7-1-2010

A study of the relationship between prevention, risk and barriers related to prostate cancer among African-American men in Georgia

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ABSTRACT

SCHOOL OF SOCIAL WORK

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A STUDY OF THE RELATIONSHIP BETWEEN PREVENTION, RISK AND
BARRIERS RELATED TO PROSTATE CANCER AMONG
AFRICAN-AMERICAN MEN IN GEORGIA

Advisor: Robert Waymer, Ph.D.

Dissertation dated July 2010

This descriptive and explanatory research design examines the most significant barriers and risks to prostate cancer prevention among African-American men in Georgia. One hundred and seven (107) men in Georgia were conveniently selected in varying settings to participate in a seventeen-question survey based on risk and barriers to prostate cancer prevention. The participants answered yes or no questions about family history of prostate cancer, knowledge of prostate cancer prevention barriers, previous diagnosis of prostate cancer, and previous participation in prostate cancer screenings. Men rated barriers based on medical professional interaction, culturally appropriate literature, family involvement, spiritual/religious involvement, attitudes towards screenings, perceived susceptibility, and financial influences to their participation in
prostate cancer prevention. This document adds to the body of literature by not only offering barriers and risk that have been stated in literature, but further rating of the importance of these barriers to African-American men and evaluation of some risk factors and comparing them to the male’s participation in prevention measures. Findings of the study indicate that there is a statistically significant relationship between the participation in prostate cancer prevention and the barrier of medical professionals discussing prostate cancer prevention with participants. However, there is no statistically significant relationship between the participation in prostate cancer prevention and the other six barriers to prostate cancer prevention. Findings of the study further indicate that there is a significant relationship between the risk factors of family history of prostate cancer and age. Conversely, there is no statistically significant relationship between participation in prostate cancer prevention and educational level. Large percentages (55.7%) of the participants have not participated in prostate cancer prevention in the last year. Further research should be conducted on the relationship between barriers and risk factors and future plans to participate in prostate cancer prevention. Additional future research should conduct a pre-test, discussion on barriers and risk, and a post-test to determine the difference in barriers and risks relationships with participation in prostate cancer prevention measures.
A STUDY OF THE RELATIONSHIP BETWEEN PREVENTION, RISK AND BARRIERS RELATED TO PROSTATE CANCER AMONG AFRICAN-AMERICAN MEN IN GEORGIA

A DISSERTATION
SUBMITTED TO THE FACULTY OF CLARK ATLANTA UNIVERSITY
IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF DOCTOR OF PHILOSOPHY

BY
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ATLANTA, GEORGIA
JULY 2010
ACKNOWLEDGMENTS

It is a pleasure to thank those who made this dissertation possible such as my parents, Mr. and Mrs. Jackie McGriff who instilled excellence and guidance throughout my life. I acknowledge my sister, Jacqueline McGriff, who gave me moral support. I acknowledge Dr. Robert Waymer, chairman of my dissertation committee; Dr. Richard Lyle and Professor Hattie Mitchell who were dissertation committee members. I acknowledge Freda Reese and Angela Taylor for their wisdom and strength. Lastly, I offer my regards and blessings to all of those who supported me in every respect during the completion of my dissertation.
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CHAPTER I
INTRODUCTION

Healthcare disparities are multifaceted and comprise genetics, lifestyle, and environment, as well as access to treatment, education, and screening. Men possess higher health disparities than women. Prostate cancer occurs more commonly in African Americans and is the second leading cause of cancer death in African-American men (Arras-Boyd, Boyd & Gaehle, 2009).

Health disparity facets include beliefs about health conditions and diseases, uncertainties, concerns about sexuality, mistrust of the healthcare system, employing traditional family treatments and the reliance on family, community, and spiritual support. African-American men are impoverished, have fewer degrees, and are uninsured, or underinsured, which results in less access to health care and receiving less health information, routine prevention measures, early diagnosis, and effective treatment (Cowart, Brown & Biro, 2002). Socioeconomic factors also contribute to mortality among African-American men. Prostate cancer contributes to shortened life expectancy in the United States and many other Western countries (Albano et. al, 2007).

American men experience higher death rates than men of other cultures. They have the leading causes of death and die earlier than women (National Center for Health Statistics, 2004).
African-American men exhibit a link between delays in seeking health care and less favorable disease outcome (Walker et. al, 1995). In spite of an increased risk, African-American men are less probable than Caucasian men to be screened for prostate cancer (Abbott, Taylor, and Barber, 1998). African-American men are more likely to be diagnosed with prostate cancer than Caucasian men (American Academy of Family Physicians, 2006). Black men (African-American) are two point five (2.5) times more likely to die of prostate cancer than white men (Peters and Armstrong, 2005).

Data illustrates that there is an eighty-five percent (85%) larger probability of African-American men being diagnosed with prostate cancer. There is a one hundred and fourteen percent (114%) increased mortality rate of African Americans from prostate cancer compared to that of European-American men (Boehm, et. al, 1995).

It has been projected that by 2050 prostate cancer will be the second ubiquitous male cancer worldwide (Parkin, Bray, & Devesa, 2001). Prostate cancer symptoms become more prevalent during advanced stages, making early detection considerably necessary (Wilbur & Carver, 2008).

It has been suggested by researchers that prostate cancer is a less significant life-threatening cancer in men in the United States. However, African Americans have an increased likelihood of being diagnosed with cancer at a later stage and subsequently dying from cancer than other Americans (American Cancer Society, 2000).

Culturally, certain aspects have to be considered when targeting men of African descent and prostate cancer prevention. Other aspects that have affected the health of African-American men include lack of and limited insurance, disproportionate services,
non-culturally appropriate care, lower socioeconomic status, and biased provider practices. There are also social disparities that contributed to the increase in prostate cancer diagnoses and mortalities among African Americans. These things contribute to the increased statistics associated with African-American men and prostate cancer (Allen, Kennedy, Wilson-Glover and Gilligan, 2007).

There are barriers that have been identified that prevent African-American men from participating in prostate cancer prevention measures. African-American men in healthcare have a deepened history of oppression, discrimination, and racism that have led to an increase in diagnosis and mortality rates (Pierce, Chadiha, Vargas, Mosley, 2003).

Prostate cancer is the most frequently diagnosed cancer in the United States, accounting for thirty-three percent (33%) of all cancer cases among men. In the United States the number of new cases of prostate cancer was estimated at two hundred and thirty thousand one hundred and ten (230,110) and twenty-nine thousand and nine hundred (29,900) will die. It is anticipated that these numbers will continue to grow despite effective treatment regimens. Recent studies suggest genetics, diet, knowledge, and socioeconomic status as contributory factors; however, there appears to be more to it (American Cancer Society, 2004).

Statement of the Problem

African-American men have the world’s highest incidence of prostate cancer and more than twice the mortality rate of Caucasian men. African-American men are usually
diagnosed at a later stage and at a more advanced stage of the disease (Jemel, Thomas, Murray & Thun, 2002).

The identification of social barriers and risk that influence participation in prostate cancer prevention will be examined in this study. Prostate cancer is an increasingly diagnosed disease and the second cause of cancer-associated mortalities amongst men in the United States—thirty-two percent (32%) of new cases and thirteen percent (13%) of mortalities (Walker et. al, 1995).

Purpose of the Study

The purpose of the study is to examine the relationship between prostate cancer prevention and the routine social screening barriers and risk of African-American males in Georgia. The barriers that will be examined include (1) Interaction with the Medical Profession; (2) Education and Literature for Prostate Cancer Prevention not being tailored to this Population; (3) Importance/Lack of Family Involvement in Prevention Measures; (4) Importance/Lack of Religious Involvement in Prevention Measures; (5) Attitudes Towards Screening Measures; (6) Perceived Susceptibility; and (7) Financial Barriers to Prostate Cancer Screenings. The risks that will be examined in this study are Ethnicity, Age, Educational Level, and Family History of Prostate Cancer. A seventeen-question survey on demographics, risk, and barriers will be used in this study.
Research Questions

The research questions for the study are as follows:

1. Is there a relationship between prostate cancer prevention and the interaction with the medical profession?

2. Is there a relationship between prostate cancer prevention and the culturally appropriate prevention literature about prostate cancer?

3. Is there a relationship between prostate cancer prevention and the importance of the involvement of family and others in prevention measures?

4. Is there a relationship between prostate cancer prevention and the importance of religious involvement in prevention measures?

5. Is there a relationship between prostate cancer prevention and the attitudes of males towards prostate cancer screening measures?

6. Is there a relationship between prostate cancer prevention and the male’s perceived susceptibility of prostate cancer?

7. Is there a relationship between prostate cancer prevention and financial barriers to screening?

8. Is there a relationship between participation in prostate cancer prevention measures and the ethnicity risk factor of prostate cancer?

9. Is there a relationship between participation in prostate cancer prevention measures and the educational risk factor of prostate cancer?

10. Is there a relationship between participation in prostate cancer prevention measures and the age risk factor of prostate cancer?
11. Is there a relationship between participation in prostate cancer prevention measures and the family history of prostate cancer risk factor of prostate cancer?

Hypotheses

The null hypotheses for the study are as follows:

1. There is no statistically significant relationship between prostate cancer prevention and the interaction with the medical profession.

2. There is no statistically significant relationship between prostate cancer prevention and the culturally appropriate prevention literature about prostate cancer.

3. There is no statistically significant relationship between prostate cancer prevention and the involvement of family and others in prostate cancer prevention measures.

4. There is no statistically significant relationship between prostate cancer prevention and the importance of religious involvement in prevention measures.

5. There is no statistically significant relationship between prostate cancer prevention and the attitudes of males towards prostate cancer screening measures.

6. There is no statistically significant relationship between prostate cancer prevention and the male’s perceived susceptibility of prostate cancer.

7. There is no statistically significant relationship between prostate cancer prevention and financial barriers to screening.

8. There is no statistically significant relationship between participation in prostate cancer prevention measures and the ethnicity risk factor of prostate cancer.
9. There is no statistically significant relationship between participation in prostate cancer prevention measures and the educational risk factor of prostate cancer.

10. There is no statistically significant relationship between participation in prostate cancer prevention measures and the age risk factor of prostate cancer.

11. There is no statistically significant relationship between participation in prostate cancer prevention measures and the family history of prostate cancer risk factor of prostate cancer.

Significance of the Study

The principal mission of the social work profession is to enhance human well-being and help meet the essential human needs of all people (National Association of Social Work (NASW) Code of Ethics, 2008). This study examines the relationship between prevention, risk, and barriers related to prostate cancer among African-American men. These barriers and risk to prostate cancer prevention can have a significant affect on the family, economic, and health systems of African-American men, to name a few.

The National Association of Social Work (2008) states African-American men are more likely to suffer from chronic health problems than other races. Chronic health problems among African-American men have been attributed to relationships with medical professionals, attitudes towards screenings, healthcare systems, and treatment, ethnic factors, and socio-economic status. These and other barriers and risk have increased the likelihood of African-American men being diagnosed with prostate cancer.
more frequently and at a more advanced stage than other races. This study is significant because it is designed to increase the body of literature and knowledge about prevention, risk and barriers to prostate cancer, in hopes of reducing the number of cases and diagnoses at advanced stages among African-American men.
CHAPTER II
REVIEW OF LITERATURE

This chapter is a review of the current literature related to this study. The intent is to develop a better understanding of how to promote more timely prostate cancer screenings of African-American men through acknowledgement of the pertinent risk and barriers according to African-American men in Georgia. This chapter is divided into five sections. The sections are an overview of Prostate Cancer and African-American males, Prostate Cancer Prevention, Prostate Cancer Risk, Prostate Cancer Barriers, and Theoretical Framework.

Prostate Cancer and African-American Males

Normal cells grow and divide in a controlled manner to produce a normal amount of cells needed to keep the body healthy. When the deoxyribonucleic acid (DNA) of a cell is destroyed or altered, mutations occur to the normal cell growth and division, which prevents cells from dying and new cells from forming accurately. This in turn increases cell productivity and the extra cells may take shape as a mass of tissue, a tumor (National Cancer Institute, 2009).
Prostate cancer forms in tissue of the prostate; this gland is in a male’s reproductive system underneath the bladder, but in front of the rectum (National Cancer Institute, 2009).

