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Factors That Influence Seeking Prostate Cancer Preventive Care in African Immigrants

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Walden University
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Abstract

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MPH, Walden University, 2016

BS, Texas Christian University, 2009

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

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Abstract

Prostate cancer is a major public health problem, being the second leading cause of cancer deaths in U.S. men, but mortality can be prevented with the use of early detection strategies. African American men are more than twice as likely to die of prostate cancer as compared to Hispanic and White men. African immigrant men as compared to African American men born in the United States have higher mortality rates of prostate cancer due to not seeking preventive care. However, little is known about the factors that prevent African immigrant men living in the United States from seeking prostate cancer care. The purpose of this qualitative study was to explore and understand the factors that prevent West African immigrant men in Dallas Fort Worth (DFW) of Texas from seeking medical care to help reduce prostate cancer mortality. Three research questions were developed to aid in understanding the factors that deter immigrant men from seeking prostate cancer care. The conceptual framework was based on the health belief model. The qualitative case study approach used semi structured, open-ended interviews with 15 immigrant men from West African countries aged 45 to 75. Data collected from these interviews were transcribed and analyzed thematically. Key findings from this study were that the participants had limited or no prior knowledge about prostate cancer, including its symptoms and treatment modalities; cultural beliefs and individual perceptions impacted the seeking of prostate cancer preventive care; and lack of health insurance and healthcare access presented barriers to seeking prostate cancer preventive care. This study contributes to positive social change by expanding cultural competency training of healthcare professionals and targeting immigrant communities with culturally appropriate health education.

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Dedication

I give thanks and praises to God for bringing me thus far in life. I dedicate this project to my deceased parents (Francis and Millicent Seilenga), who were educationists, for teaching me the importance and value of education. A special dedication to my husband, Benedict M. Miller, for his support and ongoing words of encouragement during this process.

A special thank you to my daughters, Amy and Nancy, for their words of encouragement. Most importantly, Nancy, who willingly helped me over the years to improve on my computer skills.

I dedicate this work to my entire family who in various ways supported me through this process. I am thankful.

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All of my acknowledgements go to my dissertation chairman and committee members; Dr. Lee Caplan, your prompt feedback, detail-oriented and great work attitude went a long way in facilitating my success with this project. Dr. Caplan, I would like you to know that you are the main driving force behind my completion of this project. Thank you to my committee member, Dr. Frederick Schulze; every comment and piece of feedback was a learning opportunity for me. I would also like to acknowledge Dr. R Hijazi, my URR; your scholarly advice was very remarkable. The time invested in thoroughly reviewing this work to ensure that it not only meets the university standards but also an exemplary quality work helped in making the process less stressful. Thank you, Dr. Hijazi.

A special thank you to my brother Raymond Seilenga; you encouraged me to realize my dreams and always reminded me that “I can do it.” To my in-law Adesina During, who always checked in with me to see how the dissertation process was coming along and gave his words of encouragement. I cannot forget my brother, Dr. Abdul Deffie (Deceased) and cousin, Momodu Kawa (Deceased). When you were still here with us, you encouraged me to pursue my doctorate and reminded me that I owe this to my late parents. You may be gone, but I know you are smiling at me.

My acknowledgements to all the churches, social organizations, and community leaders from various West African countries for providing me with letters of cooperation and encouraging members to voluntarily participate in this study. I acknowledge the participants of this study for their interest and willingness in providing information during the interviews.

Thank you to all the faculty members at Walden University. I would never have come to this point without all of your support.

Table of Contents

List of Tables

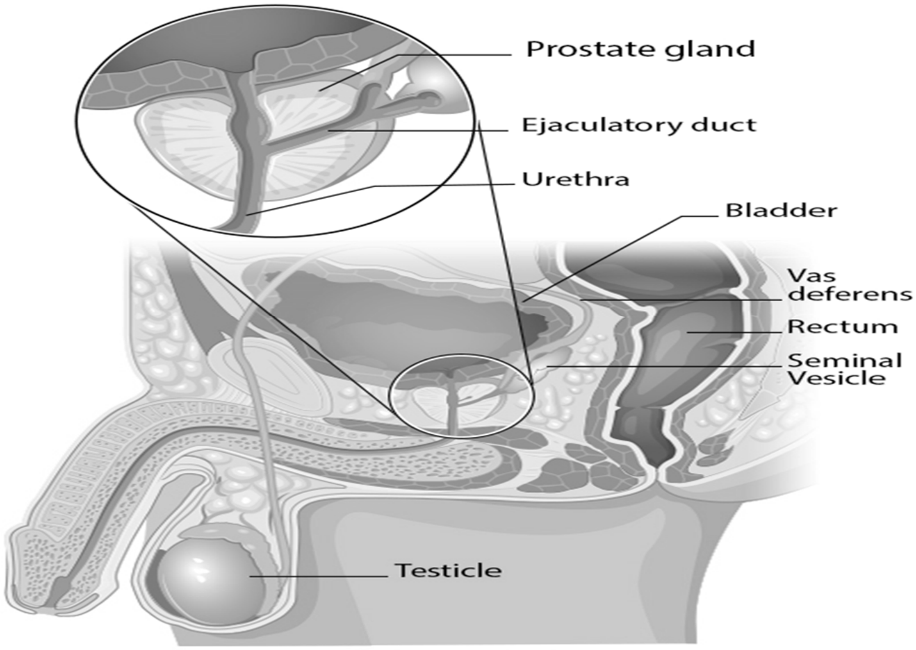
List of Figures

Chapter 1: Introduction to the Study

Most men die with prostate cancer rather than from it, yet physicians are unable to stratify patients accurately into those who will have progressive cancer and those who will not. Prostate cancer is a disease caused by an overactive growth of cells in the prostate gland in men (Centers for Disease Control and Prevention [CDC], 2021a). The prostate gland surrounds the urethra below the bladder and is located in front of the rectum. It is about the size of a walnut. Figure 1 shows the location and size of the prostate gland.

Figure 1

Prostate Gland



Note. Reprinted from *Basic Information About Prostate Cancer*, by CDC, 2021a (https://www.cdc.gov/cancer/prostate/basic_info/what-is-prostate-cancer.htm). In the public domain.

Prostate cancer accounts for 15% of all cancer diagnoses in men globally (Roy & Morgan, 2019). Its risks factors include age, race/ethnicity, geography, family history, and genetics. Other factors include diet, obesity, smoking, exposure to chemicals, inflammation of the prostate, sexually transmitted diseases, and vasectomy. Prostate cancer disproportionately affects men from sub-Saharan Africa (Cobran et al., 2018). The prevalent of prostate cancer increases with age and has a median age of diagnoses of approximately 60 years. The mortality rate of prostate cancer in African American men is the highest in the world, with 56% of African American men likely to be diagnosed of the disease (Ogunsanya et al., 2017). A contributing factor to the disparities in morbidity and mortality is that African American men are less likely to seek annual medical care or participate in screening for prostate cancer.

Background

Prostate cancer remains the second most common cancer in men and the fifth-highest cause of cancer mortality in the United States. The American Cancer Society (ACS; 2016) estimated that 180,890 new cases would be diagnosed, and 26,120 deaths due to prostate cancer would occur in 2016. Ng et al. (2013) noted that the burden of prostate cancer is high among men of African descent, and the risk increases with age and family history. Men of African descent also have the highest incidence and mortality rates as compared to other racial or ethnic groups.

Previous studies have identified various factors contributing to the higher number of cases of prostate cancer among this target population. Benjamin et al. (2016) examined the incidence and mortality rates of prostate cancer in men from 50 of the largest cities in the United States. Results indicated that 26 of the 50 U.S. cities in the study saw more African American men diagnosed with prostate cancer as compared to their White counterparts. Furthermore, Medhanie et al. (2017) determined that prostate cancer incidence of African-born Blacks varied by region. Medhanie et al. (2017) suggested that differences in environmental, cultural, social, and genetic factors play a role in the incidence of prostate cancer among West African immigrant men. Kaninjing et al. (2018) specifically examined the incidence of prostate cancer among Cameroonian men and determined that a significant number are diagnosed with late-stage prostate cancer due to their attitudes, cultural beliefs, non-compliance with screening recommendations, economic limitations, and lack of awareness. The authors determined that to successfully address the identified barriers, a specific health education program geared toward filling the knowledge gaps about the disease, dismissing misconceptions, and focusing on reducing barriers to use of health services should be implemented as an intervention. Findings from these studies could help explain the risk factors of the disease and identify and implement targeted interventions.

With regard to recent trends in preventive prostate cancer practices among Black men of African descent, research shows that very little emphasis is placed on screening. Consedine et al. (2015) examined prostate cancer screening disparities between Blacks and Whites in the United States and noted that very little is known about the African-descent populations, including Black Caribbean groups, despite their elevated risk for prostate cancer, distinct cultural backgrounds, and increase in the number of immigrants to the United States. Within the body of research on this topic, Shelton et al. (2015) and

Lepore et al. (2016) examined screening practices among African American men in the United States and identified reasons, such as anxiety, lack of formal education, lack of knowledge about prostate cancer, no intention to get screened, and no physician recommendation, for poor prostate cancer screening practices among them. Agbemenu (2016) examined the impact of acculturation on health behaviors of African immigrants living in the United States and found that acculturation can have a positive or negative effect on the health practices of African immigrants. Factors that affected these behaviors included stigma, religion, lack of perceived norm in the country of origin, competing for cultural practices, lack of information, language barriers, and cost of healthcare. Numerous cultural factors impact African immigrant men's decisions to avoid preventive measures with regard to prostate cancer.

When these men do seek care, privacy is of the utmost importance with the sensitive issue of men's health. To that end, technology can be helpful as shown by Le et al.'s (2016) study outlining the effects of cell phone technology on preventive measures against diseases such as prostate cancer and treatment after diagnosis. Study participants used text messaging as a way of communicating with healthcare providers while undergoing prostate cancer screening. This study demonstrated the impact of modern technology to promote interventions in prostate cancer prevention.

Although several studies have been conducted on prostate cancer incidence rates among African American men, only a few of them have been specific to African immigrants. Additionally, there is a dearth of information on the factors that influence the seeking of prostate cancer preventive care by African immigrants. This problem needs to be addressed due to the migration of African immigrants to the United States.

Problem Statement

Prostate cancer is the second leading cause of cancer death among men in the United States (CDC, 2021b). The National Cancer Institute (NCI; 2021) report stated that between 2011 and 2015, the incidence rate of prostate cancer was 112.6 per 100,000 men per year, and the mortality rate was 19.5 per 100,000 men per year. According to the CDC (2021a), prostate cancer affects Blacks disproportionately as compared to Whites, Hispanics, and Asians within the same age group. Tsodikov et al. (2017) examined the incidence of prostate cancer among African American men in comparison to the general population of men in the same age group, using three natural history models, that is, three independently developed models of prostate cancer natural history in Black men and the general population using an updated reconstruction of prostate-specific antigen (PSA) screening, based on the National Health Interview Survey of 2005 and prostate cancer incidence data from the Surveillance, Epidemiology, and End Results program from 1975 through 2000. Study results indicated that prostate cancer is more frequently diagnosed in Black men, but the reasons are unknown. Additionally, 30% to 43% of Black men will develop prostate cancer by the age of 85 years, which is 28% to 56% higher than the general male population (NCI, 2021). Tsodikov et al.'s (2017) study reiterated the need for prostate cancer screening earlier and more frequently in African American men as compared to other races.

According to data from the 2015 American Community Survey, the number of Black African immigrants (a majority of them from sub-Saharan Africa) in the United States increased from 1.4 million in 2006 to 2.1 million in 2015 (U.S. Census Bureau, n.d.). The Immigration Act of 1990 made possible the migration of immigrants in large numbers to the United States due to resettlement needs for refugees from African countries because of civil unrest (e.g., in South Sudan), previous underrepresentation of African countries, as well as poor economic conditions in Africa. Medhanie et al. (2017) indicated that there are major differences between sub-Saharan African-born Blacks and those born in the United States as related to culture, beliefs, socioeconomic status, dietary patterns, and genetics that make African immigrants susceptible to cancer and other diseases. Despite these differences, cancer occurrence for Blacks in the United States is typically presented collectively without considering country or region of birth. Medhanie et al. suggested that this practice fails to identify important differences that may likely inform cancer prevention and control policies and programs for African-born Black immigrants. The study by Medhanie et al. indicated that there is a high incidence of prostate cancer in Western African-born Blacks and that infectious disease is the cause of some of the most commonly diagnosed cancers in Africa.

Akpuaka et al. (2013) noted that several studies have been conducted on African Americans in the United States regarding prostate cancer but that limited studies have focused on prostate cancer among Nigerian male immigrants residing in the United States. Most prostate cancer studies on Nigerian men have been conducted outside the United States. The study by Akpuaka et al. was specific to Nigerian male immigrants, and the results suggested a need to explore their attitudes towards prostate cancer and screening that may help identify the effect of acculturation. The study further suggested the need to study the incidence of prostate cancer in this population. Additionally, the researchers supported the need to develop prostate cancer education programs with the Nigerian communities as well as the need for a reliable and valid survey instrument to be used in collecting data on Nigerian male immigrants who are at high risk for prostate cancer and that these considerations may apply to other African immigrants in the United States.

This study was unique in that I dealt specifically with West African immigrant men and provided information on how this population could be educated regarding the severity of prostate cancer and encouraged to discuss their options with the medical practitioners about preventive measures and treatments. Although there are several benefits of preventive care and early intervention measures, men generally tend to only seek medical care when they are seriously sick and their daily activities are impacted (Anderson & Marshall-Lucette, 2016; Consedine et al., 2015; Hunter et al., 2015; Ogunsanya et al., 2017).

Thus, despite the work on prostate cancer as related to African American men in the United States, little has been done on African immigrant men from West African countries. This study will help fill the gap in understanding the factors that deter seeking prostate cancer preventive care, specifically among African immigrants from West Africa, and could also provide valuable insights into decreasing disparities in the prostate cancer mortality rate in this population.

Purpose of the Study

The purpose of this qualitative study was to explore and understand the factors that prevent West African immigrant men from seeking medical care that would help decrease prostate cancer mortality rates. The lack of understanding about the increased burden of prostate cancer in African American men remains one of the most important unanswered health disparities in the United States and its metropolitan cities. Given the increase of prostate cancer disparities as a public health problem in African American men, the understanding of the factors that prevent African immigrant men in the Dallas-Fort Worth, Texas (DFW) metroplex from seeking prostate cancer preventive care might aid in designing intervention strategies that could lower their risk for prostate cancer after they have migrated to the United States.

