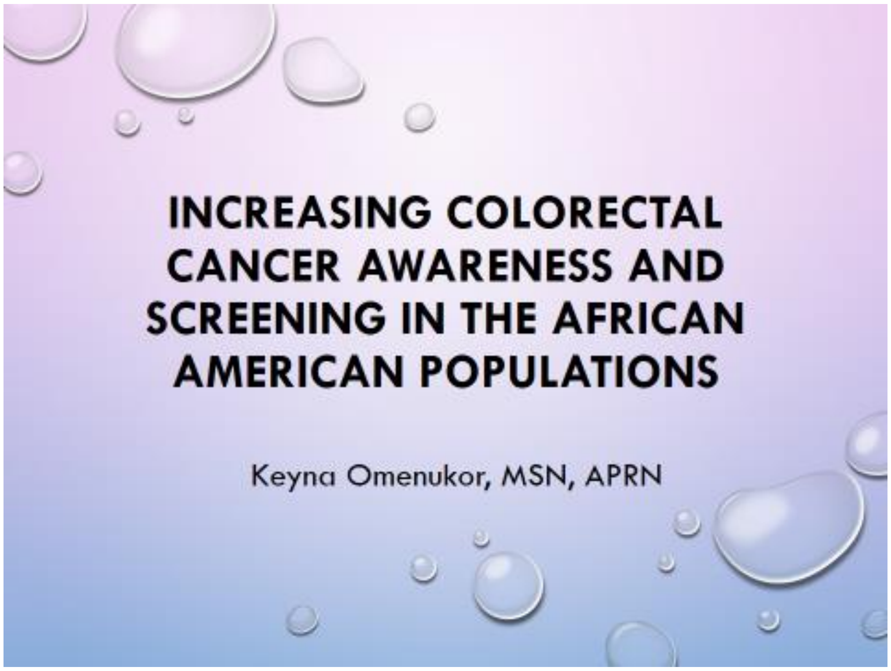
Addressing Patient-level Obstacles	
Use multimedia tools to convey important health information	• Obtain the input of community members when developing the multimedia tools • Use the tools together with patient-provider communication
Educate patients about CRC and screening	• Literacy material should match the literacy levels of the target population e.g. ○ oral presentations for patients with low literacy levels ○ printed communication for patients with advanced literacy levels • Define CRC • Describe its symptoms • Describe causes and risk factors of CRC

	• Discuss available treatment options • Provide information on preventive measures such as screening methods and lifestyle changes • Provide information on the incidence, morbidity, and mortality of CRC among African Americans • Strive to have a positive impact on attitudes by emphasizing reports showing progress in the fight against CRC • Emphasize the risk of CRC among African Americans. • Consider group education approaches
Address barriers to CRC screening	• Pessimistic stances (cancer defeatism) • Perceptions of benefits and shortcoming of CRC screening • Medical mistrust • The lack of knowledge • Low professed risk

Community involvement in CRC education	• Involve religious leaders in improving CRC awareness and screening
CRC screening reminders	• Posting reminders about CRC screening to patients via postal mail
Addressing Provider-Level Obstacles	
Provider advice and recommendation during each patient visit	• Set aside some time to advise patients about CRC and screening before discharging them
CRC screening reminders	• Electronic health record systems should be set to remind nurse practitioners about CRC screening for eligible patients
Addressing System-Level Obstacles	
Financial obstacles to screening	• Consider the monetary factors that affect CRC screening • Obtaining comprehensive patient history to identify socioeconomic barriers to CRC screening

	• Conduct research on available community resources that offer subsidized or free CRC screening services and make appropriate referrals. • Customize the history taking process ○ Asking specific probing questions to collect pertinent data regarding the family history and financial capacity of patients.