Cancer develops as cells that building blocks make up tissues that make up the body’s organs. The prostate is part of the male reproductive system located in front of the rectum, under the bladder, and surrounding the urethra. Some races, Asian and Hispanic, have a decreased risk of prostate cancer than other Caucasians (National Cancer Institute, 2009).

Ottawa (2002) states the prostate is a walnut-size gland of the male reproductive system, located in front of the rectum and just below the bladder, and it surrounds the uppermost portion of the urethra. The main purpose of the prostate is to produce fluid for semen, which transports sperm during male orgasm.

Prostate cancer is an assemblage of cells reproducing uncontrollably in the prostate that may attack and obliterate healthy tissues and organs. Early stage prostate cancer has no symptoms and symptoms that occur are comparable to those caused by benign conditions. Some symptoms include frequent and difficult urination, incomplete emptying of the bladder, blood in urine and semen, hip or back pain, intermittent or anemic urine stream (Ottawa, 2002).

An ordinary prostate is firm. Three out of four cases of prostate cancer are slow-growing and are relatively non-detrimental. When hard spots are located, the doctor may suspect cancer (American Academy of Family Physicians, 2006).
Cowart et al. (2004) deems prostate cancer as the second leading cause of cancer deaths amongst men in the United States. An increasing number of men are surviving five years beyond initial diagnosis, thus deeming them long-term survivors of prostate cancer (Ka’opua, Gotay, & Boehm, 2007).

Men have a seventeen percent lifetime risk of prostate cancer, but only a three percent risk of dying from the disease. The age-adjusted death rate for prostate cancer is 64.4 per 100,000 for African-American men in contrast with 26.6 per 100,000 for Caucasian men (Wilbur et al., 2008).

About 218,890 new prostate cancer diagnoses were expected in the United States during 2007. Twenty seven thousand and fifty men are expected to die from the disease (Jemal, 2007).

There were 4700 cases of prostate cancer in Georgia in 2008. Seven hundred thirty deaths were associated with prostate cancer in Georgia in 2008 (American Cancer Society, 2008).

The American Cancer Society (2004) states 83% of all cases are diagnosed early in the disease process, when treatment outcomes are likely to be more successful. The survival rate for those diagnosed with localized tumors is 100%. African-American men have the highest cancer death rate among all racial or ethnic groups in the United States (American Cancer Society, 2008).

The American Cancer Society (2006) states that cancer incidence rates for certain sites from 1999 to 2003 in the United States per 100,000 is 471.3. The prostate cancer rate from 1999 to 2003 in the United States was 170.3 per 100,000. The prostate cancer
rate for Georgia from 1999 to 2003 is 166.4 per 100,000. The mortality rate from prostate cancer in the U.S. is 28.5 per 100,000 and 34.4 per 100,000 in Georgia. The number of cases of prostate cancer in Georgia for all races is 24,826; the number of cases among Caucasians is 17,096 and the number of cases among African Americans is 7,406. The prostate cancer rates in Georgia per 100,000 for all races are 166.4 among Caucasians 144.7 and among African Americans 260.6. African-American men have the world’s highest incidence of prostate cancer and more than twice the mortality rate of Caucasian men.

African-American men are usually diagnosed at a later stage and at a more advanced stage of the disease (Jemal, Thomas, Murray, & Thun, 2002). African Americans are typically younger when diagnosed with prostate cancer. They also have a significantly higher clinical stage at diagnosis and have more symptoms of the disease when initially diagnosed (Merrill & Lyon, 2000).

The incidence rate of prostate cancer is 37 percent higher among African-American men. The death rate is three times higher for African-American men than for the general population (Margolis & Carter, 1996).

Data indicates an 85% greater likelihood of African-American men being diagnosed with prostate cancer. There is 114% greater chance of African-American men dying from prostate cancer than for European American men (Boehm, et. al, 1995).

Prostate cancer accounts for 29% of all new cancer cases among men in Georgia. There is 20% increased probability that African-American men will be diagnosed with
cancer than Caucasian men. African-American men rates around 663 versus the rate of 551 per 100,000 men among Caucasian men. Prostate cancer incidence rates among African-American men is 76% higher than there Caucasian counterparts in Georgia (Georgia Department of Human Services, 2006).

With a disparity of prostate cancer among African-American men being 1.6 time more likely to be diagnosed with prostate cancer and 2.4 times more likely to die from prostate cancer than Caucasian American men. African-American men are having a higher prevalence of being diagnosed when prostate cancer is in the advanced stage. Mortality rates for prostate cancer among African-American men climaxed in the 1990’s but have been decreasing since then, even though at a slower rate of decline than for Caucasian men (Arras-Boyd, Boyd, & Gaehle, 2009).

Powell (1997) explored the disparity between African-American men and Caucasian men that may elucidate the unduly high mortality among African-American men and their increased diagnoses of advanced stages of prostate cancer. The mortality rate from prostate cancer is two to three times greater among African-American men than American-Caucasian men between the ages of 50 and 70. African-American men have an increased chance of being diagnosed with an advanced prostate cancer tumor than their American Caucasian counterparts. The noted reasons in this study are due to the study of prostate cancer in African-American men, the structure of prostate cancer, scientific, biologic, and environmental factors, and barriers to health care.
Cancer diagnoses increase as men age and is atypical under age fifty. African-Americans have an increased chance of diagnosis of prostate cancer at a younger age (Reis-Starr et al., 1998).

Prostate Cancer Prevention

This section is a review of the current literature related to prostate cancer prevention. The intent is to develop a better understanding of measures used to prevent prostate cancer among African-American men. This section is an overview of Prostate Cancer Prevention that examines prevention, screenings in general, prostate specific antigen (PSA) test, digital rectal examination (DRE), and treatment measures. Preventative health care is participating in activities with an aim of preventing a disease (Burns, 1992).

Cancer prevention attempts to decrease the occurrences and mortality rates of cancer. Prevention of cancer will reduce the new cases of cancer in a group or population, thus lowering the case of deaths caused by cancer. Avoiding risk factors and increasing protective factors may help prevent cancer (National Cancer Institute, 2008).

The DRE and PSA tests have the ability to detect prostate deficiencies; however, these screenings do not determine if the problem is cancer or a less serious condition. Prostate Specific Antigen is developed in the prostate. The blood test for prostate-specific antigen (PSA) is lab checks of the patient’s level of PSA in their blood. The digital rectal exam (DRE) is when a lubricated, gloved finger is inserted into the rectum
and feels the prostate through the rectal wall, to check for hard or lumpy areas (National Cancer Institute, 2008).

A screening is an examination for cancer before it exhibits any warning signs (American Academy of Family Physicians, 2006). Screenings are defined as effective early detection of a disease in an asymptomatic person (Edward, 2004).

There is controversy around the risk to benefit of prostate cancer screening. The debate examines which men should be screened for prostate cancer, the most appropriate screening to detect prostate cancer, and the implication associated with the interpretation of results (Arras-Boyd, Boyd, & Gaehle, 2009).

The merits of prostate cancer screening have been debated; however, there is consensus that the population at greater risk, African-American men, should be screened. Family history of prostate cancer is significantly associated with participation in prostate cancer screening, as well as age, race, marital status, prostate cancer symptomology, previous prostate cancer screening and educational interventions (Reis-Starr et al., 1998).

Screenings are designed to detect clinically significant prostate cancer at a stage when intervention reduces morbidity and mortality. The merits and methods of screening continue to be debated. An ideal screening test is cost-effective, easily administered, and has a high sensitivity and specificity. The PSA and DRE tests fulfill these criteria. Apprehension to the exam is around an abnormal test that leads to a biopsy of the prostate gland as the next step (Wilbur et al., 2008).

PSA and DRE screenings are best used in conjunction with each other. African-American men should be tested for prostate starting at age 40 and above. Prostate exams
can be uncomfortable or embarrassing and no one enjoys it. Prostate exams are important for your health and better than the alternative, advanced untreated prostate disease, which is much more difficult to treat (Ottawa, 2002).

Plowden (2006) states while prostate cancer screening recommendations vary, experts agree that an individual should be provided with information and allowed to make a decision. Social factors influencing a decision to participate in prostate cancer screening among urban African-American men age 40 and over were explored. The men in this study expressed an interest in participating in prostate cancer prevention strategies that were culturally appropriate.

Prostate specific antigen (PSA) blood tests is an indicator, rather than a definite diagnosis. Normal PSA level for men up to age 60 yrs old is 0-4 ng/ml, for men in their 70's normal levels are up to 6.5 ng/ml; if a male’s level is 6.5-10 ng/ml there may be concern with their prostate, and level of 10 ng/ml or greater usually indicates cancer. Digital rectal examination may identify an irregular prostate gland, which is may indicate a five-fold increased risk of cancer at time of screening. The DRE is not as accurate (Edwards, 2004).

PSA, a glycoprotein excreted by normal and neoplastic prostate tissue, was originally developed to measure the extent of prostate cancer at diagnosis and to monitor for recurrence. Men with PSA values greater than 10 ng per mL should be referred immediately. Elevated PSA values other than prostate cancer are due to acute urinary retention, benign prostatic hyperplasia, DRE, ejaculation, perineal trauma, prostate biopsy, prostate surgery, and prostatitis (Wilbur et al., 2008).
False positive tests results occur in about 70 percent of men with an abnormal test result, that do not result in cancer. False negative test results occur in about 20 percent of men with normal test results that have cancer (Wilbur et al., 2008).

The PSA meets the formerly mentioned criteria for an ideal prevention test. PSA detects prostate cancers that would not have been normally detected (Wilbur et al., 2008).

Sandler & DeSilvio (2003) believes that patients with slowly increasing level of PSA, a doubling time of less than two years, are at minimal risk of prostate cancer specific mortality. Patients with a rapidly increasing level of PSA, a short doubling time of greater than 6 months, often develop symptomatic metastatic disease.

PSA values after men were diagnosed with prostate cancer demonstrate that up to 38% of prostate cancers occur in men with PSA values less than ng per mL. Follow-up decisions become more difficult with a slightly elevated PSA value because the elevation may not be caused by cancer. About 70% of men with PSA values greater than 4 ng per mL do not have cancer (Mistry & Cable, 2003).

Some laboratories use age or race specific reference ranges for PSA. The traditional cutoff of greater than 4 ng per mL is the most widely used and recommended cutoff for screening (US Preventative Services Task Force, 2008).

Digital rectal examination is the only method that allows a physician to physically examine the prostate gland. Only part of the gland can be palpated, the tumors can be missed easily (Wilbur et al., 2008).

An abnormal DRE is the examination of an enlarged, asymmetric, nodular, or tender prostate. Firm nodule, generalized nodularity, and asymmetry are more
disturbing. Symmetric enlargement of the prostate is common in aging men. The test interpretation is ultimately based on the physician’s impression, which correlates to a poor inter-rater reliability. Despite the attendant morbidity and cost, seventy-two to eighty-two percent of patients who undergo biopsy based on DRE findings will not have prostate cancer (Wilbur et al., 2008).

Ross, Berkowitz, & Ekwueme (2008) provides evidence that prostate cancer deaths are reduced by screening for elevated prostate-specific antigen (PSA), coupled with early diagnosis, has become more common in the past decade. Treatment is insufficient to advocate routine screening for prostate cancer. The study examined characteristics that might influence testing and compared test use between men ages 40 to 49 and 50 to 79 years. It examined 7,669 participants with no history of prostate cancer in the 2005 National Health Interview Survey.

Among men who reported PSA testing results, an estimated 16% of 40- to 49-year-old men and 49% of 50- to 79-year-old men had a PSA test in the past 2 years. Among men ages 40 to 49 years, non-Hispanic African-American men were more likely to have had a PSA test than non-Caucasian men. There was no identified significant difference by race/ethnicity in men ages 50 to 79 years (Ross, Berkowitz, & Ekwueme, 2008).