Research Questions

Research Question (RQ)1: What are the factors that prevent West African immigrant men from seeking prostate cancer preventive services in DFW, Texas?

RQ2: Do socioeconomic disparities impact access to prostate cancer preventive care among West African immigrant men in DFW, Texas?

RQ3: How does the level of knowledge about prostate cancer impact seeking preventive services among West African immigrant men in DFW, Texas?

Theoretical Framework

The health belief model (HBM) was used as the theoretical base for this study. The HBM explains reasons for people not participating in preventive health programs (Creswell & Creswell, 2014; Hochbaum, 1958; Rosenstock, 1974). Creswell and

Creswell (2014) also suggested that the HBM includes important concepts that help determine the likelihood for people to take action to prevent or to control illnesses. Six HBM constructs explain people's behavior about their health. These include perceived susceptibility, the belief in the chances of experiencing a risk; perceived severity, belief about the seriousness of a condition and its consequences; perceived benefits, the value of an action to reduce risk or seriousness of the impact; perceived barriers, belief about the material and psychological costs of the action; and cues to action, strategies that trigger readiness and confidence in the ability to act and self-efficacy. The decision to use the HBM as a theoretical framework for the study was based on previous research by Mincey et al. (2017) and Saleh et al. (2015) that demonstrated the need to educate young Black men about their health, including their prostate and prostate cancer, to decrease health disparities among this population. These previous studies further emphasized the necessity of developing and implementing educational programs that aid in identifying and prioritizing the needs of Black men in screening for prostate cancer (Mincey et al., 2017; Saleh et al., 2015).

Nature of the Study

I used the case study approach due to its focus on understanding a person or situation in great depth. The case study approach explains, describes, and explores events or phenomena in the everyday context as they occur (Creswell & Creswell, 2014). With a case study, the researcher gains a thorough understanding of a study, population, or individual. The qualitative case study approach allows the researcher to carefully look at the roles that demographics, cultural beliefs, and cognitive and emotional factors play.

Further, the case study approach helps in understanding and explaining unexpected links and pathways that could result in making new policy initiatives and improvement of service delivery. Patton (2015) asserted that the case study approach assists in identifying information that answers the “what,” “why,” and” how” questions in research. If there is a gap in the literature, the case study approach can offer insights to identify what gaps exist or to determine why one implementation strategy might be better than another. The case study approach further aligned with this study because of its distinctiveness in observing, explaining, and documenting different aspects of a situation (see Ravitch & Carl, 2016).

Possible Types and Sources of Data

I used semi-structured face-to-face interviews, consisting of open-ended questions to collect data on the attitudes of African immigrant men towards seeking prostate cancer preventive care. Observational notebooks/journals were used to record observed experiences, physical gestures, and statements made by participants during formal and informal conversations on barriers associated with prostate cancer preventive care. I conducted telephone interviews to collect data when face-to-face interviews were not possible.

Rubin and Rubin (2012) suggested that semi-structured interviews are useful in qualitative research for understanding influences on peoples’ health, perceptions, and behaviors. Open-ended questions during the interview sessions allowed me to probe into the subject matter and examine new issues that emerged from the study participants’ responses. The participants in the current study articulated their opinions, feelings, and views about prostate cancer and their personal experiences in seeking care. Previously, Ng (2013) conducted interviews as part of data collection to determine factors that influence prostate cancer healthcare practices in Barbados, West Indies and found that privacy, taking time off work, and mistrust of the medical practitioners were barriers to healthcare-seeking by these men. Structural barriers identified included limited access to care and poor dissemination of health education materials. Similarly, I analyzed the data collected to identify barriers and develop themes to help understand the factors that prevent African immigrant men from seeking prostate cancer preventive care.

Sample of Interview Questions

1. How old are you, and what country is your country of origin?
2. How many times a year do you visit your primary care physician?
3. Do you have health insurance?
4. Do you receive government assistance such as Medicare or Medicaid?
5. What do you know about prostate cancer, its symptoms, and treatment?

Definition of Terms

Acculturation: Adoption of beliefs and behaviors of another cultural group (Agbemenu, 2016).

African American: People who identify themselves as being Black or African American. These men may have ancestors who originate from Africa and the Caribbean countries (Hooper et al., 2017).

African immigrant men: African men who migrated to the United States from African countries (Agbemenu, 2016).

Disparities: Difference in health status between populations based on social status, including education, income, and access to preventive healthcare (Benjamin et al., 2016).

Incidence of prostate cancer: The occurrence of new cases of prostate cancer among a population (CDC, 2021b).

Informed consent: An agreement signed voluntarily by a study participant to participate in a research study. The study participant gains a clear understanding of the research process and all the risks involved.

Prostate gland: A walnut-sized gland that is only found in men. It is part of the reproductive system in men and carries sperm. This gland is located in front of the rectum, below the bladder (CDC, 2021a).

Prostate-specific antigen (PSA): Antigenic enzymes released by cells inside the prostate gland and found in abnormally high concentrations in the blood of men with prostate cancer (ACS, 2021).

Screening: A method of identifying people or populations who have a particular disease or medical condition before they exhibit symptom/s of the disease.

White men: Caucasian people of European origin or descent.

Assumptions

I assumed that all participants were fluent in speaking, reading, and writing English, and that they were honest with their answers. I also assumed that the principles of saturation were met to determine the sample size of the study. Saturation in qualitative studies implies that study participants are recruited until the sample is large enough so that having more participants does not lead to the uncovering of new information related to the research of the development of new themes related to the research (Patton, 2015).

Scope and Delimitations

The study was limited to African immigrant men between the ages of 45 and 75 years, who were born in Africa, immigrated to the United States, and reside in DFW. The study participants had no history of prostate cancer and had never participated in prostate cancer screening. The information gained from this study can help determine the factors that deter African immigrant men from seeking preventive prostate cancer care.

Limitations

The purposeful sampling method was used in recruiting the study participants. The main purpose of purposeful sampling is to create a sample that can be a reasonable representation of the population being studied. Purposeful sample can be achieved by applying what is already known about the population to select a sample of basic elements that are representative of part of the population (Robinson, 2014). This was a limitation because African immigrants from other countries in West Africa were not represented. Therefore, caution should be taken in generalizing the study findings to all African immigrant men. Also, the study findings may not be an ample reflection of the opinions of all African immigrants who reside in DFW, given the inclusion and exclusion criteria of the study. Finally, the target number of willing study participants was difficult to recruit due to mistrust among African immigrants.

Biases, such as question bias, could influence the study outcome. The way by which a question is phrased can lead to biased responses from study participants. This can be minimized using an interview guide. According to Creswell and Creswell (2014), the researcher is the main instrument in data collection, and to maintain the validity of the data collected, an interview guide should be prepared to help the researcher phrase the questions correctly or rephrase a question when in doubt. Despite the identified limitations, the study could provide information on how African immigrant men could be educated on the severity of prostate cancer and be encouraged to discuss their screening options with their medical practitioners.

Significance

Although there are proven measures that could aid in prostate cancer care and early detection in developed countries like the United States, prostate cancer remains a public health threat in underdeveloped countries (Bray et al., 2018). Additionally, there is a scarcity of research examining and describing the factors that prevent African immigrant men from participating in prostate cancer preventive care (Akpuaka et al., 2013; Lepore et al., 2017; Ng et al., 2013; Pedersen et al., 2015). Lepore et al. (2017) suggested that African immigrant men generally do not feel comfortable discussing prostate cancer care with their doctors and that they have the tendency to delay seeking medical care until the issue affects their daily functioning. There is a dearth of research on the perspectives and factors that deter African immigrant men from participating in prostate cancer preventive care, on their cultural beliefs on participating in preventive medicine, and on how they could be educated on overcoming barriers to seeking preventive care for prostate cancer.

This study aided in understanding the factors that prevent African immigrant men from seeking prostate cancer preventive care. This study can result in positive social change, as its results can increase awareness of the disease in the target population. African immigrant men could become more knowledgeable about the severity of the disease, which could help to overcome the barriers related to seeking prostate cancer preventive care. Although there are proven measures for decreasing the mortality rates of prostate cancer among the at-risk population, prostate cancer mortality continues to increase among the African immigrant population living in the United States.

Summary

Prostate cancer is the second leading cause of cancer death among men in the United States. Prostate cancer affects Blacks disproportionately as compared to Whites, Hispanics, and Asians (CDC, 2021a). Although several research studies have been conducted on the nonparticipation of African Americans born in the United States and other minorities on screening for prostate cancer, there is a dearth of literature related to factors specifically associated with African immigrant men. With this study, I attempted to fill the gap in literature dealing with the factors that prevent West African immigrant men from seeking prostate cancer screening. Identifying these factors could make it possible to develop interventions designed to increase the participation of these men in prostate cancer screening, which could ultimately lead to decreased prostate cancer mortality.

In the current study, I sought to discover if African immigrant men would understand the severity of prostate cancer to help in overcoming some of their barriers related to seeking prostate cancer care. The potential social change implications of this study could, therefore, be that it would raise awareness among African immigrant men about the severity of prostate cancer and the value and availability of screening to help diagnose the disease at an early stage. In Chapter 2, I present a literature review of barriers to prostate cancer screening in African immigrants in the United States and the importance of raising their awareness of the severity of the disease and the availability of screening that might decrease their prostate cancer mortality.

Chapter 2: Literature Review

Introduction

Prostate cancer is a serious public health problem and a cause of morbidity and mortality among men globally. There are approximately 1.4 million new cases diagnosed every year, accounting for 293,000 deaths in men worldwide (Chen et al., 2017). The ACS (2016) estimated that, in the United States, 161,360 new cases of prostate cancer would be diagnosed and that 26,730 men would die of this disease in 2017. The vast majority (approximately 95%) of prostate cancer cases diagnosed are clinically localized to the prostate without evidence of spread to other parts of the body (Buyyounouski et al., 2017). Globally, Black men of African descent are more likely to be diagnosed with prostate cancer and have higher mortality rates than other racial/ethnic groups. The incidence of prostate cancer is higher in African Americans compared to other ethnic groups, which could indicate a genetic aspect to the disease (Bowen, 2019; Chen et al., 2017). Genetics, more than socioeconomic factors, have been identified as an underlying factor for the high incidence of prostate cancer among Black men from different countries, including the United States, Jamaica, West Africa, and other sub-Saharan African countries (Chen et al., 2017). Socioeconomic and cultural reasons, including access to screening and perceptions about screening methods, mistrust of the healthcare system, and lack of knowledge about the disease itself, have all been identified as contributing factors to this disparity (James et al., 2017). Risk factors for prostate cancer include advanced age, Black race, a family history of the disease, and certain genetics (CDC, 2021a).

In a controversial move, in 2012, the ACS and the U.S. Preventive Services Task Force (USPSTF) recommended against the use of population-based prostate-specific antigen (PSA) screening for prostate cancer, although they did continue to recommend early screening for men at high risk for the disease. Blair et al. (2018) suggested that the recommendation against routine prostate cancer screening may have resulted in an increase in prostate cancer mortality rates and its adverse outcomes since 2012. The same study suggested that abandoning PSA screening would lead to a 13% to 20% increase in prostate cancer mortality and that screening for prostate cancer using PSA and digital rectal examination (DRE) may reduce prostate cancer mortality by 50% over the next 20 years (Blair et al., 2018). Furthermore, Blair et al. noted that there is an urgent need to provide uniform guidelines that urologists and medical practitioners could adhere to when discussing prostate cancer screening with their patients. Grossman et al. (2018) explained that due to the ongoing debate about the benefits of prostate cancer screening, the USPSTF recently released a statement changing its stance on PSA screening. For men aged 55 to 69, the task force recommends discussion with a healthcare provider to weigh the benefits and possible harmful effects of the screening, and for men 70 years and older, the task force recommends no screening at all.

Despite the innovative screening methods for prostate cancer, it has been documented that African American men are reluctant to participate in this process for various reasons (Buyyounouski et al., 2017). The purpose of this study was to explore and understand the factors that influence West African immigrant men to not seek prostate cancer preventive care. Within this study, African immigrant men were educated about the severity of the disease, which can help to overcome the barriers related to seeking prostate cancer preventive care.

Literature Search Strategy

The search engines and databases that were used for the literature review included but were not limited to ProQuest, Medline, Academic Premier, Google, PubMed, PsycINFO, and Google Scholar. Additionally, the *Journal of Immigration Minority Health* and books recommended by Walden University were searched. I also retrieved information relevant to the topic from websites that included the National Cancer Institute, National Institute of Health, American Cancer Association, American Cancer Research, Tarrant County Department of State Health Services, and Texas Cancer Research Institute and Prevention. The following keywords were used: *prostate cancer screening*, *immigrant men*, *immigrant African men, Black men OR African men*, *prostate cancer screening guidelines*, *barriers to prostate cancer screening*, *health belief model*, *perceptions*, *risk factors*, *attitudes*, *incidence*, and *behaviors.* The identified keywords were used separately and in various combinations to find as much peer-reviewed literature as possible that was relevant to the study.

Theoretical Foundation

The focus of the study was to explore and understand the factors that prevent West African immigrant men in the United States from seeking medical care to help decrease prostate cancer mortality rates. The HBM was used as the theoretical base for this study. Researchers have begun to use theoretical-based research approaches in an attempt to determine the factors that contribute to the disproportionate burden of prostate cancer. Di Pietro et al. (2016) stated that by using the application of theory, researchers expect to reveal both internal and external factors of an individual that could contribute to health disparities in prostate cancer detection and control. Thus far, there has not been a published, comprehensive review of the literature assessing the impact of theoretical-based approaches in prostate cancer, particularly among African American men.

The HBM explains reasons for people not participating in preventive health programs (Hochbaum, 1958; Rosenstock, 1974). The HBM is commonly used to measure health beliefs and behaviors concerning cancer screening (Zare et al., 2016). Additionally, the behavior is explained in the context of HBM, resulting from a combination of attitudes associated with the main HBM components, the perceived susceptibility, severity, benefits, and barriers. The HBM is a psychological model that categorizes different patterns of health behavior. The decision to use the HBM as a theoretical framework for the study was based on previous research by Mincey et al. (2017) and Saleh et al. (2015), which demonstrated the need to educate young Black men about their health to decrease health disparities among this population. These two studies, along with that of Anderson and Marshall-Lucette (2016), further suggested the need to develop and implement educational programs that aid in identifying and prioritizing the needs of Black men with regard to screening for prostate cancer.