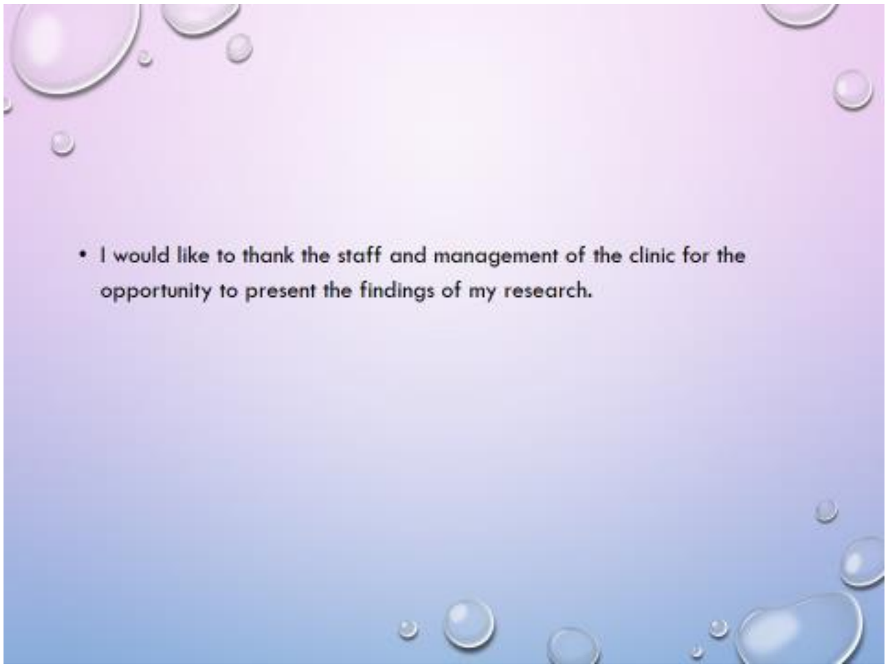
Appendix D: Presentation at the Practicum Site



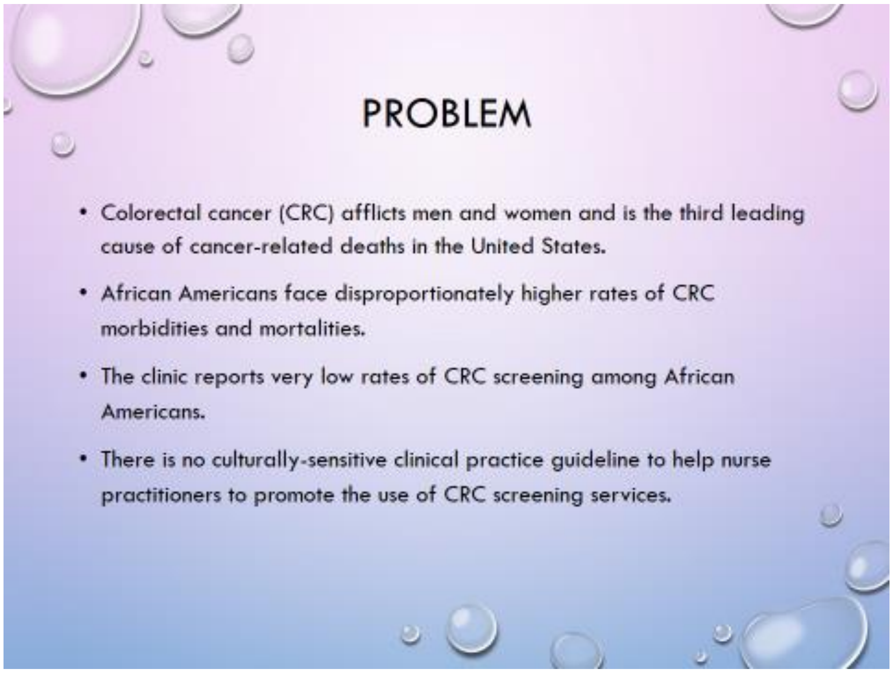
INCREASING COLORECTAL CANCER AWARENESS AND SCREENING IN THE AFRICAN AMERICAN POPULATIONS

Keyna Omenukor, MSN, APRN

DEVELOPING AN EVIDENCE-BASED CULTURALLY SENSITIVE CLINICAL PRACTICE GUIDELINE ON COLORECTAL CANCER AWARENESS AND SCREENING IN THE AFRICAN AMERICAN POPULATIONS