Higher education, higher poverty threshold, usual source of medical care, family history of prostate cancer, and comorbid conditions were associated with increased PSA test use in both age groups. Men ages 50 to 79 years born in the United States, who were married, had private or military health insurance, and had been diagnosed with another cancer type were more likely to be tested. Findings from the multivariate analyses
indicated drastically higher PSA test use among younger non-Hispanic African-American men than among non-Hispanic Caucasian men. The findings suggest that healthcare providers are probably conveying the information on the increased risk of prostate cancer among African-American men (Ross, Berkowitz, & Ekwueme, 2008).

Lim & Sherin (2008) states prostate cancer is the principal cancer in U.S. men, and the third leading cause of cancer deaths. The principal screening tests for the detection of prostate cancer include digital rectal examination (DRE) and the measurement of serum tumor marker, prostate-specific antigen (PSA). There are risks and benefits associated with prostate cancer screening. This study reviewed the efficacy of DRE and PSA for prostate cancer screening found in the medical literature prior to July 2007.

PSA screening tests used in clinical practice include a PSA cutoff of 4 ng/ml, age-specific PSA, PSA velocity, PSA density, and percent free PSA. Prostate cancer screenings are used to detect early disease and offer the potential to decrease morbidity and mortality. Prostate cancer screening benefits remain unproven and results are pending ongoing trials. There is no convincing evidence that early screening, detection, and treatment improves mortality at this time (Lim & Sherin, 2008).

Limitations to prostate cancer screening include prospective adverse health effects associated with false positive and negative results and treatment side effects. There is insufficient evidence to propose routine population prostate cancer screenings with DRE or PSA. Physicians assisting men, particularly African-American men and those with positive family history should provide information about probable benefits and risks of
prostate cancer screening and limitations to current screenings, to maximize informed decision-making (Lim & Sherin, 2008).

Stroud, Ross, & Rose (2006) believe that clinical guidelines for using the prostate-specific antigen (PSA) test tools vary among the population. The study qualitatively explores the prostate cancer screening practices among African-American primary care physicians. Eight telephone focus groups were conducted with forty-one African-American primary care physicians from twenty-two states. The five major topic areas comparative to providers screening practices include use of serum PSA and digital rectal examination (DRE), counseling routine, factors influencing screening practices, familiarity with clinical guidelines, and use of educational materials.

Ninety-five percent of the physicians routinely recommended and offered prostate cancer screening to their patients. Studies reveal that the universally defined prostate cancer screenings consist of both a PSA test and a DRE. The majority of physicians reported offering the PSA test to asymptomatic, non-African-American men beginning around age 50. African-American men or men with a family history of prostate cancer were offered the PSA test 5-10 years earlier than the norm. The patterns for prostate cancer screening among African-American primary care physicians do not reflect both sides of the PSA screening debates. Physicians concerned about patients being diagnosed with prostate cancer is more important than concerns about the potential limitations of screening. The side effects of treatment did not present a concern among participants. The physicians advocated more to use of PSA testing with asymptomatic men, despite their race or ethnicity (Stroud, Ross, & Rose, 2006).
Treatment side effects are stronger predictors of psychological distress, regardless of years since diagnosis. An estimated 10% to 20% of survivors are at risk of clinically significant levels of depression and other types of psychological distress (Zabora, BrintzenhofeSzoc, Curbow, Hooker, & Piantadosi, 2001).

Many men fear screening for prostate cancer due to a possibility of having to undergo treatment. Treatment for prostate cancer depends on the extent of disease and may be comprised of surgery, radiation, hormone therapy, and chemotherapy. Radical prostatectomy is the most common treatment for localized prostate cancer and exemplifies the most significant evidence of a decrease in mortality rates. Some prefer watchful waiting as a viable option, particularly men who are elderly and have localized, low-grade cancers (Wilbur et al., 2008).

Therapy for prostate cancer is not placid and may result in urinary incontinence, sexual dysfunction, or bowel dysfunction. When prostate cancer leads to metastases, treatment may not be effective. Complications in treatment depend on the form of treatment, age, and the presence of other diseases (Wilbur et al., 2008).

Prostatectomy is a surgical procedure in which the prostate is removed. Brachytherapy is internal radiation therapy that permanently places radioactive seeds inside the prostate. Hormone therapy uses medication or surgical removal of the testicles to prevent male hormones from stimulating further growth of prostate cancer. Cryosurgery destroys diseased tissue of the prostate with a freezing technique (Ottawa, 2002).
Plowden (1999) investigated the health beliefs and practices of African-American men regarding prostate cancer screening. A descriptive non-experimental design was used with a self-administered questionnaire to identify participants' knowledge level, health beliefs, and practices related to the screening and early detection of prostate cancer in African-American men. Results indicate that most participants had a high level of prostate cancer knowledge, early detection and had prostate screening done on a regular basis.

Participants in this study believed that prostate cancer was not preventable but if contracted, treatment would be painful and impair sexual function. Other significant beliefs included: good health habits were important, most rated their health as good or excellent, and they rely on their faith to stay healthy. Findings of this study provide culturally appropriate information, which may contribute to developing prostate cancer prevention programs in African American communities (Plowden, 1999).

Prostate Cancer Risk

This section is a review of the current literature related to prostate cancer risk. The objective is to increase knowledge around African-American men’s risk of prostate cancer. This section is an overview of Prostate Cancer Risk that explores the prevalent risk of prostate cancer as age, race, family history, and education level.

Some risk factors to cancer include smoking, being overweight, and lack of exercise may help prevent certain cancers. Cancer protective factors such as quitting smoking,
eating a healthy diet, and exercising may also help prevent some cancers (National Cancer Institute, 2008).

The risk of being diagnosed with prostate cancer is one in fourteen, although prostate cancer is rare in men under 50 years old. Family history, exposure to radioactive substance, race, age and testosterone replacement therapy, are all risks to prostate cancer. True hereditary prostate cancer occurs in a very small number of men, and tends to develop at a very early age, i.e. under 55 years of age (Edwards, 2004).

A study by Verhage & Kiempen (2003) states that age, race, and family history are the only well-established risk factors for the disease. Studies show that first-degree relatives of prostate cancer patients have a two to threefold increased risk of prostate cancer. Familial risk factors have been observed in Asian-Americans, Caucasians, and African Americans.

Other risks to prostate cancer include age 50 yrs+, race, African American, diet, high fat/low fruit and vegetable, and heredity. A father or brother with prostate cancer doubles a man’s risk (Cowart et al., 2004).

The risk factors of prostate cancer are age, family history, race, prostate changes, and genome changes. In the United States, men diagnosed with prostate cancer are normally over the age of 65; rarely is it a man under the age of 45. Prostate cancer is more widespread among African-American men than Caucasians or Hispanic/Latino men and less frequently diagnosed among Asian/Pacific Islander and American Indian/Alaska Native men. Risks are higher if a man’s father, brother, or son had prostate cancer (The National Cancer Institute, 2008).
The estimated lifetime risk of being diagnosed with prostate cancer being one in five men. The identification of risk factors, including age, African-American ancestry, family history, and possibly diet and environmental factors, has allowed health care professionals the opportunity to identify, screen, and study men at the greatest risk of developing prostate cancer (Grumet & Bruner, 2000).

Prostate cancer diagnosis among African Americans is 66% greater than among European American men. For African Americans with a family history of hereditary prostate cancer the increased risk of diagnosis is even greater. This population should be a prime target for chemoprevention strategies. In addition to the higher incidence of prostate cancer among African Americans compared to other populations, the mortality of prostate cancer among this high-risk population is significantly greater than one hundred percent compared to other populations. These findings further demonstrate the need for chemoprevention in this target population (Powell & Meyskens, 2001).

Autopsy studies and clinical findings support the argument that prostate cancer exhibits a more aggressive biological behavior and perhaps more rapid growth among African Americans compared with European Americans. It has been hypothesized that genetic and epigenetic factors may be responsible for a more rapid growth rate among African Americans compared with other populations (Powell & Meyskens, 2001).

Accumulating evidence indicates that a diet high in fat content is closely associated with prostate cancer progression. Investigators have reported that fat intake and percentage of energy from fat were highest in African Americans, followed by European Americans, Japanese Americans, and Chinese Americans. African Americans are an
important target population to include in chemoprevention trials that include dietary factors as preventive agents (Powell & Meyskens, 2001).

Weinrich, Vijayakumar, Powell, Priest, Hamner, McCloud, & Pettaway (2007) measured the knowledge of hereditary prostate cancer in high-risk African-American men. This was a cross-sectional, correlation pilot study, of 79 African American men with hereditary of prostate cancer. Telephone interviews were used to evaluate their knowledge of hereditary prostate cancer. The knowledge of hereditary prostate cancer was low and the high percentage of incorrect responses on questions that measure genetic testing, prevention, and risk based on a positive family history highlights educational needs. This study identified a critical need to educate high-risk African-American men about hereditary prostate cancer.

Men consider family history as a significant risk factor. Heredity is described as one’s genetics or inherited element. The body of literature provides evidence of a positive correlation between family history and prostate cancer risk. The etiology may perhaps involve a multiplicity of mechanisms, for instance exposure to the same environmental or dietary risk factors, or one or more genes working together to increase the risk of prostate cancer (Reis-Starr et al., 1998).

The American Academy of Family Physicians (2006) studies reveal that African-American men have an increased probability of acquiring prostate cancer than white men. Men with a father or brother who has had prostate cancer are more likely to get it.

Walker et al. (1995) state there is a twofold increased risk among men who had a father or brother with cancer of the prostate. Research results demonstrate an increased
risk to six point one if both a first-degree and second-degree relative have a diagnosis of carcinoma of the prostate. Prostate cancer is biologically diverse in appearance and effect. Family history and genetic susceptibility possibly play a role in the racial differences in incidence rates of prostate cancer.

Zeeger et al. (2003) believes there is two point five fold probabilities in men who have a first-degree relative with prostate cancer. The risk is even greater if the relative previously diagnosed with prostate cancer is a brother rather than a father, if the affected relative is younger than 55 years, or if two or more first-degree relatives are affected.

According to Albano et al. (2007), numerous factors influence the association between education level and cancer death rate, including access to medical care associated with lack of health insurance, the prevalence of exposure to important cancer risk factors, such as cigarette smoking and obesity; and the likelihood of cancer screening utilization. African-American men with 12 years of education or less are more likely to be diagnosed with prostate cancer than those with 16 years of education or more. African-American men who completed 12 or fewer years of education had a prostate cancer death rate that was more than double that of black men with further schooling. Prostate cancer mortality rates in African-American men were higher than those among white men in all educational categories. Death cancer rates are generally higher among African Americans than among whites with similar levels of education.

Higher cancer mortalities among African Americans versus whites at comparable education levels probable reflect socioeconomic disparities in work, wealth, income, housing, overall standard of living, and access to medical care that are not fully captured
by the single measure of socioeconomic status. Associations between prostate cancer mortality and level of education suggest that variable factors associated with lower levels of education may play a significant role in the uniquely high mortality from prostate cancer among black men (Albano et. al, 2007).

Late stages of prostate cancer diagnoses among rural African Americans and metropolitan African Americans has been linked to the role of socioeconomic factors and access to health care. Studies suggest etiologic factors that include race as a surrogate for social and economic status. This limits identifying a person of color who has limited resources, lives in a substandard residential environment, works in a high-risk occupational setting, or is a single parent exposed to multiple risk factors psychological, physiological, or both. Higher mortality among African-American men also suggests the role of other factors in determining stages of cancer at diagnosis, such as delay in seeking health care, demographic variables, socioeconomic status, functional status, and social support (Walker et. al, 1995).