In applying the HBM to determine the effect of educational programs for prostate cancer prevention on knowledge and PSA testing in men over 50 years within a specific community, Zare et al. (2016) determined that men are more vulnerable to diseases and have a higher mortality rate as compared to women because they are less likely to take care of their health and are more likely to make unhealthy lifestyles choices. When compared to women, men tend to ignore the warning signs of diseases and get late referrals to seek medical attention. The study findings reflected the fact that health education programs designed based on the HBM could positively impact the prostate cancer-preventive behaviors of study participants by improving their knowledge level and creating positive effects on susceptibility and severity. Zare et al. cited the importance of HBM in the adoption of the prostate cancer screening behaviors by the participants.

Glanz et al. (2008) noted that the HBM was built on the perception that people are likely to act in ways that they believe will decrease their health risks if they consider themselves susceptible to a health condition, believe they are at risk for the health condition, understand that taking action might be beneficial in reducing susceptibility to or severity of the health condition, and believe that the benefits of their action outweigh barriers. The following definitions were used by Glanz et al.(2008) in their HBM study:

Cues to action: Strategies adapted to activate readiness.

Perceived barriers: One's opinion of the tangible and psychological cost of action.

Perceived benefits: One's belief in the benefits of engaging in healthy behaviors to reduce the threat or risk of the condition.

Perceived severity: One's feelings relating to the seriousness of acquiring a condition or disease.

Perceived susceptibility: Refers to one's beliefs about the probability of experiencing disease or condition.

Self-efficacy: The ability to take action or control of one's self.

The research questions that guided the current study were as follows:

RQ1: What are the factors that prevent West African immigrant men from seeking prostate cancer preventive services in DFW, Texas?

RQ2: Do socioeconomic disparities impact access to prostate cancer preventive care among West African immigrant men in DFW, Texas?

RQ3: How does the level of knowledge about prostate cancer impact seeking preventive services among West African immigrant men in DFW, Texas?

The questions posed may be answered using the HBM. In considering the constructs of the HBM, it is believed that African immigrant men will participate in early detection methods to screen for prostate cancer and take control of their health if they consider themselves susceptible to the disease and believe the risk involved in taking action does not outweigh the benefits.

Mincey et al. (2017) applied the HBM as a guide in conducting a qualitative study to explore prostate cancer knowledge and risk in African American college men. According to the HBM, the likelihood of someone engaging in a certain behavior is based on perceived susceptibility, perceived severity, perceived barriers and benefits, and cues to action. Mincey et al. used the HBM's perceived susceptibility (one's belief that he or she is at risk of developing a certain health outcome) and perceived severity (one's belief in the severity of a health condition) to develop questions about the different beliefs that might impact prostate cancer knowledge among the study participants. The authors conducted focus group interviews with 35 Black male study participants at a historically

Black college and university. Data were analyzed using themes to discover that African American college males had very little knowledge and understanding of their prostate and its functions. They did not know their risk of developing prostate cancer, and while several of the students believed that the disease was serious, only a few believed they were susceptible to having it. Study findings suggested that more work needs to be done to educate young African American males not only about the function of their prostate and prostate cancer but also on their general health. Mincey et al. also suggested that to decrease health disparities, more needs to be done to increase the health knowledge of all African American men.

In another study, Gautam (2017) explored the knowledge and beliefs and the processes of information-seeking about cancer in the African American population based on the HBM. Gautam concluded that African Americans with a higher level of education were very likely to access cancer information online. Perceived benefits and cues to action were highly related to the common ways of seeking cancer information; therefore, African Americans' perceptions and beliefs about cancer may be increased through health education, mass media campaigns, and the wider availability of health information online.

People's attitudes and beliefs generally affect their health behaviors (Bilgili & Kitis (2019). In a cross-sectional study conducted in Turkey to determine the personal attitudes and beliefs of Turkish men as related to prostate cancer and prostate cancer screening using the HBM as a theoretical framework, Bilgili and Kitis determined that early detection through screening and timely treatment ensures the chances for increases to the 5-year survival rate and improved prognosis**.** Based on study participants' responses, the strongest predictors of attitude towards beliefs about prostate cancer screening were the seriousness, susceptibility, and benefit perceptions. Also, age, education level, family history, and motivation perceptions were found to be important predictors of men's prostate cancer screening behaviors.

Prostate Cancer in Developing and Developed Countries

Prostate cancer is the second most commonly diagnosed cancer among males globally, with the highest incidence and mortality rates in men of African descent (Bray et al., 2018; McGinley et al., 2016). In a global analysis of prostate cancer, the highest incidence rates (cases/100,000) are in the United States, with Blacks at 168.3, followed by White men in France at 132.1 and Australia at 111.1 (Torre et al., 2016). The highest mortality rates (deaths/100,000) are in Black men in Trinidad and Tobago, the United States, Cuba, and South Africa; Asia has the lowest incidence and mortality rates. Ilic et al. (2018) suggested that the use of PSA and other screening modalities for the disease may be responsible for the variation in incidence rates in developed countries. Genetics also account for the susceptibility and the disproportionately high rates in some populations of African descent (Bray et al., 2018). Prostate cancer remains the most frequently diagnosed cancer among men in the United States, where there were an estimated 161,360 new cases expected in 2017 (ACS, 2016). Kelly et al. (2018) suggested that prostate cancer incidence would increase by 1.03% each year through 2025, with the incidence increasing the most in men aged 45 to 54 years (2.29% per year) and 55 to 69 years (1.53% per year). Kelly et al. also suggested that the estimated annual incidence of prostate cancer will increase to 42% by 2025, with African American men aged less than 70 years suffering the largest increase. The overall incidence of prostate cancer among Black men is two times that of White men, with the difference increasing to almost five times greater among men younger than age 50 years. Due to the increase in prostate cancer incidence rates among the African American population, racial disparities for prostate cancer will continue to increase. Because of this concern, Kelly et al. suggested that the impact of the prior and current prostate cancer screening recommendations should continue to be examined.

In some African countries, such as Cameroon, lack of data about the actual impact of prostate cancer across the region could be leading to the continued rise in deaths from the disease. Kaninjing et al. (2018) conducted a study to examine prostate cancer screening perceptions, beliefs, and practices among men in Bamenda, Cameroon, and determined that due to inadequate national cancer surveillance registry in the country, little is known about the true burden of the disease on the population. However, limited public health data documented during that time maintained that prostate cancer is a leading cause of death for men in the population. When analyzing the data extracted from interviewing study participants, the authors identified themes such as lack of awareness, self-medication, attitudes toward the disease, fear, cultural beliefs, reliance on traditional medication, and socioeconomic issues as contributing factors to Cameroonian men being diagnosed with prostate cancer during the late stages. To that end, Kaninjing et al. recommended public health programs to educate the public on prostate cancer and quell some of the innate fear felt toward medicine in general, thus leading to increased screening and earlier diagnoses.

If early detection is indeed a tool for lowering incidence of late diagnoses and deaths from prostate cancer, then we must consider why countries with advanced medical abilities and access continue to report sizeable gaps in the occurrence and mortality rates of minorities. Chen et al. (2017) suggested that the decline in prostate cancer mortality rates in the United States and other developed countries might be partially due to screening procedures that can detect the disease early. Lack of health insurance and racial disparities account for the higher incidence of prostate cancer among African American men when compared to other racial/ethnic groups. Additionally, socioeconomic, educational, cultural, and genetic factors, as well as disparities in care delivery and access to treatment, contribute to prostate cancer disparities in the United States (Desai et al., 2018; McGinley et al., 2016). Researchers have also suggested that genetics may increase the risk of developing the disease. McGinley et al. (2016) examined prostate cancer in U.S. men of African origin and determined that they are at a 1.8 times higher risk of developing prostate cancer than the general male population, and they are often diagnosed at later stages and have higher mortality rates.

In Tarrant County, Texas, from 2007 to 2011, Blacks had the highest incidence and mortality rates for all types of cancer, 646.9 and 289.7 per 100,000 respectively (Desai et al., 2018). In 2015, an estimated 8,023 new cancer cases and 2,962 cancer deaths occurred in Tarrant County. Desai et al. determined that early prostate cancer screening and detection in patients is important when seeking treatment and in preventing the spread of the disease to other major parts of the body, thus increasing survival rates. Prostate cancer screening can be done using a digital rectal examination or by monitoring PSA levels.

The Rationale for Screening Practices

In the United States, the median age of death from prostate cancer is 80 years (Grossman et al., 2018). According to Grossman et al., most men diagnosed with prostate cancer never experience symptoms. Therefore, without participating in screening, these men would have gone undiagnosed. African American men have been burdened with an increased risk of prostate cancer, especially those with a family history of the disease.

Table 1 outlines guidelines for prostate cancer screening between 2010 and 2012. In 2010, the ACS only recommended an annual PSA screening for prostate cancer beginning at 50 years for men who are not at increased risk for the disease and 40 years for men at high risk for the disease. The USPTF did not make any recommendations for prostate cancer screening in 2012. In 2015, due to the availability of updated data supporting the need for early detection for prostate cancer and the debate over benefits of screening, the USPSTF adapted guidelines that would focus more on an individual approach and shared decision-making (de Carvalho et al., 2018; Kandasamy et al., 2017; Wagland et al., 2019). The USPSTF updated its 2015 recommendation for men between 55 and 69 years that each individual should be advised of the pros and cons of prostate cancer screening by their medical practitioner so that he can make an informed decision as to whether or not to obtain screening. The decision should be made in conjunction with

Table 1

Summary of PSA Screening Guidelines by Organization 2010–2014

Organization	Year published	Baseline testing (age)	Invitation to screening[*] (age)	High-risk group[**]	Screening interval	PSA threshold for biopsy (ng/mL)
American Cancer Society	2010	None	50 years while life expectancy ≥ 10 years	40 years while life expectancy ≥ 10 years	Annually if PSA > 2.5 ng/mL Every 2 years if PSA < 2.5 ng/mL	2.5 ng/mL in select patients
U.S. Preventive Services Task Force	2012	None	None	None	None	None
American Urological Association	2013	None	55–69 years	40–69 years	Every 2 years	None specified
European Association of Urology	2013	40–45 years	Any age while life expectancy ≥ 10 years	Any age while life expectancy ≥ 10 years	Every 2– 4 years if baseline PSA > 1 ng/mL Every 8 years if baseline PSA ≤ 1 ng/mL	None specified
American College of Physicians	2013	None	50–69 years	40–69 years	Annually if PSA ≥ 2.5 ng/mL	None specified
National Comprehensive Cancer Network	2014	45–49 years	50–70 years 70–75 years if life expectancy ≥ 10 years	Consider change in biopsy threshold	40–49 years: Every1–2 years if PSA > 1 ng/mL Repeat at age 50 if PSA ≤ 1 ng/mL 50–70 years: Every 1–2 years	3.0 ng/mL < 3.0 ng/mL with excess risk based on multiple factors (family history, race, PSA kinetics)
Melbourne Consensus Statement	2014	40–49 years	50–69 years 70+ years while life expectancy ≥ 10 years	Use to better risk stratify men	None specified	None specified

[*] For men who are well-informed on the risks and benefits of PSA screening.

[**] African American race and first-degree relatives diagnosed with PCA.

the patient’s family history, race/ethnicity, and preexisting medical condition. This approach would allow the individual to consider the benefits and harms of screening, which he could then consider in conjunction with his values and preferences when making his decision whether or not to get screened. The USPSTF evaluated several studies to determine the benefits and harms of PSA-based screening (Grossman et al., 2018). The committee also focused on assessing current decision analysis models to determine whether there is an overuse of PSA-based screening. Additionally, the committee also evaluated the pros and cons of PSA-based screening inpatient subpopulations that are at increased risk of prostate cancer, including older men, African American men, and those with a family history of prostate cancer**.** Grossman et al. stated that for some men there is little probability that prostate cancer screening can reduce the chances of dying from the disease while subjecting them to the risks of screening which may include false-positive results that may lead to additional unnecessary testing and prostate biopsy, as well as overdiagnosis and overtreatment which could result in complications such as incontinence and erectile dysfunction. Finally, the USPSTF recommended against PSA-based screening for prostate cancer in men 70 years and older.

There are controversies on whether screening for prostate cancer is beneficial. The USPSTF suggests that the pros of PSA screening do not outweigh the cons. Others suggest that PSA screening leads to overdiagnosis of prostate cancer (de Carvalho et al., 2018; Wagland et al., 2019). There remains a need for consensus regarding the question of whether screening improves disease-specific mortality as well as the question of whether the overall benefits of screening outweigh the possible harms and costs of over detection and over treatment. Ilic et al. (2018) suggested that screening for prostate cancer may result in a limited benefit in disease-specific mortality over 10 years. O’Sullivan (2017) examined the results of two large randomized controlled trials in Europe: The Prostate, Lung, Colorectal, and Ovarian Cancer Screening Trial (PLCO) and The European Randomized Study of Screening for Prostate Cancer (ERSPC). The ERSPC trial indicated a significant decrease in mortality rates in men screened with PSA as compared to those that did not receive PSA screening. The PLCO trial, on the other hand, showed no difference in mortality rates between the two groups. It was suggested that these discrepancies may have been as a result of the differences in screening intervals, PSA threshold to biopsy, higher prostate cancer incidence in the United States than in Europe before the trials began, and a varying degree of “contamination” in each of the control groups with many patients who were not randomized to PSA screening received.

In 2013, the American Urological Association (AUA) recommended PSA screening every 2 years for low-risk individuals ages 55 to 69 and for high-risk individuals between the ages 40 and 69 (de Carvalho et al., 2018)**.** Also in May 2015, the AUA was able to confirm its 2013 guidelines based on data collected on African American men. In 2013, the European Association of Urology (EAU) recommended PSA screening at 45 years and every 4 years thereafter if the baseline PSA is > 1 ng/mg and every 8 years thereafter if the baseline PSA is ≤ 1 ng/ml. However, in 2015, the EAU updated its recommendations, focusing on individual risk in decision-making.

The summary in Table 2 shows updated recommendations made by the USPSTF, AUS, and EAU between 2015 and 2017. The organizations agreed that PSA screening should be offered to a well-informed man, that the PSA test should serve as a baseline risk classification tool, and that further testing (repeat PSA) depended on the PSA level and a man's life expectancy. The decision to perform a biopsy should not be made based on a PSA test alone but should also take into consideration additional biomarkers, risk prediction tools and/or imaging (de Carvalho et al., 2018).