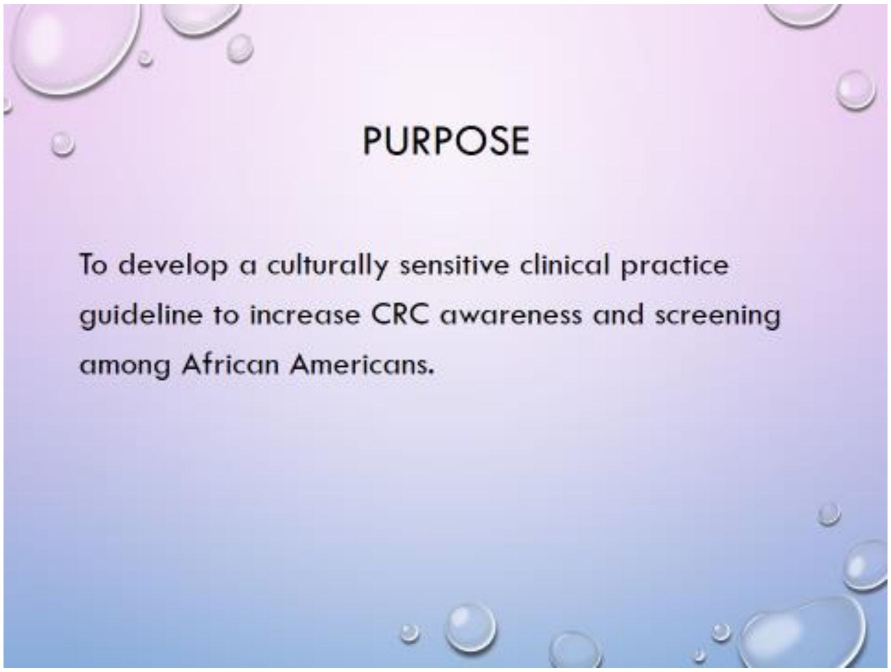


- I would like to thank the staff and management of the clinic for the opportunity to present the findings of my research.



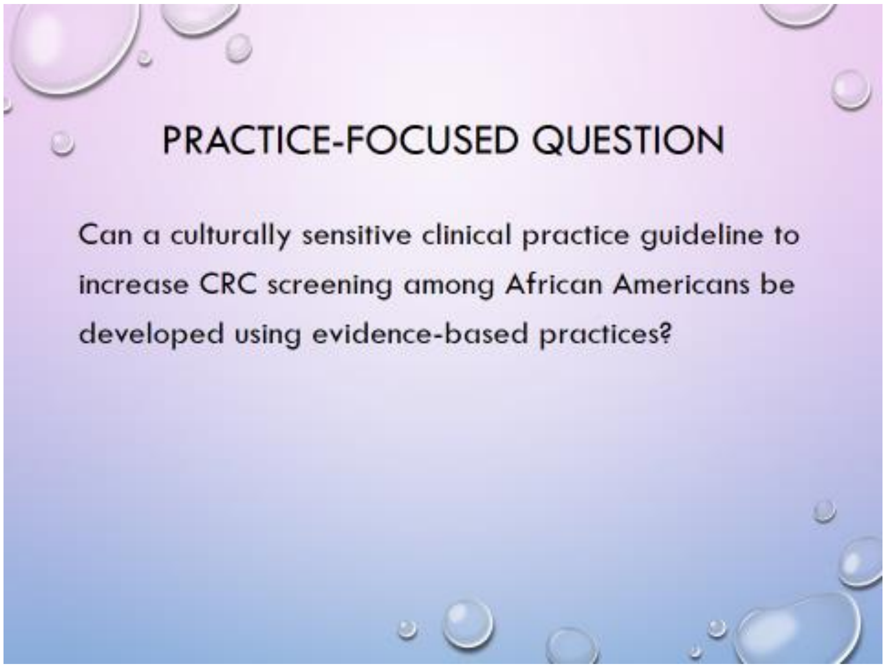
PROBLEM

- Colorectal cancer (CRC) afflicts men and women and is the third leading cause of cancer-related deaths in the United States.
- African Americans face disproportionately higher rates of CRC morbidities and mortalities.
- The clinic reports very low rates of CRC screening among African Americans.
- There is no culturally-sensitive clinical practice guideline to help nurse practitioners to promote the use of CRC screening services.