Men with cells called high-grade prostatic intraepithelial neoplasia (PIN) are possibly at an increased risk of prostate cancer, because these prostate cells appear atypical under a microscope. Researchers have found when specific regions on certain chromosomes and genetic are changed one or more region, the risk of prostate cancer may be increased. The risk increases with the number of genetic changes that are found as well as an elevated risk of prostate cancer when certain genes, such as BRCA1 and BRCA2, are altered (National Cancer Institute, 2008).
Vasectomies have been identified as potential risks for prostate cancer in some cases. Diet plays a part in prostate cancer. Men with a diagnosis of prostate cancer consume more dietary animal fat than men who have not been diagnosed with prostate cancer; therefore, a vegan lifestyle may lessen one’s risk of being diagnosed with prostate cancer. Prostate cancer has also been linked to a history of venereal disease, having multiple sexual partners, and some occupations, primarily farming and jobs involving exposure to cadmium (Walker et al., 1995).

Jones, Underwood, & Rivers (2007) states prostate cancer is the most commonly diagnosed cancer in men in the United States. It disproportionately affects African-American men when compared to other ethnic groups. African-American men are two to three times more likely to die of prostate cancer than white men.

The reasons for the disparity remain unclear, but several factors may be involved, such as age, race, nationality, nutrition, exercise, and family history of cancer. Detection of prostate cancer in high-risk African Americans is important but continues to be controversial. This article reviews the current issues and challenges regarding prostate cancer in African-American men. Healthcare professionals play a vital role in the health care and education of patients; therefore, they must be aware of the issues (Jones, Underwood, & Rivers, 2007).

Prostate Cancer Barriers

This section is an analysis of the current literature related to prostate cancer barriers. The intent is to enhance the awareness around African-American men’s barriers
Prostate cancer disparities have been deemed complex due to linkage to genetics, lifestyle, and environment. Access to treatment, education, and screening are other noted disparities. Lack of prostate cancer screenings among African-American males to lack of awareness and there are social-environmental factors (Arras-Boyd, Boyd, & Garhle, 2009).

Contributions to prostate cancer disparities among African Americans include lack of knowledge, screening, and access to health care (American Cancer Society, 2008). It is believed that African Americans experience racial discrimination in obtaining health care due to the color of their skin (Pierce et.al., 2003).

Participation in regular screening programs requires numerous sets of convoluted procedures that can be intricate for most persons to grasp or fit into their stress-filled daily lives and schedules. The challenges are intensified for the individual who has to cope with being African American, male, and aged, in addition to other issues such as lack of access to health care and racial insensitivity in the health care system (Boehm, et. al, 1995).
The ultimate decision regarding prostate cancer screening is often influenced by patient character. These character influences include apprehension about cancer, expectations about testing, and family history (Wilbur et al., 2008).

A study conducted by Blocker, Romocki, & Thomas (2006), examined the importance of culturally based prostate cancer prevention programs for African-American men through focus groups with the men and their spouses. The findings conclude cultural and gender-influenced beliefs associated with prostate cancer prevention. These influences are the importance of the black family and the positive influence of spouses/partners on promoting cancer screening and healthy behaviors. Barriers identified that related to the healthcare system include continued mistrust of the medical community and negative attitudes toward specific screening tests. Religious influences were also noted in this study to consist of the importance of spiritual beliefs and church support, the roles of faith and church leadership, and beliefs about God's will for good health.

A study by Robinson (1996) conducted a focus group discussion to assess knowledge, attitudes, and beliefs about prostate cancer screening and treatment, willingness to participate in screening, incentives, and barriers toward participating in prostate cancer screening. The middle socioeconomic participants expressed a greater motivation to participate in prostate screening. This motivation can be attributed to an increased knowledge about prostate cancer, screening, procedures, and access to health promotion actions. African-American men being less apprehensive regarding abnormal screening results, having exposure to more aggressive providers with respect to
screening, and receiving medical care in an environment that respects the consumer would increase screening participation, thus decreasing mortality rates.

McDougall (2004) completed a study in which African-American men participated in a screening initiative and completed the 22-item Barriers to Prostate Cancer Screening Checklist and 22-item Response to Barriers Checklist. This study determined the importance of planning a health screening in the community. The program’s implementers should evaluate both barriers and advantages to prostate cancer prevention programs before the implementation phase of the project. The barrier that was identified for not participating in prostate cancer prevention measures includes too many things going on in the participant’s life. The least ranked barrier was the lengths of time taken to obtain an appointment.

African-American men have the highest rate of incidence for prostate cancer in the world and are more likely to die from the disease than other ethnic groups. Routine screening for prostate cancer can lead to early detection of the disease, thereby reducing negative outcomes, but studies have shown that African-American men are less likely than Caucasian men to engage in screening practices. Lack of access to health care, socioeconomic status, inadequate knowledge, fear, patient-provider communication, distrust of the medical profession, and aversion to digital rectal exam have been identified as possible barriers to prostate cancer screening in African-American men (Haas & Sakr, 1997).
Reynolds (2008) explores causes of this striking disparity between prostate cancer incidence and mortality in African-American men and cites strategies used to improve prostate cancer screening rates among this population.

Wray, McClure, Vijaykumar, Smith, Ivy, Jupka, & Hess (2009) understands obstacles to and opportunities for improving prostate cancer communication among African-American men within their communities. Interviews were conducted with 19 community leaders and five focus groups with healthy men and survivors. Process evaluations of two outreach projects in which survivors spoke to African-American men about prostate cancer and screening was also conducted during the study.

The three levels of obstacles to prostate cancer screening and treatment that were identified. Individual-level obstacles was limited knowledge and fear of cancer. Socio-cultural barriers w distrust of the medical system, lack of a provider for routine and preventive care, reluctance to talk about cancer, and aversion to aspects of screening. Institutional deficits included the scarcity of educational efforts targeting prostate cancer. Survivors can be effective in building prostate cancer knowledge, promoting optimistic attitudes toward screening, and encouraging conversations about prostate cancer. Educational barriers included minimal information about screening risks and decision-making techniques (Wray et al., 2009).

The most potent prostate cancer intervention combines survivor-led prostate cancer education with mass media and institution-based outreach. An effective comprehensive programs shifts social norms that impedes conversation and foster fear, leading to informed decision-making and enhanced treatment outcomes (Wray et al., 2009).
The study by Odedina, Campbell, LaRose-Pierre, Scrivens, & Hill (2008) addressed the significant controversies about prostate cancer screening. This is the only methods documented to combat prostate cancer through early detection with an appropriate treatment. The study identifies personal factors influencing African-American men's participation in prostate cancer screening. Two cross-sectional surveys were mailed over one year to test the validity of the Attitude-Social Influence-Efficacy model to predicted prostate cancer screening. The participants were African-American men age forty and older. This study used a multiple linear regression and logistic regression analyses.

One-hundred-ninety-one African-American men participated in the first cross-sectional survey with sixty-five African-American men responding to the follow-up survey a year later. The participant's demographics include mostly African-American men from the United States, 50-59 years of age, with some college training, married, urban residents, with full-time employment status and a household income of $20,000-$39,000. The key to participation in prostate cancer screening were attitude, perceived behavioral control, past behavior and perceived susceptibility. Attitude was the primary barrier to screening behavior. Fostering appropriate prostate cancer detection activities was the most important factor identified in this study should be considered (Odedina, et al., 2008).

Prostate cancer mortality is significantly greater among African-Americans than among Caucasian men. Two hundred and seven African-American men within 6 months of diagnosis were surveyed about health attitudes and behavior. Two hundred and seven African American and three hundred and forty-eight Caucasian patients from the Rapid
Identification Cancer Registry were identified and surveyed. African-American men were younger, unmarried, and had lesser education, job status, and income than Caucasian men. African-American men had less access to medical care, poorer medical insurance coverage, more use of public clinics and emergency wards, less accessibility to primary care physician, less likely to participate in physician visits, and expressed less trust in physicians (Talcott, Spain, Clark, Carpenter, Do, Hamilton, Galanko, Jackman, & Godley, 2007).

African-American men acknowledged their greater risk of Prostate Cancer, accepted greater responsibility for their health, and accepted responsibility their delayed diagnosis. African-American men more often request prostate screening tests that diagnosed their cancers, which is different from routinely ordered screening tests for Caucasian men. With less prostate cancer education, the African-American participants were aware of their increased risk of cancer, the importance of treatment, and their responsibility for their health. Obstacles diagnosis and appropriate care include physician distrust, reduced access to care and continuity of medical care arising from their worse socioeconomic position (Talcott et al., 2007).

Ford, Vernon, Havstad, Thomas, & Davis (2006) examined the factors associated with perceptions of prostate cancer screening among African-American men age 55 years and older based on the items developed using the Preventive Health Model (PHM). The studies used two focus group to collect data using questions developed based on the conceptual framework of the PHM. Barriers that emerged from the focus groups related to prostate cancer screening include lack of knowledge regarding prostate cancer, fear of
cancer, confusion about prostate cancer screening and prostate cancer diagnostic tests, encouragement by others as motivation for cancer screening participation, intergenerational transfer of health information, lack of health insurance coverage as a barrier to prostate cancer screening and treatment, and limited availability of screening clinic hours during nonworking hours.

Jones & Wenzel (2005) states, prostate cancer affects African-American males within the United States in a disproportionate number compared to white males. African-American males are 1.7 times more likely to develop and 2-3 times more likely to die from prostate cancer than white males. Numerous reasons for this disparity exist, including low socioeconomic status, distrust, conflicting cultural beliefs, and past health-care experiences. Controversies surrounding this topic and perhaps contributing to the disparity include cancer-screening recommendations, cancer-related myths, and potential prevention modalities.

Research must focus on cancer-related issues among African Americans to increase the awareness and knowledge of health-care professionals and the public. This awareness will aid in decreasing morbidity and mortality rates among African Americans and other minority populations, particularly, among the vulnerable at-risk minority populations. This article focuses on current issues related to African-American men and prostate health (Jones & Wenzel, 2005).

The purpose of this study was to assess African-American males' knowledge, attitudes, and beliefs regarding prostate cancer and early detection methods. This was a cross-sectional study conducted with 67 (N = 67) African-American men to assess their
knowledge, attitudes, and beliefs regarding prostate cancer and prostate cancer early detection methods. Data collection occurred at several urban churches in the Washington, D.C., metropolitan area (Clarke-Tasker & Dutta, 2005).

This study suggest that 91% of the men did not consider prostate cancer screening embarrassing or painful. Eighty-six point five percent believe that physicians would propose that a Digital Rectal Exam (DRE) is necessary along with a Prostate Specific Antigen (PSA) tests. These two tests are effective early prostate cancer prevention screenings. Thirty percent of the men would not want to know if they had prostate cancer and 53.2% did not believe they were likely to get prostate cancer in the future. The implications and results of this study support the need for ongoing prostate education and screening programs for African-American men (Clarke-Tasker & Dutta, 2005).


When conducting effective cancer prevention research in the African American community, collaboration with churches and recruiting African-American men using a culturally competent approach that incorporates the values of the community is essential. An implication for addressing specific barriers to recruitment and building partnerships in health promotion research was determined (Abernethy et al., 2005).
This study was conducted to identify the factors perceived by African-American men as influencing their behavior relative to prostate cancer screening. A total of 49 African-American men, age 40 and above, participated in 10 focus group discussions in Florida. Factors identified include impediments to prostate cancer screening; positive outcome beliefs associated with prostate cancer screening; social influence; negative outcome beliefs associated with prostate cancer screening and resources or opportunities that facilitate prostate cancer screening. Other factors include prostate cancer knowledge; perceived susceptibility to prostate cancer; perceived threat of prostate cancer; perceived severity of prostate cancer; positive health activities; illness experience; and prostate cancer screening intervention message concept, message source, and message channel are additional factors that influence screening participation (Odedina, Scrivens, Emanuel, LaRose-Pierre, Brown, & Nash, 2004).

This study offers an excellent guide for designing an effective, culturally sensitive, and relevant prostate cancer prevention interventions. These interventions will increase African-American men's participation in prostate cancer screening (Odedina et al., 2004).