Table 2

Summary of PSA Screening Guidelines by Organization 2015–2017

Org. year	Determining who to screen	Starting age	Ending age	Interval	Factors for biopsy	Refer-ence
USPSTF 2017	SDM	55 years	69 years	Studies needed to explore: • optimal screening frequency • possible benefits of screening before 55 years for African American or men with family history of prostate cancer		(20)
AUA 2015	SDM while life expectancy > 10–15 years	55 years	> 70 years or life expectancy < 10–15 years	2 years or more	PSA, volume, age, inflammation	(22)
EAU 2016	SDM while life expectancy > 10 years	> 50 years > 45 years if African American or family history	> 70 years or life expectancy < 10–15 years	2 years if PSA > 1 ng/mL at 40 years 2 years if PSA > 2 ng/mL at 60 years 8 years for those not a risk	PSA, DRE, age, comorbidity, risk calculators	(21)

Note. SDM = shared decision-making; DRE = digital rectal examination.

The Malmo Preventive Project, a Swedish national data service, suggested PSA screening only in situations where there is a strong relationship between PSA at age 44 to 50 and future diagnosis of advanced prostate cancer is foreseen. Additionally, these guidelines should be considered for African American men who have a family history of prostate cancer and who are well-informed on the risks and benefits of PSA screening.

Barriers to Accessing Healthcare

Adekeye et al. (2018) examined the barriers to accessing healthcare among immigrants in the state of Georgia and noted that African-born immigrants were among the fastest growing immigrant group in the state of Georgia and that little research has been conducted on healthcare related to cancer in this population. Furthermore, when research studies have been conducted on African immigrants in the United States, these immigrants were lumped together as African Americans or Blacks without considering cultural differences that may have existed. The studies concluded that many African immigrants do not participate in preventive care because of lack of health insurance, unaffordable medical costs, high cost of drugs, and individual barriers such as linguistic and cultural (Adekeye et al., 2018; Adu-Boahene et al., 2017; Wafula & Snipes, 2014; Woodgate et al.,2017). These findings indicated that it is necessary to create social and institutional changes that do away with barriers to access health services to ensure healthcare for all.

Lack of Insurance and Knowledge

A health-needs assessment that was done on West African Immigrants in Rhode Island who were mainly from Nigeria, Ghana, and Liberia found that African immigrants in the United States may experience barriers to healthcare access due to lack of knowledge on how to locate resources in the US healthcare system and also lack of health education (Adu-Boahene et al., 2017). It is important to note that this needs assessment confirmed that there is limited information on the health status and demographics of Africa immigrants in the United States and that the immigrants are generally lumped together in the African American population. Shenoy et al. (2016), Ettridge et al. (2018), and Wafula and Snipes (2014) identified barriers to prostate cancer treatment as lack of knowledge about prostate cancer and its screening, lack of health insurance, low socioeconomic status, increased age, lack of acculturation, mistrust of healthcare professionals, fear of the side effects of prostate cancer treatment, and cultural beliefs.

Fear

Fear of the unknown also plays an important role in the low uptake of prostate cancer screening among African immigrants in the United States. In a study conducted on the factors influencing prostate cancer healthcare practices, it was noted that Black men associated prostate cancer with death and a fear of knowing something was wrong and consequently were not getting screened for the disease (Ng et al., 2013). Men, in general, avoid going to the doctor, as they dread knowing what may be wrong with them. In a study conducted in Lagos State, Nigeria, to explore the opinions of men on risks for prostate cancers screening, Ugochukwu et al. (2019) noted that men's views for screening for the disease were influenced by misperceptions, misinformation, fear and anxiety around screening procedures, and mortality.

Healthcare Disparities

Healthcare disparities among Black men compared to their White counterparts have been well documented (Chen et al., 2017). Despite advances in the medical field, life expectancy is lower for Black men than for White men, and this gap continues to increase. Gilbert et al. (2016), He and Mullins (2017), and Sereday et al. (2019) also confirmed that Black men have some of the highest incidence and mortality rates for cancers that could be detected through early screening resulting in interventions that may improve outcomes. Prostate cancer is a typical example of cancer disparities, whereas Black men have a mortality rate of 42.8 per 100,000, more than twice that of White men 18.7 per 100,000 (ACS, 2016).

Doctor-Patient Communication and Trust Factors

Mistrust among Black male patients can present a challenge to having a usual source of care. Stewart et al. (2019) identified trust as a barrier to Black men accessing medical care. The study results indicated that the interaction of Black men with their doctors is important to their healthcare experience and their use of healthcare services. A positive doctor-patient relationship is extremely beneficial for eliminating patient distrust of the physician. However, Black men generally feel disempowered and that their masculinity is challenged even without particular physical exams (Kinlock et al., 2017; Stewart et al., 2019). In the case of prostate cancer, Black men may feel embarrassed to discuss his condition with their doctor depriving them of much needed emotional support. Stewart et al. (2019) and Kinlock et al. (2017) maintained that Black male patients can be empowered to speak openly and honestly about their health and feel the utmost sense of ownership about maintaining good health when they have a positive relationship with their healthcare providers. Hunter et al. (2015) suggested that men would be more likely to participate in prostate cancer screening with the support in the decision-making by their doctor and that patient-doctor communication is an important factor in the willingness of men to participate in prostate cancer screening. Abuadas et al. (2016) and Kinlock et al. (2017) noted that most African American men mistrusted non-Black doctors and felt they were treated differently than those of other races. Kinlock et al. examined the association between medical mistrust and quality of life among Black and White men with prostate cancer. Study results indicated the association between high levels of medical mistrust among African American men with prostate cancer and low quality of life. Medical mistrust can serve as a barrier to quality health by creating non-compliance with medical advice, failure to keep appointments, and even delay receiving or seeking medical care.

Socioeconomic Factors

Low socioeconomic status is another barrier associated with early detection or treatment of prostate cancer. In a study conducted by Goovaerts et al. (2015) to examine the impact of age, race, and socioeconomic status on trends in late-stage prostate cancer diagnoses in Florida, it was noted that most men were diagnosed during the late stages of prostate cancer, and mortality rates from prostate cancer were higher for Blacks compared to Hispanics and Whites. Goovaerts et al. noted that lower socioeconomic status and higher prevalence and severity of chronic diseases may limit cancer screening in the Black population and thereby contribute to a delayed diagnosis of prostate cancer.

People living in socioeconomically disadvantaged neighborhoods are less likely to access screening services and less likely to have health insurance (Goovaerts et al., 2015; Walker et al., 2016). A study conducted by De Rouen et al. (2018) to investigate the association between socioeconomic status and tumor grade among African American men with prostate cancer found that the chances of being diagnosed with advanced-stage prostate cancer were higher in college graduates as compared to men without a college degree. Also, retirees were 30% less likely to have higher grade tumors compared to those who were employed. De Rouen et al. examined the impact of individual and neighborhood factors on disparities in prostate cancer survival and found that African American men had worse survival rates than their White counterparts within the same socioeconomic status. Additionally, there was an increased risk of death from prostate cancer for African American who reside in lower socioeconomic neighborhoods and do not have a college education than in those in lower socioeconomic neighborhoods who have a college education (< high school versus college: HR = 1.32, 95% CI: 1.05–1.67). This study showed low education and low socioeconomic status to be contributing factors for not surviving prostate cancer.

Summary and Conclusion

Given that early detection of prostate cancer might increase the chances for survival, understanding the barriers that prevent African immigrant men from seeking medical care might help decrease mortality rates. The proposed study was novel in that it dealt specifically with West African immigrant men and how this population could be educated regarding the severity of prostate cancer and encouraged to discuss their options for early detection with their medical practitioners. This study helps to fill the gap in understanding the factors that deter African immigrants from West Africa from seeking prostate cancer preventive care and could also provide valuable insights into decreasing disparities in prostate cancer mortality rates in this population. The study could also help African immigrant men to reduce their risk for prostate cancer, increase survival rate and improve their quality of life. The HBM is a theoretical model that could be used to explain human behaviors (Abuadas et al., 2016; Louis, 2019; Modeste et al., 2018). Studies have confirmed that health education programs or interventions that are guided by the HBM constructs and are geared toward health behaviors are more likely to benefit individuals and their communities. Understanding the factors that prevent African immigrant men from seeking prostate cancer preventive care services qualitatively and based on a theoretical assumption could help decrease prostate cancer mortality rates among these men.

In Chapter 3, I discuss the research design, rationale for the study, my role as the researcher, and the research methodology. The issues of trustworthiness and ethical considerations for the study are also discussed.

Chapter 3: Research Method

Introduction

The purpose of the qualitative study was to explore and understand the factors that prevent West African immigrant men from seeking preventive medical care to decrease prostate cancer mortality. This research study helps fill a gap in understanding the factors that prevent African immigrant men from seeking prostate cancer preventive care. Although there are proven measures for decreasing the mortality rates of prostate cancer among at-risk populations, prostate cancer mortality continues to increase among the African immigrant population living in the United States (Medhanie et al., 2017). This study was unique in that it addressed an under researched area of prostate cancer (see Akpuaka et al., 2013) among a population that continues to grow in the United States. The study results provided much-needed insights into understanding the factors that prevent African immigrants from seeking prostate cancer preventive care. Additionally, this study could assist policymakers and healthcare practitioners in making recommendations for prostate cancer prevention in this population. In this study, African immigrants were made aware of the severity of the disease and the resources that are available in their communities to overcome the barriers related to prostate cancer screening.

In Chapter 3, I discuss in detail the research design and rationale, my role as the researcher, and the research methodology. I also discuss the trustworthiness and ethical considerations for the study.

Research Design and Rationale

I designed the following research questions to guide this qualitative study:

RQ1: What are the factors that prevent West African immigrant men from seeking prostate cancer preventive services in DFW?

RQ2: Do socioeconomic disparities impact access to prostate cancer preventive care among West African immigrant men in DFW?

RQ3: How does the level of knowledge about prostate cancer impact seeking preventive services among West African immigrant men in DFW?

African American men in the United States have higher prostate cancer incidence rates than the general population (Tsodikov et al., 2017). According to the ACS (2016), nearly 1 in 6 men will develop prostate cancer in his lifetime. Prostate cancer is more prevalent, more aggressive, and more frequently diagnosed in Black men than in any other racial/ethnic groups. Additionally, African American men have a higher risk of dying from the disease than the general male population (NCI, 2021). According to the Texas Department of State Health Services (TDSHS; 2018), prostate cancer deaths are more common among Black men than in White and Hispanic men in Texas. An estimated 53.6% of men had never talked to a healthcare professional about the advantages of the PSA test. It is also important to note that in Texas, hospitalizations for prostate cancer are more common among Black men than in White or Hispanic men, and the hospital costs for prostate cancer hospitalization are approximately $247 million.

The research method used for this study was qualitative, guided by a case study approach. Qualitative research was used for this study because it focuses on understanding a person or situation in great depth. Quantitative research, on the other hand, focuses on statistical methods of inquiry when analyzing phenomena (Patton, 20l5). Qualitative research is inductive; themes and categories are identified through data collection and analysis by using techniques such as interviewing, observation, videotaping, and case studies. Creswell and Poth (2016) suggested that with qualitative research, the researcher studies the participants in their natural settings and uses descriptions of the participant's perspective in examining the issue under study. According to Ravitch and Carl (2016), qualitative research consists of collecting data, seeking study participants, and putting together study procedures. Furthermore, the advantages of qualitative research include that it allows for complex issues to be studied and can produce rich data on beliefs, perceptions, experiences, and behavior, while highlighting an interpretation of the study (Creswell & Poth, 2016). The disadvantages, on the other hand, include being biased, having a small sample size, lacking rigor, and possibly being subjective.

According to Creswell and Creswell (2014), there are five approaches to inquiry in qualitative research; these include phenomenology, ground theory, ethnographic, narrative, and case study. The case study approach seemed most appropriate for this study because it explains, describes, and explores events or phenomena in the everyday context as they occur (see Creswell & Creswell 2014). With the case study approach that was used in this study, I was able to gain a thorough understanding of the issues studied as well as the population or individual studied. According to Creswell and Creswell, the qualitative case study approach allows for the researcher to carefully look at a case or several cases that are studied over some time through an in-depth collection of data from many sources that include but are not limited to interviews, observations, and documents, making conclusions based on themes. Creswell and Creswell explained that the case study approach helps in explaining and understanding unexpected links and pathways that would result in making new policy initiatives and improvement of service delivery. Alder and Alder (2015) explained that the case study approach assists in identifying information that answers the “what,” “why,” and” how” questions in research in the context of discovery, asking open-ended questions and following pathways that develop the theoretical findings. If there is a gap in the literature, the case study approach can offer additional insights to identify what gaps exist or why one implementation strategy might be better than another. The case study approach further aligned with this study because of its distinctiveness in observing, explaining, and documenting different aspects of a situation (see Ravitch & Carl, 2016).

The ethnographic approach, on the other hand, provides an in-depth description and analysis of how people who share the same culture identify with their lived experiences and create meaning from their interpretations (Creswell & Poth, 2016). The ethnographic approach can be described as interpretative and descriptive in that one learns about people by living with them and sharing their experiences. With the ethnographic approach, the researcher is at the advantage of using several data sources to increase the validity of the study findings. Although the ethnographic approach seemed closely related to the case study approach in dealing with a group/or culture, it would have been less effective for this study, which focused more on the cultural behavior of an individual.

Another possible study approach is the phenomenological approach, which describes the common meaning for single or several individuals and their lived experiences (Creswell & Creswell, 2014). Because the phenomenological approach describes people's lived experiences of a phenomenon without explaining the causes of their actions, it was less effective for this study (see Creswell & Creswell, 2014). The grounded theory approach focuses on theory development, which is not the focus of this study. The narrative approach focuses on the story told by individuals. With this approach, researchers can identify with story characters in a way that leads to changes in health-related issues, knowledge, attitudes, and beliefs (Creswell & Creswell, 2014). Because the study was not about storytelling of an individual's lived experiences, this approach was not appropriate (see Creswell & Creswell, 2014). This study was about identifying and understanding the factors that deter African immigrants from making informed decisions about their prostate health, and thus, I used the case study approach.