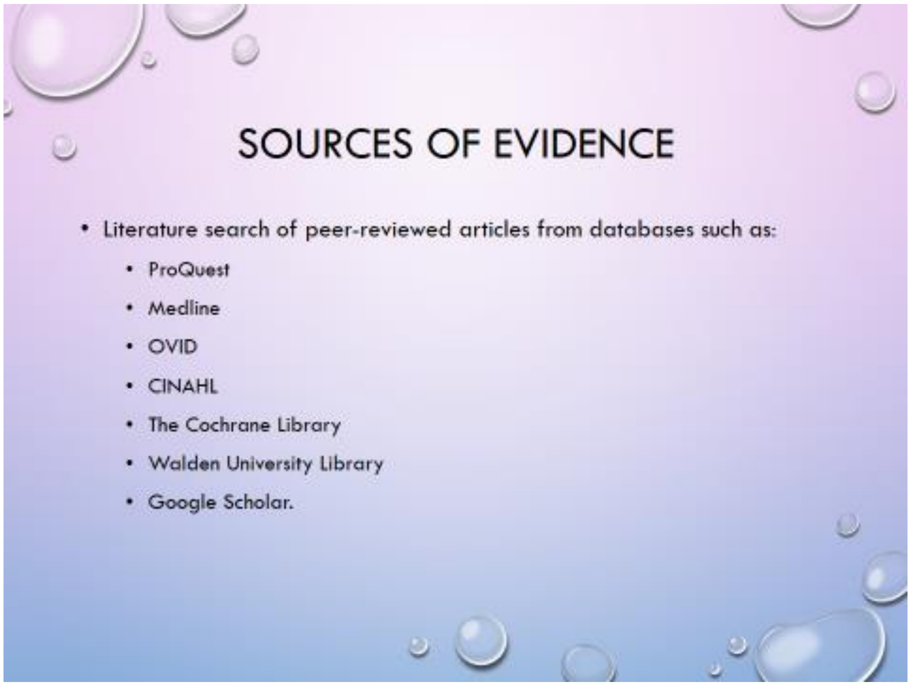
PURPOSE

To develop a culturally sensitive clinical practice guideline to increase CRC awareness and screening among African Americans.



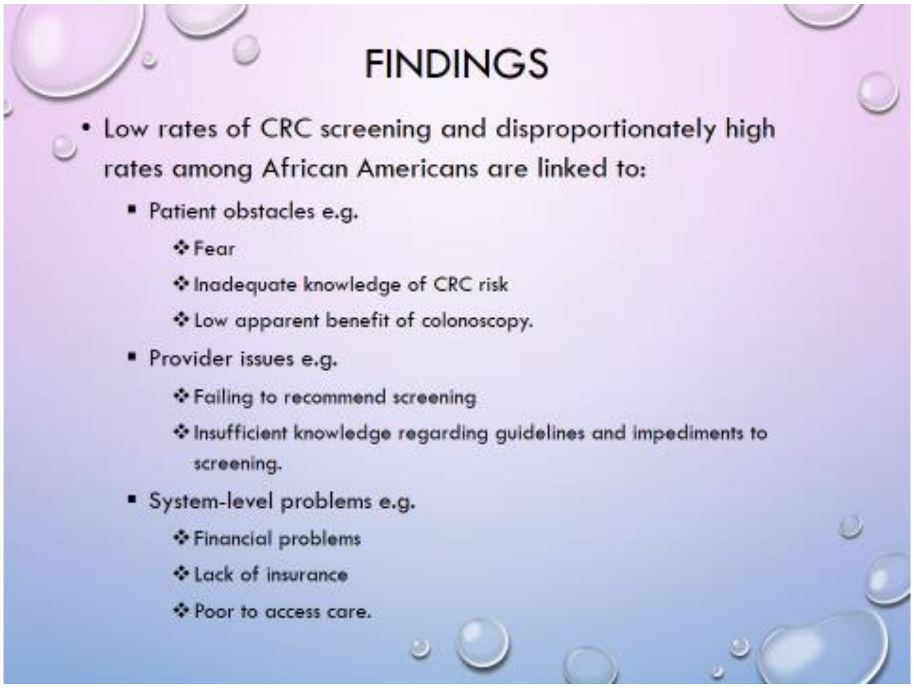
PRACTICE-FOCUSED QUESTION

Can a culturally sensitive clinical practice guideline to increase CRC screening among African Americans be developed using evidence-based practices?