A study conducted by Weinrich, Weinrich, Priest, & Fodi (2003), was designed to determine the reasons why men fail to participate in a free prostate cancer screening. A survey and secondary analyses using correlation design in a community sites in the Southeastern United States was used. The two hundred and forty one participants were age 40-68 years, African American, married, and earning between $9,601 and $25,020 per year. The study surveyed men who did not participate in initial prostate cancer screening after educational program. This self-reported research design solicited reasons
men decided not to participate in a free screening following a prostate cancer educational program, and predictors for subsequent participation in screening.

Self-reported reason for not participating in a free prostate cancer screening opportunity was time conflicts and a significant relationship between income and physician problems existed among the men who did not participate. Time conflict was the most frequently reported reason men failed to participate, however, when provided a follow-up phone call and vouchers for reimbursement of the cost associated with screening, increased participation. Implications for healthcare providers were illustrated in the significant relationship between income and physician problems as reasons for not participating in screenings (Weinrich et al., 2003).

Lambert, Fearing, Bell, & Newton (2002) descriptive comparative study investigated the prostate screening health beliefs and practices of men over the age of 45. A self-administered questionnaire was completed pre-informational session. This information session included a question and answer period and handout materials from the American Cancer Society on risk factors, screening tests, and early detection of prostate cancer. The study results showed that there were no significant differences between African American and Caucasian men on age, self-reported health status and the use of a private physician for screenings. Both ethnic groups had similar history of blood relatives with cancer and concern about development of illness.

Caucasian men had an increased number of digital rectal exam (DRE) while African-American males had the prostate-specific antigen (PSA) completed more frequently. The findings indicated that 26% of the entire sample revealed they had never
had the screening test done. Ethnical comparisons concluded a significant difference between African Americans belief that faith contributes to health and Caucasian men belief that they were likely to develop prostate cancer (Lambert et al., 2002).

Results of this study indicate that there are still a significant number of men reporting never having had a PSA test done, even though 75% knew that the test is recommended for early detection of prostate cancer. Continued efforts to educate and increase screening are still needed among both African American and Caucasian men (Lambert et al., 2002).

This study applied the Health Belief Model in determining African-American male's knowledge, attitudes, and perceptions of prostate cancer and early detection methods. The ultimate value of the information assessed from this population was used to design specific theory-based, culturally relevant interventions, which may decrease mortality in this high-risk population. Two focus groups were conducted with African-American men whose ages ranged from 38-80 years. After consenting to audiotaping, participants completed a survey questionnaire and viewed a culturally appropriate video on prostate cancer (Clarke-Tasker, & Wade, 2002).

Results reveal that the men believed in the importance of prostate cancer early detection. Study participants felt physicians did not adequately screen or suggest that they be screened for prostate cancer. Men between 40 and 50 years of age expressed concern about possible changes in their sex life if diagnosed with prostate cancer. Despite having limited knowledge of prostate cancer, participants considered a digital
rectal examination to be embarrassing and uncomfortable. Participants were not opposed to having the procedure done (Clarke-Tasker & Wade, 2002).

Boyd, Weinrich, Weinrich, & Norton (2001) purpose for this correlational study was to measure structural obstacles to a free prostate cancer screening. The sample consisted of five hundred and forty-nine men, 69% who were African-American. The male participants of this study attended a prostate cancer educational program and were offered free prostate cancer screening at their physician of choice. Obstacles that were predictors in screening participation were making an appointment, planning for an appointment, and reminders of prostate cancer screening. Health education, race and marital status were also predictors of screening participation.

The purpose of this study was to investigate the health beliefs and practices of African-American men regarding prostate cancer screening. A descriptive non-experimental design was used with a self-administered questionnaire to identify participants' knowledge level, health beliefs, and practices related to the screening and early detection of prostate cancer in African-American men. Results indicate that most participants had a high level of prostate cancer knowledge, early detection and had prostate screening done on a regular basis (Fearing, Bell, Newton, & Lambert, 2000).

The study participants believed prostate cancer is unpreventable and if contracted, treatment would be painful and impair sexual function. Other significant beliefs included good health habits were important, most rated their health as good or excellent, and they rely on their faith to stay healthy. Findings of this study provide culturally appropriate
information, which may contribute to developing prostate cancer prevention programs in African American communities (Fearing et al., 2000).

Nivens, Herman, Pweinrich, & Weinrich (2001) developed and tested the cues to participation in prostate cancer screening theory, which exposures to information from certain sources cues or triggers screening. This descriptive correlational was conducted in 11 counties of a southeastern state. This convenience sampling measured one thousand eight hundred and sixty-seven men at risk for prostate cancer with recent exposure to prostate cancer information.

Findings suggest that several major cues to participation theory were supported including: exposure to prostate cancer information, hearing about prostate cancer from a healthcare provider, including men's demographic characteristics when providing information about prostate cancer. Hearing about prostate cancer from family and friends was not significantly related to screening behavior (Nivens et al., 2001).

Agho & Lewis (2001) states while digital rectal examination, prostate-specific antigen, and transrectal ultrasound have been identified as effective means of early detection of prostate cancer, African-American men tend to underuse these services as compared to white men. Using a nonrandom sample of 108 African-American men, the authors conducted an exploratory investigation of the effects of education, income, age, and health insurance coverage on actual and perceived knowledge of prostate cancer. The extent to which the use of prostate cancer screening services may be attributed to actual and perceived knowledge of prostate cancer was also explored.
Respondents demonstrated a poor knowledge of prostate cancer and less than 40% reported having had prostate cancer screening as part of their annual physical examination. The results of the study also revealed that there was a moderately strong correlation between actual and perceived knowledge of prostate cancer, use of prostate cancer screening service was positively associated with actual and perceived knowledge of the disease. Actual knowledge of prostate cancer was negatively correlated with education, age, and income. Actual and perceived knowledge of prostate cancer were both correlated with having health insurance coverage (Agho & Lewis, 2001).

This study was conducted to identify factors associated with intention to be tested for prostate cancer risk among African-American men. Participants in this study included African-American men, previous patients at the University Health Service at the University of Chicago, were 40 to 70 years of age, and did not have a personal history of prostate cancer. This univariate and multivariate analyses, collected baseline telephone survey data on four hundred and thirteen men regarding their intent to have a blood test to assess prostate cancer risk. Eighty-six percent of the men said that they intended to be tested (Myers, Hyslop, Jennings-Dozier, Wolf, Burgh, Diehl, Lerman, & Chodak, 2000).

Intention to be tested for prostate cancer risk was high among men in the study. Implications suggest that past screening, perceived susceptibility, and beliefs related to early detection might influence receptivity to genetic testing for prostate cancer risk (Myers et al., 2000).

It is well known that African-American men are more likely to be diagnosed with metastatic prostate cancer than Caucasian men are. Racial variation in the use of prostate
cancer early detection modalities (digital rectal examination (DRE) and prostate-specific antigen (PSA) testing has been suggested. Several factors may help to explain the reported low levels of DRE and PSA test utilization among African-American men, including background socio-demographic characteristics, medical history, and cognitive and psychosocial perceptions. The study reviewed the impact of these characteristics on prostate cancer early detection examination utilization (Myers, 1999).

Findings suggest race-related differences in cognitive and psychosocial factors are present. Preliminary education for informed decision-making and facilitate informed decision-making is suggested as an approach to help minimize racial differences in cognitive and psychosocial factors that influence the use of prostate cancer early detection modalities (Myers, 1999).

Interaction with the Medical Profession

The American Academy of Family Physicians (2000) published the need for patients to be counseled by their physicians about the risks and potential benefits of screening for prostate cancer. African-American men convey a considerable frustration with the lack of information and support they are afforded from their physician when making decisions about prostate cancer (Hagen, Grant-Kalischuk, & Sanders, 2007). Many African-American males distrust the healthcare system, have limited access to it, and/or have fears and concerns about prostate cancer and male sexuality (Cowart, 2004). Other African-American men do not have access to their own primary care physicians (Reis-Starr et al., 1998).
When African-American men have insurance, locating culturally appropriate providers can be a challenge. Providers that operate under unconscious preconceptions of African-American men interact with these patients based upon preconceived notions that further alienate them, and make notions based on their appearance, and instinctively use bias when evaluating symptoms and making treatment decisions. It has been stated in literature that the inequitable death rate of African-American men with cancer is due to lack of access to care that would incorporate preventative measures. The lack of access to care prevents education around healthy life style changes, thus African-American men are less likely to adopt healthier behaviors (Rich, 2000).

Barriers to attaining accurate and mutual decision making about prostate cancer include lack of time during the office visit, physician absentmindedness, and lack of patient knowledge of health literacy and education around prostate cancer. Time is a vital factor limiting the dialogue about screening. Brief bit of precise information to assist and support the patient in making the necessary decisions about prostate cancer is needed. The discussion about prostate cancer screening has too many nuances to be explained efficient, in a patient centered manner, during a routine preventative physicians visit. Apposite decision making about PSA testing rarely occurs during routine visits. Physician should stress shared decision making, aid in answering the patient’s questions, and guide men toward accurate and accessible information on prostate cancer (Wilbur et al., 2008).

This study examined five themes that critical affects African-American men's participation in prostate cancer screenings. The themes identified include lack of
knowledge, communication, social support, quality of care, and sexuality. African-American men experience a sense of disconnectedness from the healthcare system; thus, equate their nonparticipation in prostate cancer early detection activities to this disconnectedness. Lack of discussion about the decision to participate in prostate cancer screen and lack of culturally appropriate dialogue with healthcare providers has engendered distrust, created fear, promoted disconnect, and augmented the probability of nonparticipation in prostate cancer screenings amongst African-American men (Woods, 2004).

Barriers to prostate cancer screening discussions with physicians have been identified as patient comorbidity, limited education/health literacy, prior refusal of care, physician forgetfulness, acute-care visits, and lack of time. It has been noted that prostate cancer screening discussions are usually facilitated by patients requesting a screening, patients educated about prostate cancer, patients with a family history of prostate cancer, the African American race, visits for routine physicals, review of previous prostate cancer screening results, extra time during encounters, and reminder systems. Prostate cancer screening dialogues sometimes does not occur (Guerra, Jacobs, Holmes, & Shea, 2007).

Barriers to prostate cancer dialogue are insufficient time for health maintenance, physician absentmindedness, and patient personality. The researcher proposes future research that uses educational and decision support interventions to involve more patients in prostate cancer screening decisions (Guerra et al., 2007).

Ross, Powe, Taylor, & Howard (2008) states prostate cancer is the second leading cancer killer in men. Men in general and African-American men in particular face
crucial decisions regarding prostate cancer screening and perhaps treatment for this disease. Major health organizations agree that men should discuss prostate cancer screening with their physicians or other health care professionals. The purpose of the study was to examine socio-demographic and other correlates of physician-patient discussions regarding the advantages and disadvantages of the prostate-specific antigen (PSA) test among African-American men aged 40 or older.

A majority of African-American men reported having discussed the advantages and disadvantages of prostate cancer screening and/or testing with their physicians before ordering it. Physician-patient discussions about the PSA test were associated with increased screening in African-American men. African-American men have greater prostate cancer incidence and mortality over other groups, thus, future attempts should find meaningful correlations between PSA screenings and tests use to reduce the burden of this disease (Ross et al., 2008).

McFall (2006) asserts that informed decision-making is recommended for prostate cancer screening. The researcher examines demographic and screening-related factors associated with men's discussion of the advantages and disadvantages of prostate-specific antigen (PSA) tests with their physicians. Data from two thousand one hundred eighty-four men aged 50 years and older who reported a screening prostate-specific antigen (PSA) test in the 2000 National Health Interview Survey cancer control supplement.

When physicians initiate prostate cancer testing, African-American men have an increased participation in prostate cancer screenings and a regular source of care. The study suggest that future research should examine what role practice setting and the
physician-patient relationship play in a discussion of PSA testing and how to facilitate active involvement of patients in decision making (McFall, 2006).