Role of the Researcher

For this study, my role was an interviewer, observer, and transcriber. I was solely responsible for collecting and analyzing data from interviews, observation, and recorded responses. According to Creswell and Creswell (2014), a researcher should be able to separate themselves from making personal judgments and stereotyping, which may manipulate the findings of a study. With this in mind, I based my observations on taking notes and recording responses. I built trust and rapport with the church, mosque, and community center leaders by explaining to them the purpose of the research, their responsibilities, and mine. These community leaders, in turn, provided access to the participants for the research to be carried out at their facilities without undermining the trustworthiness of the research tradition (see Creswell & Poth, 2016). Denzin and Lincoln (2011) asserted that building relationships easily and sensitivity to the study participants' surroundings are qualities of a successful qualitative researcher. Additionally, effective qualitative researchers are skillful in asking questions without reservations, which enables them to uncover information without interfering with social norms. I used semi structured face-to-face interviews comprised of open-ended questions to collect data on the factors that prevent African immigrants from seeking prostate cancer preventive care. Using open-ended questions during the interview sessions allowed me to probe into the subject matter and make new inquiries that emerged from the study participants' responses**.**

I did not have any personal or professional relationship with any of the participants that could have influenced their responses. Any biases that could have affected this study were based on my knowledge of the etiology of prostate cancer and my ethnicity. However, the bias from my knowledge of the etiology of prostate cancer helped rearticulate any question that could lead to confusion in the interviewee's response. Denzin and Lincoln (2011) defined qualitative research as an interpretive naturalistic approach to the world. This means that the researcher can study the participants in their natural setting, making sense of the phenomenon from the participant's perspectives. It was advantageous for me to conduct this study because I am

African by origin and naturalized in the United States, which enabled me to be familiar with some of the participants' cultural preferences. Because this study was not conducted within my work or home church environment, there was no conflict of interest. Thorne (2016) noted that it is best practice for researchers to adhere to professional standards to help build personal integrity in research.

Methodology

Participant Selection Logic

Prostate cancer is the most common noncutaneous cancer among men in the United States. When compared to the general population, African American men have a higher risk of developing prostate cancer and dying from the disease (ACS, 2016; NCI, 2014). African American men are 60% more likely to be diagnosed with the disease and 2.5 times more likely to die from it than White men (ACS, 2016). Prostate cancer screening with the PSA test is the main method for early detection for the disease (Allen et al., 2018). However, there are serious concerns with the test due to its high rate of false-positive findings that may lead to unnecessary biopsies and anxiety in patients. The UPSTF (2017) has recommended against routine screening of all men at average risk for prostate cancer. The UPSTF has emphasized that as best practice, healthcare providers should discuss the advantages and disadvantages of screening using the PSA test. The ACS (2016) has also recommended that African American men should discuss prostate cancer and screening methods with a physician beginning at age 45 years. Allen et al. (2018) noted that most other medical organizations, such as the American College of Physicians and the American Urological Society, recommend that men be educated about the risks, benefits, and potential limitations of prostate cancer screening by their healthcare providers to ensure they make informed decisions regarding screening.

The sampling strategy used for this study was the purposeful sampling with the principle of saturation. Etikan et al. (2016) suggested that collecting data in qualitative research is important because the data aid in explaining and gaining a better understanding of the theoretical framework. It is imperative that selecting the method of obtaining data and from whom the data will be obtained is done using best judgment because no amount of analysis can make up for data that are improperly collected. The purposeful sampling technique is commonly used in qualitative research because of the qualities of the study participants. Patton (2015) noted that purposeful sampling selection of participants is solely based on the characteristics of the individuals and the diversity of the sample population in its entirety. Purposeful sampling is a nonrandom technique that does not need underlying theories or a set number of participants. Etikan et al. (2016) noted that with purposeful sampling, the researcher selects study participants who are willing and available to provide valuable information based on their knowledge or experience.

This type of sampling strategy was used because qualitative research typically focuses on studying the participants in their natural settings using small samples, whereas quantitative research is based on probability sampling generalizing to a larger population. Patton (2015) noted that sampling involves the identification and selection of individuals or groups of individuals who are proficient and well-informed with a phenomenon of interest. Jägervall et al. (2019) used purposeful sampling through advertisement and the snowball method to examine sexual changes in gay men in Sweden after prostate cancer treatment. Wagland et al. (2019) used purposeful sampling to explore experiences of treatment decision-making amongst men diagnosed with Stages 1 to 3 cancer. Benoot et al. (2017) used purposeful sampling to examine the sexual adjustment process by cancer patients and their partners.

The participants for this study were West African immigrants aged 45 to 75. This age range of the study participants was selected based on prostate cancer screening recommendations of the ACS. The participants resided in DFW for at least 1 year before the beginning of the study. They did not have diagnosis of prostate cancer and had never participated in prostate cancer screening. The participants were able to read and write English. The selection of the study participants was based on inclusion and exclusion criteria that included age, diagnoses, ethnicity, geographic location, level of literacy, country of origin, the period of stay in the United States, and gender. The participants were recruited from community centers, mosques, churches, and different West African countries social organizations using purposeful sampling. Patton (2015) suggested that choosing the sample size in qualitative research is based on the researcher’s inquiry, the compelling questions that need answers, credibility of the study results, and the amount of time and resources available to conduct the study. There are no set rules for the number of participants for a qualitative study. According to Hoeber et al. (2017) and Taherdoost (2016), sampling in qualitative research mainly focuses on collecting a large set of data that provides rich information relevant to the study. It is therefore important to select study participants who fulfill the study purpose and provide rich information valuable to the study. Even though there are no set rules about number of participants for a qualitative study, it is important to note that sample size in qualitative research is determined once the data collection has reached the saturation point where no new information can be obtained from any additional data. In qualitative research, data saturation point determines the sample size as it indicates that adequate data have been collected for an in-depth analysis. Baker and Edwards (2012) suggested that a sample size of about 30 participants for a qualitative study is adequate to reach the saturation point. The case study approach allows the researcher to explore and examine the issues relevant to gaining an in-depth understanding of the phenomenon (Creswell & Creswell, 2014). The study participants were recruited by posting invitational flyers at churches, mosques, community centers, and different West African countries social organizations, African grocery stores, and barbershops frequented by African immigrants. Informed consent was administered to participants, and their rights and privileges were explained to them before conducting the interviews.

Instrumentation

According to Patton (2015), data collection in qualitative research can be carried out by conducting interviews, observation, documentation, and using audiovisual materials. For this case study, the data collection instruments were semi structured interviews conducted in-person or via telephone, observations, and the recording device. The interviews were used to explore and understand the factors that deter West African immigrant men in DFW from seeking medical care to help decrease prostate cancer mortality rates. Rubin and Rubin (2012) highlighted the importance of interviewing as a flexible method of gathering data in qualitative studies. This research was conducted using unstructured interviews with open-ended questions and observation, all geared toward gaining an insight into the study phenomenon from the participants' perspectives. Zhang et al. (2015), Shenoy et al. (2016), and Hooper et al. (2017) all conducted interviews in examining prostate cancer screening among African American men. I observed and noted the behaviors and body language of the participants when asking questions. Observation is a method of collecting data used by researchers to observe behaviors of the study participants in their natural settings. For this study, participant responses were audio recorded on an iPad and written on notepads. I used notepads to jot down statements made by the participants about prostate cancer, and these notes were used for clarification during data analysis.

Procedures for Recruitment, Participation, and Data Collection

The original plan for data collection was to conduct semi structured face-to-face interviews, comprised of open-ended questions to collect data from African immigrant men aged 45 to 75 years regarding their perspectives on seeking prostate cancer preventive care. The research questions previously listed were used to guide the development of the interview questions. Each interview session lasted for 15 to 45 minutes. I recorded the interviews using an iPad and field notes. Due to COVID 19 restrictions, telephone interviews were mainly used to collect data. I developed an interview guide that included protocols directing the interview process. This document provided the informed consent form, interview questions, aim of the study, opening and closing remarks for each interview, and disclosure statements. Using semi structured interviews with open-ended questions, I was able to probe further into the subject matter by developing new inquiries that emerged from the study participants' responses. I conducted 15 interviews with the goal of eliciting clearly articulated opinions, feelings, and views about prostate cancer and personal experiences. Due to the voluntary nature of the study, the interviews were conducted based on the availability of the study participants. With the support of community leaders, I was able to conduct most of the interviews in the evenings and weekends when the participants were at home.

Lune and Berg (2016) explained that getting a good participant response is critical for obtaining quality representation and completing the study on time. It is good practice to make follow-up calls to participants who had shown interest in the past and to redistribute flyers in more conspicuous locations to attract other recruits. For this study, I used semi structured, face-to-face or phone interviews to collect and analyze demographic data, as well as data on health beliefs, current access to care, culture, behavior, and barriers that affect seeking prostate cancer preventive care.The interview protocol was designed using the following modified questions from published articles on prostate cancer.

Interview Questions

1. How old are you, and what country is your country of origin?
2. How many times a year do you visit your primary care physician?
3. Do you have health insurance?
4. Do you receive government assistance such as Medicare or Medicaid?
5. What do you know about prostate cancer, its symptoms, and treatment?

6. Have you ever avoided discussing men’s health issues, such as prostate cancer, with your doctor or health practitioner? Why or why not?
7. Is it common in your family to discuss men’s health concerns like prostate cancer? Why or why not?
8. Is it common in your culture to discuss men’s sexual health concerns like prostate cancer with your peers, friends, or healthcare professionals? Why or why not?
9. Have you ever felt uncomfortable discussing men’s sexual health concerns like prostate cancer with a healthcare professional, intimate partner, family, or friends? Why or why not?

Data Organization Technique

According to Creswell and Poth (2016), the case study approach creates an insight into people’s daily experiences. Since the participant interviews were the main source of data collection, journals, notebooks, and an iPad were used to record responses. Denzin and Lincoln (2011) noted that qualitative research focuses on capturing the meanings of various narratives in a study. Coding was used to place interview responses into categories. Coding in qualitative research helps in creating structure. It aids in organizing the data, making it easy to retrieve the same code each time without looking through the entirety of interview responses. Also, I used axial coding themes to ensure that every aspect of the data was included in the data analysis. For this study, data analysis was completed manually.

Data Analysis

Data analysis is one of the most important stages of the qualitative research process. For this study, data analysis was conducted by reviewing information gathered during the semi structured interviews to aid in identifying themes and codes. According to Vaismoradi et al. (2016), themes can be used as an aspect of organizing data by identifying repeating ideas that enable researchers to answer the study question. Themes are usually created through the researcher's interpretation of the data collected from interviews. According to Jones et al. (2019), a researcher's goal is to demonstrate honesty in presenting his/her work to help in validating the research findings. For this study, my goal was to ensure the accuracy of the information by analyzing and transcribing all audio recorded interviews, field notes, and reflective journal notes verbatim. The analysis of the data was made more reliable by setting checks in place through member checking and triangulation.

According to Fusch et al. (2018), triangulation is a method employed by the researcher to thoroughly analyze data and then present the findings to achieve a better understanding of the experience of the study phenomenon. Triangulation can be either viewed as a strategy that contributes to constructing validity or as an alternative of acquiring new knowledge, through new viewpoints. Abdalla et al. (2018) stated that information coming from different perspectives maybe used to confirm, develop, or clarify the research problem. Furthermore Abdalla et al. noted that the process of triangulation can be tedious, yet the strategy is dynamic in that it limits biases and thus increases the likelihood of replicating findings. Triangulation can be holistic as it gives the researcher the ability to examine the same phenomenon, or research topic, through several data inquiries.

The importance of triangulation cannot be underestimated in ensuring the reliability and validity of the data and study results. Fusch et al. (2018) discussed four types of triangulation: data, investigator, theory, and methodological. Data triangulation uses multiple data sources, such as people, groups, or organizations, to create a variety of insights and discover similarities about the data analyzed in different settings. This method of analysis was applicable to my study because research studies are set to change over time depending on the interest of a researcher. Investigator triangulation uses more than one researcher to investigate a specific phenomenon**.** This triangulation strategy was not feasible for my study because I was the sole researcher, and generating differing views from multiple researchers was not needed. Theory triangulation relates to utilizing different theoretical perspectives when analyzing data. This was not applicable to my study because I used more than one conceptual framework.

According to Abdalla et al. (2018), methodological triangulation is frequently used by researchers, because it can use multiple data collection strategies such as interviews, focus groups, observations, organizational documents, field notes, and reflective journals to analyze a phenomenon. This triangulation strategy was more applicable to my study as it involved combining different methods of data collection for the purpose of better understanding the phenomenon. Abdalla et al. further explained that this triangulation strategy helps to avoid biases. When analyzing data, I referred to my field notes and reflective journal for clarification in the event of concerns with the data.

A qualitative analysis was done using the thematic analysis approach. Thematic analysis was used by the researcher when transcribing data to aid in identifying emerging patterns and to clarify the research question (Creswell & Creswell, 2014). I used code segments to describe information in-depth and identify themes and codes from phrases that were frequently used and sentence patterns. Axial coding was used for this study because it is a more direct approach for looking at data to ensure that all important aspects of the data have been identified (Williams & Moser, 2019). In axial coding, the relationships among themes are clearly stated, examined, and categorized.

Issues of Trustworthiness

Credibility

The credibility of a qualitative research study relates to the honesty of the researcher in presenting his/her work (Jones et al., 2019). Establishing credibility between the study participants and the researcher is pivotal because it helps ensure that the research findings represent credible information drawn from the participants' original data and is a correct interpretation of the participants' original views (Korstjens &Moser 2018). Qualitative researchers attain credibility through the use of detailed explanation, collection of rich data, corroborating evidence from several sources and by engaging in reflections with participants. Creswell and Creswell (2014) noted that these practices help ensure the dependability and trustworthiness of a researcher in presenting a true and accurate study. Credibility is important in creating confidence that people can act upon data and findings to make decisions in their work or future research settings. For this study, I compared and analyze the themes identified from interviewees, as well as from the field notes from my reflective journal. I used triangulation to validate the data. Creswell and Creswell suggested that using the triangulation of multiple sources, such as semistructured interviews and comparing them with organizational documents, can be useful when verifying the research findings.

Transferability

Transferability is the extent to which the results of the study can be generalized to other settings or groups. Since a researcher's main goal is to ensure that readers understand the findings adequately enough that they can implement the study in their situation, I ensured transferability by not only describing the study participants' behavior during the interviews but their perspective as well, so that the behavior and experiences become meaningful to the reader. Korstjens and Moser (2018) noted that establishing transferability rests on the reader's judgment in applying the study findings to his/her setting. The researcher must give an in-depth description of the participants and the research process so that the reader will be able to determine whether the findings apply to his/her setting. I ensured transferability by providing an in-depth description of the study setting, study sample, sample size, sample strategy, inclusion and exclusion criteria, and interview procedure.