SOURCES OF EVIDENCE

- Literature search of peer-reviewed articles from databases such as:
  - ProQuest
  - Medline
  - OVID
  - CINAHL
  - The Cochrane Library
  - Walden University Library
  - Google Scholar.

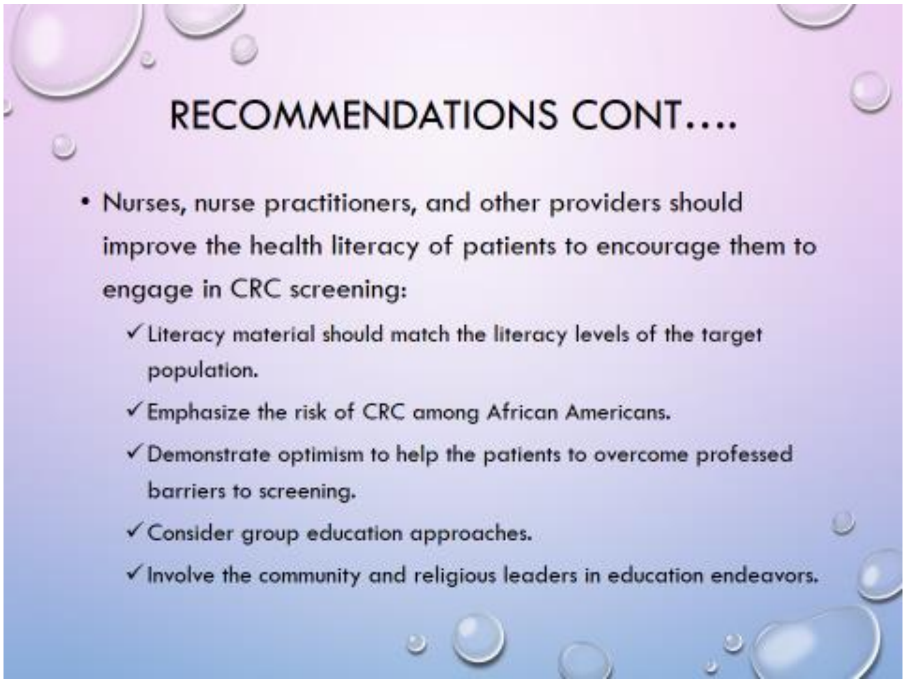


FINDINGS

- Low rates of CRC screening and disproportionately high rates among African Americans are linked to:
  - Patient obstacles e.g.
    - ❖ Fear
    - ❖ Inadequate knowledge of CRC risk
    - ❖ Low apparent benefit of colonoscopy.
  - Provider issues e.g.
    - ❖ Failing to recommend screening
    - ❖ Insufficient knowledge regarding guidelines and impediments to screening.
  - System-level problems e.g.
    - ❖ Financial problems
    - ❖ Lack of insurance
    - ❖ Poor to access care.

RECOMMENDATIONS

- Develop system- and policy level interventions that target vulnerable populations to reduce the underuse of CRC screening services.
- Conduct research about available community resources or organizations that offer subsidized CRC screening services and inform patients accordingly.
- Nurses, nurse practitioners, and other providers should remind and recommend CRC screening to eligible patients.
- Nurses, nurse practitioners, and other providers should post reminders about CRC screening to patients and use Electronic Health Record Systems as cues to remember.



RECOMMENDATIONS CONT….

- Nurses, nurse practitioners, and other providers should improve the health literacy of patients to encourage them to engage in CRC screening:
  - ✓ Literacy material should match the literacy levels of the target population.
  - ✓ Emphasize the risk of CRC among African Americans.
  - ✓ Demonstrate optimism to help the patients to overcome professed barriers to screening.
  - ✓ Consider group education approaches.
  - ✓ Involve the community and religious leaders in education endeavors.

QUESTIONS OR CONTRIBUTIONS

Thank You