The purpose of this study was to examine the associations between physician-patient discussions, demographic and health-related variables, and PSA test use. A sample of 739 African-American men, 40 years and old, who had participated in the National Health Interview Survey (NHIS) 2000, were assessed. More than three-fourths of the participants reported that their doctors had discussed with them the advantages and disadvantages of the PSA test before administering it (Tannor & Ross, 2006).

This bivariate analysis showed a positive association with PSA test use including men aged 50 and over, having health insurance coverage and having participated in physician-patient discussions about the test. The study also determined that a greater number of men unaware of nor had undergone a PSA test. Increased efforts should be made by the healthcare community to promote prostate cancer screening education and physician-patient discussions (Tannor & Ross, 2006).

Steele, Miller, Maylahn, Uhler, & Baker (2000) study determined population-based rates of reported prostate cancer screening and assessed prostate cancer-related knowledge, attitudes, and screening practices among men in New York aged 50 years and older. Two telephone surveys were conducted: one was included in the 1994 and 1995 statewide Behavioral Risk Factor Surveillance System interviews and the other was a community-level survey that targeted African-American men.

The study revealed that fewer than 10% of the men in each survey perceived their prostate cancer risk to be high, almost 20% perceived no risk of developing the disease,
and race and physician advice was significantly associated with screening with a PSA test or a digital rectal examination. This study concluded that physician advice might have been a major determining factor in their decision to be tested (Steele et al., 2000).

Education and Literature for Prostate Cancer Prevention

Nivens, Herman, Weinrich, & Weinrich (2001) suggest that 38% of older, African-American men have not heard of or read anything about prostate cancer. Men with access to prostate cancer information are more prone to participate in screening (Nivens et al., 2001). When data is advertised in the media, important factors are not included, which leads to further proliferation of negative stereotypes of black men (Rich, 2000). Educational programs on prostate cancer should be designed to be both culturally appropriate and race specific to the particular site where the program is being held (Reis-Starr et al., 1998).

Decreased literacy skills among African-American males must be taken into consideration. Public awareness and health education programs targeted to African Americans have lagged extremely behind medical knowledge, and traditional health messages designated for the general population have not been very effective in reaching minority men to improve prostate cancer outcomes. Health information often deficient of cultural knowledge and cultural significance for African Americans, and is complex for people with minimal literacy skills to interpret and understand (Cowart et al., 2004).

Cultural competence is being aware of and responsive to matters of culture, race, ethnicity, gender, age, socioeconomic status, and sexual orientation. Educational materials that provide African-American men with culturally relevant information about
symptoms recognition, screening guidelines and disease prevention, must be developed and circulated widely within community settings frequented by the target population to decrease the knowledge deficit, and to allay fears about the prognosis of prostate cancer (Cowart et al., 2004).

Professional organizations recommend that physicians discuss prostate cancer with patients to make individual screening decisions. Few studies have tested strategies to encourage such discussions among high-risk populations. This randomized, blinded, controlled trial with concealed allocation study examines the effects of two low-literacy interventions on the frequency of prostate cancer discussion and screening. Conducted in an inner-city primary care clinic, serving a predominately African-American population, on men aged 45-70 with no history of prostate cancer, presenting for a regular appointment (Kripalani, Sharma, Justice, Justice, Spiker, Laufman, Price, Weinberg, & Jacobson, 2008).

Patients received a patient education handout on prostate cancer screening that simply encouraged them to talk to their doctor about prostate cancer or a control handout. Two simple low-literacy interventions significantly increased discussion of prostate cancer and PSA test orders but not performance of DRE. Both interventions were effective in empowering low-literacy patients to initiate conversations about prostate cancer with their physician (Kripalani et al., 2008).

Programs mission should be to educate these men about the disease and to promote prostate health through information about prevention, early detection, and treatment options. Program administrators should be aware of how to promote professional and
public awareness of prostate cancer in African-American men, to produce and evaluate appropriate, culturally relevant educational materials and to reduce barriers to early screening and detection of prostate cancer for these men (Cowart et al., 2004).

The program must foster effective communication throughout the community, empower black men to feel comfortable seeking medical help, and assist with better communication among these men, their healthcare professionals and their families. It is vitally important that education and prevention programs must institute credibility and trust, which, requires shaping the program to fit their needs, perceptions, sensitivities and concerns of African-American men. The programs setting should be natural and non-threatening for African-American men, thus, bring the program to them, without asking, them alter their normal routines. Community networking and positive publicity is imperative when reaching out to African-American men and inspiring confidence in the program. The supportive culture of camaraderie is effective as well. A primary challenge will be to win credibility and support from the African American community, they key is to involve diverse stakeholders (Cowart et al., 2004).

Health education programs that target African-American men should also be culturally sensitive. Health education and prevention programs have not traditionally been customized address the needs of men of all ethnic and racial groups (Boehm, et. al, 1995).

Arras-Boyd et al. (2009) state that community-based prostate cancer programs provide a way to reach African-American men at greater risk of prostate cancer. Being Caucasian, not having a health care provider, desiring information about prostate cancer
prevention, and having knowledge of the risk and benefits associated with prostate cancer are all predictants to participating in screenings.

Boehm, et. al, (1995) study was based on the social cognitive theory and self-efficacy. The purpose of this study was to evaluate the effectiveness of a prostate cancer educational and screening program offered in African-American churches. African-American men were trained as lay educators to serve as role models and exemplify desired behavior. The population was one hundred twenty-three African-American men age 31.3 to 78.7, married, with a high school or equivalent education, and with an income of $20,000 to $39,000. This convenience sample met the following criteria for inclusion: the participants attended the educational and screening program presented by an African-American urologist and African-American prostate cancer survivor and the participants completed both the pretest and posttests of the Prostate Cancer Screening Knowledge Inventory. Prior to the educational and screening program, the participants had a moderately high level of knowledge about prostate cancer and prostate cancer screening and detection.

T-test results revealed a significant improvement in participant’s prostate cancer screening knowledge’s scores following the church-based educational and screening program. Significant improvement in the participant’s self-efficacy following the program, with the mean posttest self-efficacy scale score increasing. There has been a shift from focusing entirely on the information being taught to designing educational programs that increases the participant’s sense of self-efficacy. This shift is designed to foster an increased follow through and newly desired behaviors (Boehm, et al., 1995).
The purpose of this exploratory study was to assess the knowledge of low-income African-American men regarding prostate health and prostate cancer, and reveal myths and misinformation that are barriers to prostate cancer health decisions and behaviors. African-American men participated in focus groups that openly discuss prostate health, prostate cancer screening, diagnosis, and treatment, and factors influencing prostate health decisions and behaviors (Richardson, 2004).

Participants revealed sociocultural and psychological barriers myths and lack of accurate and adequate knowledge about prostate health and cancer, fear, denial and apathy. The findings suggest dynamics that explain the lack of participation in prostate health screenings and services among the medically underserved and socioeconomically poor, African-American men. It was revealed that lack of knowledge affects all barriers to participation. Progress in prostate cancer outcomes are attainable when culturally and linguistically suitable prostate cancer health education is tailored to the needs of African-American men (Richardson, 2004).

Audio taped focus groups and interviews were conducted to analyze embryonic themes. The male participants had insufficient information about the prostate cancer, its risk among African-American men, or the controversy concerning screening, except for prostate cancer survivors. Significant informants and focus group participants allude to inadequate access to services, mistrust of the health system, poor relationships with medical providers, and perceived threats to male sexuality as major barriers to participation in prostate cancer screenings (Allen, Kennedy, & Wilson-Glover, 2007).
Participants and informants suggested that interventions be rooted in a community settings, address men's overall health, and be administered by culturally competent providers, emphasized & foster trust among the community and providers, and have sustainability in the community. Screening efforts may be hindered by persistent mistrust of the healthcare system and inadequate relationships between patients and providers. Fervent support for screenings was apparent in previous program participants. (Allen et al., 2007).

Weinrich, Boyd, Weinrich, Greene, Reynolds, & Metlin (1998) states fewer African-American men participate in prostate cancer screening, although they have higher prostate cancer incidence and mortality rates. This study documents the benefits of two educational methods, the peer-educator method, and the client-navigator method, in increasing their participation. Sixty-one percent of the one thousand two hundred eleven African-American men who received an educational program on prostate cancer participated in the free prostate cancer screening.

Men who received the peer-educator method intervention, which included a testimony in support of prostate cancer screening given by an African-American man, were more likely to participate than were men who received a standard educational program. The client-navigator method intervention included a phone call aimed at overcoming screening barriers and reminders for screening. Findings suggest an increased participation by African-American men in prostate cancer screening following the peer-education and client-navigator interventions (Weinrich et al., 1998).
Importance of Family Involvement in Prevention Measures

Studies show that marriage significantly improves prostate cancer screening participation among men. Marriage significantly improves health compliance altogether (Reis-Starr et al., 1998). The social support from a significant other has been shown to influence screening behaviors (Plowden, 2006). Cancer is often referred to as a family disease; the psychological consequences of the illness and its treatments affect the quality of life experienced by partners and other family members, as well as that of patients/survivors (Baider, Cooper, & Kaplan, 2000).

Prostate cancer is a significant health problem for African-American men intensified by low participation in screenings, clinical trials, and prospective cohort studies. Ten focus groups were conducted with African-American males and their female partners/spouses. Perceptions and knowledge about prostate cancer, as well as willingness to participate in screening and research studies were measured. Participants had a basic level of knowledge about prostate cancer, and the importance of education was a unified theme (Hughes, Sellers, Fraser, Teague, & Knight, 2007).

Dialogue with targeted African-American men and their partners/spouses may increase awareness and retention in medical research. Partner- or spouse-influenced health promotion, education and behavior might be effective (Hughes et al., 2007).

The purpose of this study was to develop and test the efficacy of a prostate health curriculum designed to train African-American and Afro-Caribbean barbers to deliver prostate cancer control messages to their customers. Focus groups were conducted that further inform the curriculum, which was pilot tested in training sessions. The high
incidence of late-stage diagnosis prostate cancer in African Americans has often been attributed to lack of screening. In surveys administered to ninety-two customers and nineteen barbers, only 26% of customers and 42% of barbers reported having some knowledge of the prostate-specific antigen (PSA) screening test. More than 90% of the barbers expressed a willingness to obtain prostate cancer information to specifically share with their customers, and 83% of customers expressed an interest in obtaining prostate cancer information and willingness to receive that information from their barbers (Fraser, Brown, Homel, Macchia, LaRosa, Clare, Davis-King, Collins, Samuel, Macalino, & Browne, 2009).

This pilot study suggests that there is a need for intervention programs that increase awareness and prostate health knowledge and behavior in communities with elevated incidence of prostate cancer. The study further suggests that barbers that are willing to use their leadership skills to educate and encourage their customers to engage in informed decision making is a positive intervention (Fraser et al., 2009).

Hart, Underwood, Smith, Bowen, Rivers, Jones, Parker, & Allen (2008) acknowledges that prostate cancer is the most common cause of cancer in men and the second leading cause of cancer deaths. African-American men bear a disproportionate burden of prostate cancer diagnosis and mortality. It is imperative that African-American men have the appropriate information needed to make informed decisions about prostate cancer screening. Large numbers of African-American men could potentially be excluded from receiving culturally appropriate prostate cancer education, which inspired
this study designed to recruit and intervene with African-American men and barbershops for increasing prostate cancer screening decision-making.

The purpose of this study was to learn effective strategies for recruiting African-American barbershops for prostate cancer education and to determine barbershop proprietors' willingness to allow their barbershops to be used for research. The study concluded that African-American barbershops in general are welcoming environments in which to implement community-based prostate cancer education and public health research (Hart et al., 2008).