Dependability

Dependability helps establish the trustworthiness of the research and accounts for the consistency of study from the researcher's perspective, considering the different contexts in which the research occurs (Burkholder et al., 2016). Using the same data to achieve the same result helps the researcher to determine dependability. I established dependability by using the same interview protocol to ask each study participant with the same questions. I also kept a journal in which I noted any concerns I had during data collection activities. Burkholder et al. noted that keeping an audit trail in research helps in ensuring dependability.

Confirmability

The confirmability of the study refers to the extent to which the study results could be corroborated. There are several ways in which this process can be achieved. For example, the researcher can document actions taken during the study to verify the data collected. For this study, I kept a reflective journal to document my observations, concerns, and decisions to establish transparency while maintaining this as a source for future references. Keeping a journal of events and actions that occurred during the research served as a guide for other research studies. Additionally, keeping an audit trail that can be referred to for clarification if needed helped authenticate the participant's responses and not the researcher's biases. Connelly (2016) noted that maintaining a journal of activities taken during the research study can help in establishing impartiality on the part of the researcher. Additionally, these notes can be valuable to future researchers and be used as a reference on how and why decisions were made during past studies.

Reliability

Reliability in qualitative research refers to ensuring consistency in the research findings. The results of the study should truthfully reflect the study phenomenon, and they should be able to be replicated if the study is repeated (Bengtsson, 2016). I ensured that during the interviews, participants were asked the same questions in the same order and in the same way. According to Cypress (2017), reliability could be achieved by asking the participants the same questions at different times and obtaining the same answers. The reliability of this study depended on the honesty and completeness by which the study participants answered the interview questions. Cypress further asserted that rigor in qualitative research is connected to the concepts of reliability and validity and that these are necessary components that guide the quality of the research.

Ethical Procedures

According to Ravitch and Carl (2016), research involves the collection of data from and about people. Protecting the rights and wellbeing of the research participants is therefore crucial. As the researcher, I must protect the study participants' rights against all ethical misconduct during the research. For this study, the Belmont report served as a guide for ensuring the study participants' rights. Approval for conducting the study was received from Walden University Institutional Review Board (IRB) and the approval number is: 10-15-20-0293133. I used an informed consent form provided by the University IRB to gain access to the study participants. The informed consent included information on the purpose of the study, duration of the interview and voluntary participation and a guarantee from the researcher to adhere to ethical conduct. Curtis (2018) explained that the researcher should ensure that the wording on all recruitment materials, i.e., flyers and consent forms, be culturally appropriate and on the reading level of all study participants. The consent form provided to the study participants included my email address and telephone number as well as a statement giving the participant the option to withdraw from the study at any time without retaliation. The consent form also guaranteed that all data collected will be kept confidential and used only for research purposes.

It is necessary to protect the confidentiality of the data and anonymity of the participants while conducting research. The participants were assured in writing to protect their personal information, pseudo names were used instead of their real names. The National Bioethics Advisory Commission (2001) maintains that people should participate in research only when the study addresses important inquiries the study risks are minimal and justifiable, and an individual's participation is voluntary and informed. Creswell and Poth (2016) explained that safeguards, i.e., counseling services, should be made available if a participant wishes to withdraw from a research study for reasons that may affect his/her wellbeing. Additionally, due to the sensitive nature of the study, it was best practice that I present general information and not specific information about the study in the consent form. Full disclosure, informed consent, and the option to be removed from a study at any time are all important ethical practices that are essential for conducting research. I secured a lock and safe deposit box to store all data. Computer files and iCloud were also used to back up and store data that would be kept for 5 years.

Summary

Although Black men represent a high-risk population for prostate cancer, controversy remains whether early detection through screening may help reduce prostate cancer mortality and morbidity rates in this population. The literature reviewed for this study revealed that perceptions of healthcare quality can influence a person's willingness to undergo routine preventive health exams (Hewitt et al., 2018; Modeste et al., 2018). Rezaee et al. (2019) found that patients who had good quality healthcare were more likely to participate in routine preventive care such as screening for other cancers. In addition, inadequate/substandard healthcare may not only result in poor health but can also be a disadvantage in the decision-making process between the patient and physician regarding whether to get screened for prostate cancer given its risks and benefits. The qualitative case study approach was employed for this study because it aided in exploring the phenomenon from the individual's perspective, allowing the individual to share his/her experiences from a real-life context (Ravitch & Carl, 2016). The case study approach helps answer the "how," "what," and "why" questions, thus capturing the information in a descriptive way especially when the phenomenon of interest is not clearly stated. Soliciting study participants, collecting data from them through interviewing, audio recording the interviews, and taking observational notes are all implementation strategies that can be useful for developing themes regarding the factors that deter African immigrant men from seeking prostate cancer care. In Chapter 4, I discuss in detail the demographics of the study and the results of the study.

Chapter 4: Results

Introduction

The purpose of this qualitative case study was to understand the factors that deter West African immigrant men residing in DFW from seeking medical care that would help decrease prostate cancer mortality. Three research questions were developed, one to address the factors that prevent West African immigrant men from seeking prostate cancer preventive services, another to address the impact of socioeconomic disparities on accessing prostate cancer preventive care, and the final question to access the impact on lack of knowledge about prostate cancer on seeking preventive service. For this study, semi structured interviews consisting of nine qualitative questions, using the HBM as a framework, were conducted face-to-face and by telephone to collect information from the 15 participants from the population of West African immigrant men between the ages of 45 and 75 years residing in DFW. The original plan was to interview at least 30 participants; however, the point of saturation was reached after interviewing 15 participants.

Setting

Due to COVID 19 pandemic restrictions, church leaders posted flyers on church bulletin boards and church websites, and recruitment flyers were emailed to community leaders to be posted on community organization websites and social forums of West African countries in DFW. One interview was conducted face-to-face, while practicing social distancing and adhering to CDC, state, and local guidelines, and the other 14 interviews were conducted via telephone. The interviewees were also given the option to participate via Skype or Zoom. The interviews were conducted with participants on an individual basis, and the participants were able to choose the time and dates convenient for their interviews. The participants were given the option to change or cancel any scheduled appointment due to any schedule conflict. The participants did not report any issues with the interview process that might have influenced the answers they gave during the interview. Although most of the participants answered the majority of the interview questions in complete sentences, Participants 6 and 10 provided very short answers that were succinct enough to create significant meaning for the interview questions.

Demographics

A sample of 15 study participants was purposefully selected from West African immigrant communities in DFW. All study participants had resided in DFW for at least 12 months prior to the interview, were able to read and write English, and had never been screened for or diagnosed with prostate cancer. The demographics pertaining to the inclusion criteria of the participants are shown in Table 3 and include the country of origin and age of the study participant. Although marital status was not directly asked during the interviews, responses to Interview Questions (IQ) 8 and 9 helped disclose the marital status of the study participants.

Table 3

Country of Origin and Age of Participants

No.	Country of origin	Race	Age
1	Liberia	Black	47
2	Gambia	Black	50
3	Gambia	Black	47
4	Nigeria	Black	57
5	Liberia	Black	62
6	Nigeria	Black	58
7	Guinea	Black	53
8	Guinea	Black	63
9	Liberia	Black	51
10	Ghana	Black	46
11	Sierra Leone	Black	60
12	Sierra Leone	Black	57
13	Sierra Leone	Black	50
14	Sierra Leone	Black	67
15	Nigeria	Black	58

Data Collection

Data collection for this study was conducted by purposefully selecting participants who were immigrant men from countries in West Africa. Due to the COVID 19 pandemic, there was a slight deviation from the initial plan for data collection as mentioned in Chapter 3. The original plan was to conduct in-person, face-to-face interviews, with telephone interviews being used in the event a participant would not be available to conduct an in-person interview. The revised plan approved by the IRB was for interviews to be conducted via telephone, Zoom, or Skype. Face-to-face interviews were to be conducted in accordance with CDC, state, and local guidelines, and I provided the personal protective equipment supplies needed to conduct the interviews safely while practicing social distancing. The interviews were conducted from November 9, 2020, through December 28, 2020. One interview took place at a church in Fort Worth, and the other 14 interviews were conducted over the telephone. The duration of the interviews ranged between 15 and 45 minutes. The interview questions can be seen in Appendix A. The study participants were given consent forms at least 24 to 48 hours prior to the interview in order to enable them to understand their rights before making a decision about participating in the study. Included in the consent form was permission to audio record the interviews. The participant who completed the study in-person signed the consent form on the day of the interview. I audio recorded the interviews using two separate devices; one device was used as a backup in case the output was not clear or there was a malfunction with the other device during the interview. The two devices included my personal iPad and a commercially available professional audio recorder

(Olympus Digital Voice Recorder VN-541 PC). Data recorded on the Olympus Digital Voice Recorder were transferred to and saved in my iCloud account that could only be accessed by me with a password. The data from the interviews on my iPad were saved with other personal documents related to the study that could only be accessed by me. After carefully listening to each recorded interview, I manually transcribed it verbatim and generated a transcript for each interview using a Microsoft Word document. I securely emailed each participant a copy of the transcript and the results of the interview via drop box for him to check for accuracy and completeness of their transcribed information. Only one participant did not respond to the check for accuracy of the information provided during the interview. The interview participants expressed appreciation for being part of the study, were receptive of learning more about the disease, and promised to follow up with their primary care physicians during the next doctor's visit. Based on the responses provided during the interviews, the majority of the study participants had limited knowledge about prostate cancer or had never heard about the disease.

Data Analysis

The HBM was used to create an interview protocol of open-ended interview questions to aid in answering the three research questions. After reading each participant's transcript several times, I was able to identify and highlight important statements for each participant's responses that aligned with the HBM constructs of perceived susceptibility, perceived seriousness (severity), perceived barriers, perceived benefits, cues to action, and self-efficacy. Nowell et al. (2017) suggested that several strategies that can be used during data analysis. Some of these include thematic analysis and category coding, qualitative content analysis, and discourse analysis. It is also important to consider the most plausible approach that will align well with a particular conceptual framework and method (Maguire & Delahunt, 2017). For this study, I used thematic analysis and category coding, which are considered a blueprint for the inductive approach. I read the transcribed interviews several times and familiarized myself with the data I collected and then assigned preliminary codes to identified phrases. I then manually coded every phrase using Microsoft Word. The use of Microsoft Word was helpful in coding, retrieving, and comparing similarities and differences between each code. I interpreted each statement made by the participants and then created meanings in short phrases that gave a clear picture of the participants' responses (see Saldaña, 2016). Based on this analysis, I was able to identify relevant phrases, which aided in generating meanings from each interview. I then created themes of meanings and merged the themes to reflect the study phenomena (see Saldaña, 2016; Williams & Moser 2019). I sought and received input from my committee member on proceeding with the data analysis and description of the study results.

Table 4 shows an example of a theme resulting from the formulated meanings of the responses given by the first three participants for the question assessing the construct perceived barriers of the HBM.

Table 4

Sample Theme Developed for HBM Construct

Perceived barriers to prostate cancer	Formulated meaning for perceived barriers	Theme
“I do not know the symptoms of or treatment for prostate cancer.”	Participant does not know the symptoms or treatment for prostate cancer.	
“I know it affects men and we need to be checked out for it on a yearly basis … hmm I am not sure, but I think my father passed away from it.”	Participant knows that prostate cancer affects men and that men should be checked for the disease annually.	Lack of/limited knowledge
“I do not know much about prostate cancer, its symptoms or treatment. I never had this issue, so I never had it come up.”	Participant does not know much about prostate cancer, its symptoms, or treatment because he has never experienced it or spoken to his doctor about it.	

The same process was used to generate the emerging themes for the nine interview questions. Saldaña (2016) stated that an emerging theme may represent a phrase or sentence describing the outcomes of a process. Table 5 shows themes developed from the interview questions that correspond to the six constructs of the HBM.

Table 5

Themes Developed From Interview Questions

HBM constructs & corresponding IQ	Emerging theme
Perceived susceptibility to prostate cancer	
6. Have you ever avoided discussing men’s health issues, such as prostate cancer, with your doctor or health practitioner? Why or Why not?	Awareness, susceptibility
9. Have you ever felt uncomfortable discussing men’s sexual health concerns like prostate cancer with healthcare professionals, intimate partner, or friends?	Perceptions & behavior, privacy, secrecy
Perceived seriousness (severity) of prostate cancer	
5. What do you know about prostate cancer, its symptoms, and treatment?	Lack of/limited knowledge
Perceived barriers	
1. How old are you and what is your country of origin?	Socioeconomic status
4. Do you receive government assistance such as Medicare or Medicaid?	Availability of health insurance, socioeconomic status
7. Is it common in your family to discuss men’s sexual health concerns like prostate cancer? Why or why not?	Awareness, individual perceptions, privacy
8. Is it common in your culture to discuss men’s health concerns like prostate cancer with your peers, friends, or healthcare professional? Why or why not?	Cultural beliefs
Perceived benefits	
5. What do you know about prostate cancer, its symptoms, and treatment?	Perceived knowledge
Cues of action	
2. How many times a year do you visit your primary care physician?	Access to healthcare
Self-efficacy	
3. Do you have health insurance?	Availability of health insurance

The same process was used to generate emerging themes for all the six constructs of the HBM and the three research questions. Saldaña (2016) noted that a theme may represent a phrase or sentences that illustrate the outcome of a process. Tables 6 and 7 present the emerging themes for RQs 1 and 2 respectively, using the six constructs of the HBM. For RQ3, the theme lack of knowledge about prostate cancer emerged through the HBM construct of perceived seriousness.

Table 6

Generation of Emerging Themes for RQ1

HBM construct	Emerging theme
Perceived susceptibility	Awareness, susceptibility, perceptions & behavior, privacy, secrecy
Perceived seriousness (severity)	Lack of/limited knowledge
Perceived barriers	Socioeconomic status, availability of health insurance, individual perceptions, cultural beliefs
Perceived benefits	Perceived knowledge
Cues to action	Access to healthcare
Self-efficacy	Availability of health insurance

Table 7

Generation of Emerging Themes for RQ2

HBM construct	Emerging theme
Perceived benefits	Socioeconomic status, availability of health insurance, socioeconomic status
Cues to action	Access to healthcare
Self-efficacy	Availability of health insurance

Evidence of Trustworthiness

Credibility

Due to COVID 19 pandemic restrictions, only one participant chose to participate in a face-to-face interview, and his attitude was observed and noted in a reflective journal during the interview. The observation served to evaluate the participant's trustworthiness in his responses given during the interview. The original sample size of the study was between 15 and 20 participants. However, once 15 participants had been interviewed, I had already reached the point of saturation; no new information was uncovered from the responses given by the last five interviewees. Creswell and Creswell (2014) noted that saturation is achieved in a study when no new information is uncovered even if the sample size is increased. I used member check strategy to validate the collected data. I listened to recorded interviews several times, manually transcribed each interview, and shared documents via secured email in a drop box to each study participant for approval. This enabled the participants to verify the accuracy of their responses and ensure completeness of the interviews. Creswell and Creswell explained that member checking strategy refers to the sharing of the study results with the participants for accuracy and verification, which increases the credibility of the data. “Triangulation is the process of examining multiple sources of data and building a coherent justification for themes” (see Creswell & Creswell, 2014, p. 201) and was another strategy used to establish credibility of the data. Using multiple interview questions and a reflexive journal to document my feelings, I was able to establish triangulation.

Transferability

Transferability is the extent to which the results of the study can be applicable to other settings or groups. My goal was to guarantee that the readers understand the study enough that they can implement the study in their situation. Transferability was established by using the information from interviews and journal note generated during the interviews. The method used in this data collection can be applied to other studies with different designs. Transferability was established by providing an in-depth description of the study setting, study sample, sample size, sample strategy, inclusion and exclusion criteria, and interview procedures.

Dependability

Dependability accounts for the trustworthiness and consistency by which the research was conducted. Dependability was established by using the same interview protocol to ask each study participant the same interview questions. Additionally, a journal to note observations from the one face-to face interview, audio tape recordings of the interviews, and manually transcribed interview transcripts were all maintained. All recorded interviews were transcribed verbatim to keep the originality of the answers provided by each participant. All recorded interviews and a generated journal were kept and could be used to reference any information that led to the identified themes.

Confirmability

The confirmability of the study was established by removing my personal beliefs and judgments during the study as related to how these may influence the study results. I identify myself as Black, female, West African immigrant residing in DFW. In order to avoid any bias, I reviewed the journal notes and listened carefully to the audio recordings several times before and during transcribing the interviews ensuring that the experiences and ideas were directly those of the participants without my own views and preferences. I did not use prior knowledge of the West African culture to interpret the data in order to help minimize any biases. Such knowledge included that most West Africans with low income jobs do not have health insurance, and West African immigrant men do not like to discuss their personal health issues with females or strangers or go to the doctor unless they are very sick.

Results

The six constructs of the HBM were organized into three groups, with a total of nine interview questions to address the three research questions. The first research question asked the following: "What are the factors that prevent West African immigrant men from seeking prostate cancer preventive services in DFW?" This research question was defined to identify the factors that deter seeking prostate cancer care among the target population. The research question was also intended to assess the knowledge about and determine the barriers to seeking prostate cancer care in the target population.

Discussion of the Results for Research Question 1

Barriers to seeking prostate cancer care were assessed with IQs 1 through 9. IQ1 was as follows: “How old are you and what country is your country of origin?” The question elicited the following responses:

Participant 1 shared, “I am 47 years old originally from Liberia.” Participant 2 stated, “I am 50 years old, and I am from Banjul Gambia, West Africa.” Participant 6 said, “I am 58 years old; I am originally from Nigeria.” Participant 10 responded, “I am 46 years old originally from Ghana, West Africa.” Participant 14 shared, “I am 67 years old and retired. I am originally from Sierra Leone, West Africa.” Participants 1, 2, 6, 10 and 14 were all within screening age for prostate cancer (see CDC, 2021a) and from different countries in West Africa. IQ1 helped identify the participants’ country of origin and age. IQ2 was as follows: “How many times a year do you visit your primary care physician?” The question elicited the following responses:

Participants 1 and 10 indicated that they visit their primary care physician twice a year. Similarly, Participant 2 stated, “I visit my primary care physician at least twice a year.” Participant 6 said, “I visit my primary care physician 3–4 times a year, every 2 to 3 months.” Conversely, Participant 14 said, “I visit my primary care doctor once a year.” The most common response was that of Participants 1, 2, 6, 10 and 14 who all shared that they visit their primary care physician at least once a year. IQ2 helped explain the participants’ access to healthcare. IQ3 was as follows: “Do you have health insurance?” The question elicited the following responses:

Participant 6 said, “No, I do not currently have health insurance.” Participants 8 and 11 answered, “No, I don’t have health insurance.” Participant 10 stated, “No, not at the moment, I do not have health insurance.” Participant 14 shared, “I do not have medical insurance.” Participants 6, 8, 10, 11, and 14 all indicated that they do not have health insurance. IQ3 helped explain the participants’ availability of health insurance. IQ4 was as follows: “Do you receive government assistance such as Medicare and Medicaid?” The question elicited the following responses:

Participant 1 answered, “No, I do not receive government assistance such as Medicare or Medicaid.” Participant 2 also answered, “No, I do not receive government assistance such as Medicare or Medicaid.” Participant 6 said, “No, I do not receive government assistance such as Medicare or Medicaid.” Participant 10 shared, “No, I do not receive government assistance such as Medicare or Medicaid.” Participant 14 said, “No, I do not receive government assistance such as Medicare or Medicaid.” Participants 1, 2, 6, 10, and 14 indicated that they do not receive government assistance such as Medicare or Medicaid. Both IQs 3 and 4 helped explain the participants’ socioeconomic status. IQ5 was as follows: “What do you know about prostate cancer, its symptoms, and treatment?” The question elicited the following responses:

Participant 1 stated, “I know prostate cancer is a disease that affects men. I do not know the symptoms or treatment for prostate cancer.” Participant 2 said,

> “I know it affects men, and we need to be checked out for it on a yearly basis. Hmm … I not sure exactly, but I think my father passed away from it. Hmm …

> no, I don’t know the symptoms of prostate cancer. No, I don’t know the treatment for prostate cancer”.

Participant 6 shared,

> ”Umm … I know it has to do with urinary tract, and it has to do with men above 50. This is from my own little understanding about prostate cancer, and it comes from a lot of inconveniencies and discomfort during urination. The advanced stage of it could cause cancer. It is very dangerous if not taken care of. No, I don’t know the treatment for prostate cancer”.

Participant 10 said, “No, I don’t know much about prostate cancer. I know prostate cancer is a deadly cancer that affects men. I don’t know the symptoms and treatment for the disease.” Participant 14 stated, “I know prostate cancer affects men and it is bad, but I don’t know the symptoms or the treatment for the disease.” Participants 1, 2, 6, 10, and 14 all knew that prostate cancer affects men. IQ5 helped identify that study participants had limited knowledge about the disease and did not know the symptoms or treatment of the disease. IQ6 was as follows: “Have you ever avoided discussing men’s health issues, such as prostate cancer, with your doctor or health practitioner? Why or why not?” The question elicited the following responses:

Participant 1 said, “I have never avoided discussing healthcare issues with a healthcare practitioner. I am very open in discussing about my health with my primary care physician.” Participants 3 and 7 answered, “No, I have never avoided discussing men’s health issues such as prostate cancer with my doctor or healthcare practitioner. I never had this issue, so I never had it come up.” Participant 11 stated, “I have never avoided talking to my doctor about prostate cancer or any men’s health concern such as prostate cancer because I don’t know what it is; I never experience it.” Participant 13 explained,

> “Umm … I have never avoided discussing the issue prostate cancer, but it has never been brought up. I haven’t seen any need to discuss prostate cancer with my doctor, and they haven’t seen a need as well to discuss about it with me. I am not sure why my doctor has not brought it up. For me, I try to stay health by exercising and make sure I see my doctor once a year. Nothing about prostate cancer has never been brought to me”.

Participants 1, 3, 7, 11, and 13 all stated that they have never avoided discussing men’s health issues such as prostate cancer with their doctor or healthcare practitioner because it has never been brought up. IQ6 helped explain the study participants’ susceptibility to prostate cancer and lack of awareness of the disease. IQ7 was as follows: “Is it common in your family to discuss men’s health concerns like prostate cancer? Why or why not?” The question elicited the following responses:

> Participant 1 explained,
>
> “It is not really common to discuss men’s healthcare issues in my family. Hmm … it does not come up. If they do, it is a shaming thing, instead of people talking about it they are ashamed to talk about it; they hide it and go through it by themselves in secrecy”.

Participant 3 said, “No, it is not common in my family to discuss men’s health concerns such as prostate cancer. It does not come up.” Participant 5 said,

> "No, none of my family members and I never discuss about this. It is not common to discuss men's sexual health because it a cultural thing where people think it is a private thing. Personally, I think it should not be like that because it is a health issue. My brother was sick right here in Arlington and went to the hospital, and he had cancer; we did not discuss it with anyone".

Participant 7 shared, "No, I don't discuss with my family," and Participant 15 explained, "No, it is not common in my family to discuss men's health concerns such as prostate cancer because that is how we are raised; we do not talk about." Participants 1, 3, 5, 7, and 15 all agreed that the topic about prostate cancer has never come up. IQ7 helped reveal the study participants' lack of awareness about prostate cancer and individual perceptions of it. The participants also agreed that they felt embarrassed to talk about prostate cancer and it should be a private matter.

IQ8 was as follows: "Is it common in your culture to discuss men's health concerns like prostate cancer with your peers, friends, or healthcare professionals? Why or why not?" The question elicited the following responses:

Participant 1 answered,

> "Not at all, we do not discuss men's sexual health with our friends or family members in our culture because it is a shaming thing. We don't want people to know our business, although it [prostate cancer or health issues] is painful; we rather go through it by ourselves. Discussing about it might help, but we don't want people to make mockery about you when you share your business, calling you impotent".

Participant 2 shared,

> “No, it is not common in my culture to discuss men’s health concerns with our peers or friends, healthcare practitioners. Because of the stigma, anything that leads to death in African culture is a stigma; we need to get over that because we don’t talk about it. No, I do not feel uncomfortable talking to a healthcare practitioner; my wife is a nurse practitioner, and she makes sure I do all my doctor’s visits”.

Participant 5 stated,

> “No, it is not common in my culture to discuss men’s healthcare issues such as prostate cancer with healthcare practitioners, but with friends yes. I don’t know how to describe this, but it is an African mentality. Hmm … that is personal issues even if you have to die, you die. The level of education on prostate cancer has never been there. Where I come from, this had not been our common health problems. Our health problems have been malaria, fever, and other curable diseases, not really prostate cancer. I am assuming that some of the death might have been from prostate cancer, but we do not know that for a fact because healthcare is not advanced”.

Participant 6 said,

> “People shy away from discussing personal things like that, even when they are suffering from an illness; they don’t want people to know. It’s a cultural thing among Africans that when something bad is happening to them they would rather keep it secret. Some people may only talk about it with their doctor and no one

> else. I have a terrible habit of feeling anxious when I have to go to a doctor's appointment; I feel anxious like something bad is going to happen. I have always felt anxious going to a doctor's appointment, even when I was in Nigeria. Living in America, I found out that the culture is different; you can't get a medication or refill without seeing a doctor".

Participant 13 shared,

> "No, it is not common in my family. In fact, we hardly talk about prostate. I think it is coming from the African culture; men are regarded as the head of the family, and because of that, the perception of illness is a scary feeling, and so we tend to deliberately avoid that. And is not just prostate cancer but all other illness we tend to avoid it".

Participants 1, 2, 5, 6, and 13 all indicated that it is not common in their culture to discuss men's sexual health concerns like prostate cancer with their peers, family, friends, or healthcare professionals. IQ8 helped explain the cultural beliefs of study participants. Additionally, it revealed that although all of the study participants were from different West African countries, they seemed to share the similar cultural beliefs about discussing men's sexual health with their peers, family, friends, or healthcare professionals.

IQ9 was as follows: "Have you ever felt uncomfortable discussing men's sexual health concerns like prostate cancer with a healthcare professional, intimate partner, family, or friends?" The question elicited the following responses:

Participant 2 stated,

> "Yes, I have felt uncomfortable talking about health concerns with family, friends. We don't discuss it because it's a stigma that we need to overcome. I don't know whether we feel embarrassment or uncomfortable in discussing personal things; it's more of secrecy than anything else".

Participant 7 said, "It is not part of my culture to discuss any of our personal health issues with anyone, not even my wife." Participant 11 answered,

> "No, I don't talk about my sickness to healthcare professionals, my wife, and my family. In my culture, we don't encourage that. I don't understand what you are talking about right now. In my culture we don't do that, I only go to the doctor when I am sick".

Participant 13 explained,

> "Like I said, with my physician, no. Umm … with other healthcare practitioners, it depends on our relationship, but as a whole prostate cancer is not something I have never discussed with any healthcare practitioner. I think if the topic arises, I might feel comfortable to discuss it, but this has never come up. My wife and I share the same cultural background so we tend to avoid discussion around men's sexual health because of the scary thought of the man being the provider have to fall sick can be very nerve wrecking, so we tend not to discuss it especially when there is no reason to discuss the topic. As a whole, we tend to stay away from discussing such issues".

Participant 15 stated,

> “No, I have never felt uncomfortable discussing men’s sexual health concerns with healthcare professionals. I have discussed it with my wife maybe once or twice, and she was telling me that I need to be checked out, but I haven’t done it yet. No, I have never discussed men’s sexual health concerns with my family or friends in my culture because they are not interested in that. Most of my brothers do not live here; if I try to raise it up with my friends, they are not interested.
>
> They do not care about it in my culture; we do not talk like that”.

Participants 2, 7, 11, 13, and 15 all stated that they do not feel comfortable discussing men’s sexual health concerns with healthcare professionals, intimate partner, family, or friends. IQ9 revealed that the majority of the study participants shared the same (individual perceptions/privacy/secrecy) perspective of not feeling comfortable discussing men’s sexual health concerns with a healthcare professional, intimate partner, family, or friends.

Findings from the interviews resulted in the following emerging themes: limited access to healthcare, lack of health insurance, lack of/limited knowledge about prostate cancer, lack of awareness of prostate cancer, susceptibility to prostate cancer, cultural beliefs, individual perceptions, privacy, secrecy, and behaviors.

Discussion of the Results for Research Question 2

RQ2 was intended to determine if socioeconomic disparities impact access to prostate cancer care in the target population. IQs 1, 3, and 4 were defined to determine the age, country of origin, and access to healthcare of the study participants. The constructs of the HBM, perceived barriers were evaluated with these questions.