This study was designed to determine the feasibility of collaborating with barbershops to implement a community-based prostate cancer preparatory educational decision aid for African-American men. Trained research interviewers conducted proprietor surveys and client surveys. Ninety-six percent of the proprietors surveyed reported they would allow their clients to learn about prostate cancer and seventy-five percent reported they would consider allowing a computer to be installed to provide information about prostate cancer. Ninety-seven percent of clients reported that they would be willing to look at information about prostate cancer in their barbershops. The study concluded that it would be viable to work with barbershops and their clients for a community-based prostate cancer screening decision-aid intervention for African-American men (Hart and Bowen, 2004).

Cancer is often referred to as a family disease with psychological consequences of the illness and its treatments that affect the quality of life experienced by partners and other family members (Baider, Cooper, & Kaplan et al., 2000). Studies show that
marriage significantly improves prostate cancer screening participation among men. Marriage significantly improves health compliance altogether (Reis-Starr et al., 1998). The social support from significant others has been shown to influence screening behaviors (Plowden, 2006).

**Importance of Religious & Spiritual Involvement in Prevention**

Emerging research suggests that interventions tailored to specific spiritual and cultural dimensions and involving culturally similar role models are promising means for reaching diverse groups who might not be readily accessed conventionally (Bailey, Erwin, & Belin, 2000). It has been proven that spirituality, especially religiosity, is highly important to adults in the second half of life, with an estimated 52% reporting regular participation in some type of religious activity (McFadden, 1995).

Religion is a type of spirituality characterized by an institutionalized body of belief, rituals, and practices and an identifiable community of believers or may be rooted in a less formalized, more personally derived belief system. Many religious traditions reflect a common appreciation for the painful emotions inherent in human existence, view adversity as a pathway to understanding, and enunciate ways of framing and responding to life’s challenges. Spirituality based resources are beliefs, values, and practices grounded in a relationship with a sacred source such as God, Higher Power, nature, or however the divine is held. In the face of adversity, spirituality based resources may be used to clarify and reorder life priorities such that values of enduring importance are conserved (Pargament, 1997).
Spirituality is the reliance on a sacred being in pursuit of meaning, purpose, and significance. Discussion around spirituality and religious belief and practices are meaningful during value-laden encounters with providers who have their own values, stereotypes, and biases (Ka’opua, Gotay, & Boehm, 2007).

A respectful curiosity about spirituality and religion is suggested in patient interaction. Across specialty practice areas, social workers and other providers might benefit from education on spiritual and religious transitions, as well as supervision, case conferences, and other opportunities for increasing awareness of group norms and individual variation within groups sharing a similar tradition (Ka’opua et al., 2007).

In times of adversity, spiritually based resources may inform coping with daily challenges and guide construction of meanings that allow integration of significant events into a perspective on life (Gall, Miguez de Renart, & Boonstra, 2000). The diversity of spiritual traditions used in coping with cancer suggests consideration of and a need for interrelatedness of race and ethnicity, culture, and spiritual based resources in healthcare education (Ashing-Giwa, et al., 2004). It has been found that African-American men perceive their cancer as the will of God (Underwood, 1991).

There is a correlation between the use of the church as the educational site, support from church leadership, and lay church educators contributing to the initial interest and willingness of the men who participate in prostate cancer prevention (Boehm, et al., 1995). Minority churches and other faith-based organizations should impart information on prostate cancer to African-American men (Cowart et al., 2004). Public support by
church and community leaders facilitates acceptance among African Americans for messages about prostate cancer (Cowart et al., 2004).

Boehm (1995) discussed educational and screening programs for prostate cancer designed to strengthen knowledge and self-efficacy in African-American men through African-American churches. Education was provided by trained lay educators who were African-American men previously diagnosed and treated for prostate cancer.

The lay educators serve as role models of the desired behaviors. The pretests and posttests study was developed using the Prostate Cancer Screening Knowledge Inventory and the Prostate Cancer Screening Self-Efficacy Scale. Paired t tests demonstrated that church-based intervention significantly improves knowledge and self-efficacy scores related to prostate cancer screening (Boehm, 1995).

Weinrich, Holdford, & Boyd (1998) used churches to recruit African Americans into a health promotion study. The research measured the impact of previous exposure to cancer on participation in educational programs and free prostate cancer screenings. The Health Belief Model provided the conceptual framework for the study. Over five hundred men attended a prostate cancer educational program at their church. Men who participated in this educational program completed a questionnaire and were provided vouchers for a free prostate cancer examination.

Having a member of the congregation previously diagnosed with cancer significantly prompted participation in the cancer education program. The Health Belief Model inferred that a person might participate in a health promotion behavior if they have cues to action. Indications to action are receiving information about cancer, participation
in prostate cancer screening, and/or experiencing an event such as the diagnosis or death of a loved one from cancer. This study triggered recommendations for future cancer screening in church settings (Weinrich et al., 1998).

African-American men have the highest prostate cancer statistics worldwide. This is an indication for inventive and groundbreaking efforts being implemented to increase cancer prevention and screening behaviors among this population. This significant investigation was conducted to assess attitudes and behaviors associated with prostate cancer prevention activities that can be used to develop a culturally relevant intervention for an African-American church-based population (Blocker, Romocki, Thomas, Jones, Jackson, Reid, & Campbell, 2006).

Four focus groups of twenty-nine men and women at two African-American churches were conducted. Themes discussed consisted of culturally and gender-influenced beliefs and barriers about cancer prevention and screening, healthcare systems barriers and religious impacts, including the importance of spiritual beliefs and church support (Blocker et al., 2006).

The investigation discovered the importance of the black family, the positive influence of spouses/partners on promoting cancer screening and healthy behaviors, the roles of faith and church leadership, and beliefs about God's will for good health. African Americans continue to exemplify mistrust of the medical community and negative attitudes toward specific screening tests. Prostate cancer prevention interventions designed for church-based audiences was identified in this study as significant (Blocker et al., 2006).
African-American men have significantly higher occurrences of prostate cancer, are diagnosed at younger ages and at more advanced stages of prostate cancer, and have higher mortality rates than Caucasian men. The analysis was a community-based, quasi-experimental, delayed-control design with randomization in churches. A convenience sample consisted of four hundred and thirty African-American men age 40 to 70. A culturally appropriate group educational program was enacted, which included a video and interaction with an African-American physician with knowledge, perceived threat, and screening prevalence all increased significantly (Husaini, Reece, Emerson, Scales, Hull, & Levine, 2008).

Outcomes indicated that a low-cost prostate cancer awareness campaign within a church might be enough to affect prostate cancer knowledge, attitudes, and behaviors among African-American men. The awareness should comprise church-specific intervention elements and cultural appropriate messages (Husaini, et al., 2008).

The development of culturally appropriate health communication in the African-American churches includes developing spiritually based interventions with a health message structured in relevant spiritual themes and scripture. The study illustrates community health advisor led intervention that increase informed decision-making for prostate cancer screening among church-attending African-American men using educational booklets. Recommendations suggest an importance of working closely with the community when developing interventions and the importance of pilot testing of educational materials (Holt, Wynn, Southward, Litaker, Jeames, & Schulz, 2009).
Friedman, Corwin, Dominick, & Rose (2009) states prostate cancer is the most commonly diagnosed cancer among men in the United States, particularly among African-American men. The formative study was conducted on twenty-five African-American men, to explore the application of Nutbeam's multidimensional health literacy framework to African-American men’s understanding of Prostate Cancer information. The African-American men’s functional health literacy was assessed as well as participation in interviews or focus groups to analyze prostate cancer risk, prevention, and screening.

Participants displayed satisfactory literacy test scores, however, results from interviews and focus groups revealed participants' limited understanding and misconceptions about prostate cancer risk. Participants desired information about screening and family history delivered word-of-mouth by African-American women and church pastors as few of them had ever received or actively sought out prostate cancer resources. Study findings provide important implications for prostate cancer communication with African-American men to correct misperceptions about cancer risk and motivate preventive behaviors (Friedman et al., 2009).

**Attitudes Towards Screening Measures**

Pierce et al. (2003) states that African-American men’s negative perception about an annual rectal exam, pain, and embarrassment associated with the exam, wearing diapers, and impotence may hinder their participation in cancer screenings. Behaviors related to screening are lacking that follow-up to initial screening needed among African-American men (Boehm, et al., 1995). It has been stated that African-American men and
Caucasian men are quite apprehensive about having blood samples drawn and/or rectal examinations completed (Reis-Starr et al., 1998).

Forrester-Anderson (2005) affirms that the knowledge, perceptions, attitudes, and behavior of African-American men related to prostate cancer and screening limits the participation in prostate cancer screening using the PSA and DRE examinations. There were twelve focus groups of one hundred four African-American men, 40 years of age and older, that resided in the metropolitan area of Baltimore, Maryland. The study indicated that there is a variety of barriers to screening among the African-American population.

The noted barriers are limited knowledge about the disease, lack of access to screening services, embarrassment, and fear of a positive diagnosis. Other barriers conveyed include distrust of medical professionals and the government, disinclination about sex-related health problems, complacency about the possibility of having prostate cancer, and belief that prostate cancer has a relation to sexual behavior. Positive reinforcement, optimism, and knowledge about prostate cancer are enabling factors associated with prostate cancer screening (Forrester-Anderson, 2005).

The purpose of this study was to examine the knowledge and perceptions of Jamaican and Haitian men regarding prostate cancer. The men were knowledgeable of the signs, symptoms, and risks for prostate cancer. The participants understood that early detection is connected with positive outcomes. All of the Jamaican men previously participated in screening within the past five years. The Haitian men were less well-informed, had more misconceptions than the Jamaican men, were less sanguine that
prostate cancer could be alleviated, and were less likely to have been screened (Kleier, 2004).

Qualitative findings are usually not generalized, however, language and cultural differences give the impression of negative impact on the level of knowledge that Haitian men have regarding prostate cancer. The Haitian men’s perception of the severity and outcomes was also attributed to language and culture. This study determined that these factors hinder efforts to recruit Haitian men as screening and research participants (Kleier, 2004).

Robinson, Ashley, & Haynes (1996) study was designed to identify attitudes associated with the willingness of African Americans to participate in prostate cancer screening. Fifty-six respondents, age forty and older were divided into low or middle class socioeconomic groups based on education and occupation. Focus group discussions were implemented to measure knowledge, attitudes, and beliefs about prostate cancer screening and treatment, willingness to participate in screening, incentives and barriers toward participating in screening, and source of medical care.

The middle class socioeconomic respondents conveyed an augmented compliance with participating in prostate cancer screenings. Differences that were accredited to the middle socioeconomic class were an increased knowledge about the disease and screening procedures, enhanced access to health promotion activities, being less fearful of discovering abnormal results, exposure to more aggressive behavior on the part of the provider with respect to screening, and receiving medical care in an atmosphere respectful of the consumer. The study’s outcome indicates that efforts to increase
minority participation in prostate cancer screening or prevention must consider these
findings (Robinson et al., 1996).

Perceived Susceptibility

Susceptibility of prostate cancer hinders participation in screening measures. Behavioral and social factors include the proclivity to underrate risk for health problems, perceptions of invulnerability, and inadequate knowledge of disease. These are some of the most significant factors associated with the lack of participation in prostate cancer screenings among African-American men (Courtenay, 2000).

Susceptibility is a person's notion about acquiring a disease (Pierce et al., 2003). Men tend to underestimate their risk of dying from cancer or being diagnosed with prostate cancer (McCreary, Gray, & Grace, 2006). Thirty-six percent of African-American men over age fifty in a telephone survey were unaware or reported they did not believe they were at increased risk of developing prostate cancer (Steele et al., 2000).

Shavers, Underwood, & Moser (2009) affirm the higher risk of prostate cancer for African-American men is well-known in the medical community; conversely, it is not clear how prevalent this knowledge is among African-American men themselves. Side effects of treatment and lack of a demonstrated mortality benefit of routine screening have increased the focus on patient participation in decision making about prostate cancer screening. Respondents were 1075 males whose responses to the 2003 Health Information National Trends Study were collected and analyzed to examine the associations among race/ethnicity, demographic characteristics, and the perception of the
risk of developing prostate cancer for African-American, Hispanic, and non-Hispanic white men, age forty-five and older, without a history of prostate cancer.