IQ1 was as follows: “How old are you and what country is your country of origin?” The question elicited the following responses:

Participant 1 shared, “I am 47 years old originally from Liberia.” Participant 2 stated, “I am 50 years old, and I am from Banjul Gambia, West Africa.” Participant 6 said, “I am 58 years old; I am originally from Nigeria.” Participant 10 responded, “I am 46 years old originally from Ghana, West Africa.” Participant 14 shared, “I am 67 years old and retired. I am originally from Sierra Leone, West Africa.” Participants 1, 2, 6, 10, and 14 were all within screening age for prostate cancer (see CDC, 2021a) and from different countries in West Africa. IQ1 helped identify the participants’ country of origin and age. IQ3 was as follows: “Do you have health insurance”? The question elicited the following responses:

Participant 6 said, “No, I do not currently have health insurance.” Participants 8 and 11 answered, “No, I don’t have health insurance.” Participant 10 stated, “No, not at the moment, I do not have health insurance.” Participant 14 shared, “I do not have medical insurance.” Participants 6, 8, 10, 11, and 14 all indicated that they do not have health insurance. IQ3 helped explain the participants’ availability of health insurance. IQ4 was as follows: “Do you receive government assistance such as Medicare and Medicaid?” The question elicited the following responses:

Participant 1 answered, “No, I do not receive government assistance such as Medicare or Medicaid.” Participant 2 also answered, “No, I do not receive government assistance such as Medicare or Medicaid." Participant 6 said, "No, I do not receive government assistance such as Medicare or Medicaid." Participant 10 shared, "No, I do not receive government assistance such as Medicare or Medicaid." Participant 14 said, "No, I do not receive government assistance such as Medicare or Medicaid." Participants 1, 2, 6, 10, and 14 indicated that they do not receive government assistance such as Medicare or Medicaid. IQs 3 and 4 helped explain the participants' socioeconomic status.

Discussion of the Results for Research Question 3

RQ3 was defined to evaluate the level of knowledge about prostate cancer among the target population. Perceived seriousness and perceived knowledge of prostate cancer were assessed with IQ5, which asked the following: "What do you know about prostate cancer, its symptoms, and treatment?" The question elicited the following responses:

Participant 1 stated, "I know prostate cancer is a disease that affects men. I do not know the symptoms or treatment for prostate cancer." Participant 2 said,

> "I know it affects men, and we need to be checked out for it on a yearly basis. Hmm … I not sure exactly, but I think my father passed away from it. Hmm … no, I don't know the symptoms of prostate cancer. No, I don't know the treatment for prostate cancer."

Participant 6 shared,

> "Umm … I know it has to do with urinary tract, and it has to do with men above 50. This is from my own little understanding about prostate cancer, and it comes from a lot of inconveniencies and discomfort during urination. The advanced

> stage of it could cause cancer. It is very dangerous if not taken care of. No, I don't know the treatment for prostate cancer".

Participant 10 said, "No, I don't know much about prostate cancer. I know prostate cancer is a deadly cancer that affects men. I don't know the symptoms and treatment for the disease." Participant 14 stated, "I know prostate cancer affects men and it is bad, but I don't know the symptoms or the treatment for the disease." Participants 1, 2, 6, 10, and 14 all knew that prostate cancer affects men. IQ5 helped identify that study participants had limited knowledge about the disease and did not know the symptoms or treatment of the disease. The themes that were prominent in this study were lack of/limited knowledge about prostate cancer, cultural beliefs, individual perceptions, and behaviors.

Summary

In Chapter 4, I presented the demographics of study participants, the data collection process, the method of data analysis, evidence of trustworthiness, and the findings for this research study. In Chapter 5, I discuss in detail the results, findings, and limitations of the study, recommendations based on the study, and the study's implication for positive social change.

Chapter 5: Discussion, Conclusions, and Recommendations

Introduction

The purpose of this qualitative case study was to understand the factors that prevent West African immigrant men in DFW from seeking prostate cancer preventive care. African American men in the U.S. population are more than twice as likely to die of prostate cancer as Hispanic or White men (Dickey et al., 2017; Riviere et al., 2020). Globally, the incidence of prostate cancer is on the rise, and prostate cancer is one of the most common cancers in men. It also has a high mortality rate (World Health Organization, 2020). The World Health Organization estimated that there will be 1.41 million new cases this year. In the United States, prostate cancer is the second leading cause of cancer death among men. The ACS (2021) estimated that there will be about 248,530 new cases and 34,140 deaths from prostate cancer. In a study conducted at a university in Nigeria, West Africa, to examine the knowledge of, attitudes towards, and perceptions regarding prostate cancer among male staff, most of the staff felt there was lack of awareness of the cancers affecting men and that intervention programs had not been put in place targeting prostate cancer (Adibe et al., 2017). Even though early detection through timely screening and favorable treatment options improves overall prostate cancer survival, African American men born in the United States are not as likely to take advantage of these opportunities (Woods-Burnham et al., 2018). African immigrant men and African American men born in the United States participate less in prostate cancer screening than their White counterparts from the United States. Addressing the factors that impact seeking preventive services among West African immigrant men in DFW could aid in decreasing prostate cancer mortality in this population.

Key Findings

The key findings of the study are summarized as follows:

1. The participants revealed significant barriers that prevented them from seeking prostate cancer care, including having limited or no prior knowledge about prostate cancer, including its symptoms and treatment modalities. Based on this, they did not know that they were susceptible to the disease nor perceived its severity, and they would therefore did not appreciate the importance of seeking prostate cancer preventive services that could aid in decreasing prostate cancer mortality.
2. The participants revealed that cultural beliefs and individual perceptions also impacted their seeking prostate cancer preventive care. The study participants revealed that they do not discuss men's health concerns with their spouses, peers, friends, or healthcare professionals due to privacy issues. Some of the participants further elaborated that discussing men's health concerns was an infringement on their privacy and that they would keep their health concerns a secret even if they were dying.
3. The participants also confirmed lack of availability of health insurance and access to healthcare as barriers to seeking prostate cancer preventive care. Although some of the participants had health insurance, on average, they only visited their healthcare providers once a year, and they never discussed

prostate cancer or men’s health issues during that visit. Additionally, the participants who did not have health insurance did not have government assistance, such as Medicare or Medicaid.

Interpretation of Findings

The current study findings supported findings in the peer-reviewed literature as well as the HBM framework that African men in general have limited knowledge about prostate cancer (Adibe et al., 2017; Malika et al., 2020).

Research Question 1

The first research question was focused on understanding the factors that prevent West African immigrant men from seeking prostate cancer preventive care in DFW. The findings from the interviews resulted in the following emerging themes: limited access to healthcare, lack of health insurance, lack of/limited knowledge about prostate cancer, lack of awareness of prostate cancer, susceptibility to prostate cancer cultural beliefs, individual perceptions, privacy, secrecy, and behaviors. Perceived susceptibility and perceived seriousness are two interrelated concepts of the HBM that help determine the likelihood for people to take action to prevent or to control illnesses (Creswell & Creswell, 2014).

Research Question 2

The second research question was intended to determine whether socioeconomic disparities impact access to prostate cancer care in the target population. I found that low socioeconomic status, specifically related to not having health insurance, is among the main factors reported in this and previous studies as a barrier to accessing prostate cancer preventive care among African American men in the United States (see Malika et al., 2020; Reynolds, 2008; Riviere et al.2020).

Research Question 3

The third research question was intended to evaluate the level of knowledge about prostate cancer among the target population and the impact of that knowledge in seeking preventive services. I found that most participants in this study did not know about prostate cancer or its symptoms and treatment. Therefore, limited/lack of knowledge about prostate cancer may impact seeking preventive services. Previous studies conducted by Malika et al. (2020) and Adams et al. (2020) corroborated the study findings that participants were not knowledgeable about prostate cancer, including its symptoms or treatment. Lack of/limited knowledge may also explain the reason immigrant men interviewed in this study choose not to ask their doctors questions pertaining to the risk factors for developing prostate cancer. Lack of awareness, individual perceptions, and privacy were reported as barriers preventing African American men from seeking prostate cancer preventive care (Coughlin et al., 2021; Ekúndayò & Tataw, 2013; Wagland et al., 2017). Data collected from this study support similar findings from previous studies conducted on barriers to healthcare and health-seeking behaviors by African immigrant men and African American men (Coughlin et al., 2021; Ekúndayò & Tataw, 2013; Malila et al., 2020; Reynolds, 2008; Riviera et al., 2020; Wray et al., 2007).

Cultural beliefs also play a significant role in accessing prostate cancer care among West African immigrant men. It is important to note that even though the participants in the current study are from different West African countries, their cultural beliefs play a major role in who they discuss their health issues with, as seen from the responses given during the interviews. The study participants reported that it is not common in their culture to discuss men's health concerns like prostate cancer with anyone because they regard it as private. They also reported that they do not want to discuss men's health issues for fear of being diagnosed with prostate cancer or that the thought of illness is scary. The data from the current study show that study participants are concerned about the negative perceptions of prostate cancer in their culture, including shame, stigma, and embarrassment, as deliberate reasons to avoid discussing men's health.

The cues to action include access to healthcare and availability of health insurance by the participants to seek advice from their doctors and follow through on their doctors' recommendations regarding prostate cancer. Based on the data of this study, African immigrant men living in DFW could be ready to seek preventive care services if they are more informed about the seriousness of prostate cancer and have access to healthcare services that provide education on prostate cancer and preventive programs.

Limitations of the Study

This study was limited to West African immigrant men between 45 and 75 years of age. The selection of the study participants was based on strict inclusion criteria of age, diagnoses, ethnicity, geographic location, country of origin, and the length of stay in the United States. The study participants had resided in DFW for at least 1 year before the beginning of the study. As far as I know, they had never been diagnosed with prostate cancer and had never participated in prostate cancer screening. The findings of this study cannot be generalized to all African immigrant men and cannot be an adequate reflection of the opinions of all immigrant men from all West African countries because some countries in West Africa were not represented in the study. This study was also limited by the interviewer bias, participant bias, and objectivity of the researcher**.** Because the participants were all male, they may not have felt comfortable discussing certain things related to prostate cancer**.** Interviewer bias can be a limitation because I grew up in an African culture and therefore had previous knowledge about the culture. Using the same study instrument for another study may provide some disparity in the results because participants with residency length less than 1 year were not eligible for the current study. The use of purposeful sampling to recruit study participants was a limitation of the study because immigrants from only some West African countries were included in the current study.

Recommendations

I recommend that future qualitative studies include immigrant men from all countries in West Africa. While the study findings confirmed those from similar studies conducted in Nigeria and Ghana, I recommend that future studies include immigrant men from other regions in Africa. This variation may increase the chances of participants providing different responses. Another recommendation would be to include educational status, marital status, and income level of study participants.

Implications for Social Change

The positive social change implications of the study are that the results could be used to increase awareness of prostate cancer and the positive outcomes associated with seeking early detection in African immigrant men living in DFW. After concluding the interviews, some study participants were interested in learning more about prostate cancer. More informed immigrant men would perhaps seek and receive services at local community health centers, where health insurance and socioeconomic status are not criteria for receiving basic healthcare services. The study revealed that participants' perceptions, behaviors, cultural beliefs, lack of/limited knowledge, lack of awareness, and socioeconomic status are the major contributing factors preventing African immigrant men from seeking prostate cancer preventive care. The participants' perceptions and cultural beliefs towards prostate cancer could be addressed by developing culturally appropriate educational programs and materials that could be distributed at community centers, churches, and mosques and on various West African country social organization websites. In order to improve awareness, the community leaders could be encouraged to organize workshops and invite healthcare providers who have been trained on cultural competency to educate the African immigrant men living in DFW on the availability of healthcare resources related to prostate cancer care.

On the policy level, local government and stakeholders alike could propose regulations and policies that could create easy access for African immigrant men to receive healthcare services regardless of their immigration status. Although legal status in the United States was not part of the inclusion or exclusion criteria for participation in this research, studies conducted in the past on immigrant access to healthcare revealed that immigration status in the United States was a factor determining the eligibility for access to affordable healthcare services (see Joseph, 2017; Omenka et al., 2020). Addressing this problem could result in an increase in African immigrant men participating in prostate cancer care services, thereby decreasing prostate cancer morbidity and mortality rates in this population.

Conclusion

This qualitative study was conducted to determine the factors that influence the seeking of prostate cancer preventive care among West African immigrant men in DFW. The study revealed that there are significant barriers that prevent West African immigrant men from seeking prostate cancer care. The study revealed that participants' perceptions, behaviors, cultural beliefs, lack of/limited knowledge, lack of awareness, and socioeconomic status are the major contributing factors that prevent West African immigrant men from seeking prostate cancer preventive care. As previously mentioned, one of the findings of the current study was that participants' cultural beliefs and individual perceptions impact their seeking prostate cancer preventive care. Among West African immigrants, their cultural beliefs influence with whom they discuss their health issues. The study participants reported that they view men's health as private and do not feel comfortable discussing men's health concerns like prostate cancer with anyone, not even their wives or healthcare professionals. A strategy that might mitigate this problem is to improve cultural competency among healthcare providers by organizing educational workshops that would increase cultural awareness. Abrishami (2018) noted that a patientcentered care approach based upon unique needs reduces health disparities among different patient populations and can be achieved through training culturally competent healthcare professionals who could find ways to make these immigrant men feel comfortable discussing their men’s health concerns as related to prostate cancer.

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Appendix: Letter of Authorization

Re: Prostate-specific antigen-based screening: controversy and guidelines - Ticket ID [#4590265]

OS

Open Research Support <orsupport@springernature.com>

Mon 4/27/2020 10:32 AM

- Millicent Seilenga

Dear Dr Seilenga,

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On Sun, 26 Apr at 10:07 AM , Millicent Seilenga <millicent.seilenga@waldenu.edu> wrote:

My name is Millicent Seilenga and I am a doctoral student at Walden University in the United States America. I am currently writing my proposal and I would like to use the table in your article. "Prostate-specific antigen-based screening: Controversy and guidelines" Eric H Kim and Gerald L Andriole*Kim and Andriole BMC Medicine (2015) 13:61 DOI 10.1186/s12916-015-0296-5.

I am kindly requesting permission to adapt this table in my doctoral study. Please let me know if it is acceptable to you. Thank you so much.

Sincerely

Millicent Seilenga