Men perceive their likelihood of getting prostate cancer as somewhat or very low with some respondents perceiving themselves to be more likely to get prostate cancer than the average man of the same age. The results exemplify that few African-American men perceived themselves to have a higher-than-average risk of prostate cancer, while a higher percentage of Hispanic men perceived their risk to be higher than that of the average man of the same age. Suggestions are that all men, but particularly African-American and Hispanic men, could benefit from information regarding their specific risk of developing prostate cancer before making a decision about prostate cancer screening (Shavers et al., 2009).

Financial Barriers to Prostate Cancer Screenings

Socioeconomic positions of young urban African-American men, with higher rates of unemployment and lower-skilled jobs, have less access to health insurance. Insurance plays an important part in the affordability of healthcare services among African-American men. Medicaid overage prevents men 18 and older from qualifying unless, they have been defined as being unable to become employed for two years or greater (Rich, 2000).

Black men still face the challenge of access to appropriate care and preventative services with health insurance due to managed care. When men lack health insurance coverage, they tend to prolong care until it becomes an emergency. Consequently, they
may receive care in an emergency room or urgent care settings that are not properly equipped to provide preventative care (Rich, 2000).

Each race and sex group has a percentage of individuals without health insurance. This generally declined as education level increased (Albano et. al, 2007).

Theoretical Framework

This section elaborates on three theoretical frameworks on which this study is based. The objective is providing a framework around which the study will be centered. These frameworks include the Health Belief Model, Systems Theory, and Afrocentric Perspective.

Health Belief Model

The Health Belief Model (HBM) is designed to precipitate the health-related behaviors of African Americans with prostate cancer. It seeks an understanding of an individual’s motivation to engage or not to engage in certain health prevention programs and/or measured to determine patterns of preventive health practices (Pierce et. al., 2003).

Developed in the 1950’s, the Health Belief Model (HBM) was designed to explain the failure of people to engage in preventative health behaviors and programs. HBM originated from psychosocial theory, designed by Lewin, which is based on a phenomenological orientation to positive and negative influences in the individual’s subjective world as they affect behavior. The model is a value expectancy model that examines an individual’s behavior, values, and judgment of how an action will provide a
positive outcome. The HBM is generalizeable in numerous settings, it is cost-conscious, and prompts hypotheses for testing, not to mention it is a proficient predictor of participation in prevention screening programs (Poss, 2001).

The examination of the components associated with the HBM model will further justify its worthiness. A perceived benefit is the individual belief that a specific action will be beneficial in reducing the health threat. The lack of uniformity in testing the model, especially in the way variables are operationalized that the measures and components used in the HBM have not been refined or standardized (Poss, 2001).

HBM examines the effects of health beliefs and decisions methods in making behavioral changes. This model is appropriate for this study because it examines the psychosocial factors associated with compliance to prostate cancer prevention. Severity is a person’s perception of the symptoms from contracting the illness. HBM examines difficulties in performing the specific behaviors of interest and the negative things that could happen from performing those behaviors, cues to action such as environmental events, bodily events, or stories in the media that trigger perceptions of susceptibility (Daddario, 2007).

Neff and Crawford (1998), states the HBM posits that illness knowledge factors, perceived susceptibility to a disease and perceived severity of the disease influence preventative health behaviors. The effects of these factors are influenced by the benefits and efficacy of preventive action and perceived barriers to preventive activities. This indicates that there is a lack of clarity in terms of the structural relationships between model variables. Perceived barriers are the most consistent predictors across the study.
HBM focuses on the attitudes and beliefs of individuals. The HBM is based on individual participation in health-related action if that individual: (1) feels that a negative health condition can be avoided; (2) has a positive expectation that he/she will avoid a negative health condition by participation in prevention measures; and (3) believes that he/she can successfully participate in the health-related action. Health Belief Model attempts to reduce the health epidemic by incorporating prevention components susceptibility, severity, benefits, barriers, actions, and self-efficacy (Eisen, 1992). Health Belief Model examines dependably related variables for preventative health behavior outcomes. Severity has been deemed as the least reliable among HBM variables (Neff & Crawford, 1998).

Action is the link between intention and implementation—execution of the preventative measure. Self-efficacy is an individual’s belief that they have the power to implement an action to prevent prostate cancer. The model reviews demographics and socio-psychological factors that are related to healthcare behavior. Self-report that has commonly been used in empirical studies on the HBM conveys concern about recall or other biases associated with this reporting style (Burns, 1992).

The HBM does not apply numeric coefficients to the concepts of susceptibility, severity, benefits, and barriers, nor does it delineate the specific nature of the relationships among the variables. Some researchers add variables and others delete variables from the original model. The HBM includes normative or cultural factors that may influence health-seeking behaviors (Poss, 2001).
The HBM examines perceived barriers to seeking care. Factors that hinder people from engaging in health-seeking behaviors are analyzed (Rosenstock, 1960).

Barriers as defined by the HBM are the individual’s perception about illness and disease. Studies show that African-American men’s own perceptions may be a barrier to early prostate cancer detection. It is imperative that African-American males not feel they have overcome obstacles, perceived barriers, to obtain the benefits of prostate cancer prevention (Poss, 2001).

A thirty-two focus group study using the Health Belief Model was conducted with individuals of a lower socioeconomic class to address their attitudes concerning physical examinations, prostate cancer, and their foundation of health-care information. The Health Belief Model provided a framework to evaluate the perceptions of men of lower socioeconomic status toward the early detection of prostate cancer (Dale et al., 1999).

Most men of lower socioeconomic status viewed physical examinations pessimistically. Barriers to examinations include time, monetary costs, negative impressions of the prostate examination, and lack of belief in early detection. On average, minority men who participated in prostate examinations did so as part of examinations for chronic medical conditions or because of employer requirements for routine checkups. The rectal exam was viewed very negatively due to physical pain, social embarrassment, and uncertain value. Fear and fatalism regarding prostate cancer diagnosis and treatment were expressed by the majority of attendees. Men typically received healthcare information from the media, with television being the most common source (Dale et al., 1999).
No significant differences in barriers to early detection efforts were observed between focus groups composed of Caucasian versus African-American impecunious men. Cynical perceptions regarding physical examinations and skepticism about the value of early detection were the chief barriers to early detection (Dale, et al., 1999).

The Price, Desmond, Wallace, Smith, & Stewart (1988) study determined the difference between African-American and Caucasian adolescents' cancer knowledge, attitudes, and beliefs. The Health Belief Model, a 97-item questionnaire, was developed and completed by 573 African-American and 297 Caucasian junior and senior high school students. Chi-square analyses yielded nine significant differences between African Americans and Caucasians on cancer knowledge.

Cancer knowledge examined the etiology, warning signs, and prevention techniques. African Americans and Caucasians differed significantly on cues to action, perceived susceptibility, perceived severity, perceived barriers, perceived benefits, and interpersonal relationships. African Americans and Caucasians received cancer information from the same sources, with the exception of books, which African Americans used more (Price et al., 1988).

Systems Theory

A system is a set of components that are arranged and interconnected to make a whole. Systems Theory concentrates on the interaction between individuals and multiple systems that comprise their environment. The theory assesses the relationship of the
family, friends, work, social services, political, employment, religious, goods and services, and educational systems in the environment (Zastrow & Kirst-Ashman, 2001).

The most important concepts that are examined in this theory as it pertains to social work include systems, boundaries, subsystems, homeostasis, role, relationship, input, output, feedback, interface, differentiation, entropy—disorganization, negative entropy, and equifinality—different means to the same end. The social environment includes home, work, money, laws and rules of the community, family, friends, work organizations, government, healthcare, housing, social welfare, and educational systems (Zastrow & Kirst-Ashman, 2001).

The Systems Theory describes and evaluates individuals, other living systems, and their surroundings (Beckett & Johnson, 1995). It is believed that systems perspective is practical in evaluating persons in situation relationships, nonetheless, it has restrictions in providing the basis for interventions (Whittaker & Tracy, 1989).

The Systems Theory emphasizes the relationships among individuals, groups, organizations, or communities. Ethnocentrism is an orientation or set of beliefs that holds one’s own culture, ethnic or racial group, or nation is superior to others. Racism stereotypes and generalizes about people in a negative manner because of their race and is commonly a basis of discrimination against members of racial minority groups. When examining discrimination within a social system, prejudgment and negative treatment of people based on identifiable characteristics such as race, gender, religion, or ethnicity must be reviewed (Barker, 1999).
The limitations to the Systems Theory include not adding much to domain specific knowledge. Terms such as equifinality and multifinality are not generalizeable (Hepworth, Rooney, & Larsen, 2002).

Afrocentric Perspective

Asante (1988) defines Afrocentricity as a commitment to African values, morals, and beliefs, which leads to a positive self-persona and positive ethnic association. Afrocentric ethnical dynamics are based on the principle that African Americans share an exclusive cultural belief system that is ingrained in their African heritage, yet incongruent with the domineering Eurocentric culture.

The objective of Afrocentricity is to decrease all forms of oppression, racism, classism, homophobia, patriarchy, child abuse, pedophilia, and white racial domination. This perspective is in opposition to Eurocentric rationalism and empiricism and for emphasizing African significant customs and ethnicity as a standard and not a deviance (Asante, 1988).

Afrocentricity is a transforming perspective from what once was the norm, to what will be a new way of thinking. The strategy of the Afrocentric Perspective is uncovering all falsehoods, to expose fake issues, to demonstrate the overpowering effect of committed will-changing behaviors. It is designed to prevent African descendants from becoming victims of self-deception and to reconstruct their lives on an Afrocentric basis. It goes on to alleviate actions that prevent the incorporation of Afrocentric living, teachings, values, purpose, and activities. Afrocentricity is based on reality, a reality that is grounded in an African historical framework (Asante, 2003).
Afrocentrism encourages social scientists to use their scholarship and knowledge to analyze Eurocentric domination and empower the African culture. European attributes are those that shape the social service field as individualistic, materialistic, mechanistic, and pessimistic. These attributes separate the person from the situation, alleviate the importance of spirituality, psychosocial development based on the influence of previous stages on the later stage, and a prominence of conflict (Schiele, 2000).

The need for this perspective arises to establish an African-American-specific theoretical base that will create new human service practice paradigms and methods centered on the African culture. The cultural values of people of color and Eurocentric domination are critical areas that need to be considered when delivering human services and when developing theoretical foundations for establishing additional human service paradigms. Since most human service consumers are of color, paradigms should reflect their cultural values and worldviews (Schiele, 2000).

Developing an Afrocentric paradigm will incorporate new strategies that are harmonious with the particular cultural styles, experiences, traditions, and interpretations of these groups, which can lead to more effective human services practice. When cultural values are incorporated into social service interventions, then, treatment objective achievements are greater. Not incorporating an Afrocentric paradigm makes people of color feel as though the Eurocentric values, norms, and visions are dominant during interventions and theirs are substandard and irrelevant. Afrocentrism promotes an alternative social science paradigm more reflective of the cultural and political reality of African Americans (Schiele, 2000).
Afrocentrism is designed to dispel the negative distortions about people of African ancestry by legitimizing and disseminating a worldview that goes back thousands of years and that exists in the hearts and minds of many people of African descent today. The goal of Afrocentrism is to promote a worldview that will facilitate human and societal transformation toward spiritual, moral, and humanistic ends and that will persuade people of different cultural and ethnic groups that they share a mutual interest in this regard (Schiele, 2000).

Ethnocentrism and racism are factors that can affect the growth and development of minority group members. Racial or ethnic discrimination involves denying members of minority groups equal access to opportunities. Ethnocentrism and racism are best demonstrated in the systems perspective as discrimination within the systems, manifested in the way the system treats the consumers. Ethnocentrism and racism create barriers within the society that limit obtaining the necessary resources to lead a secure and comfortable lifestyle. Examples include adequate housing, education, employment, healthcare, and justice in the legal system (Zastrow & Kirst-Ashman, 2001).

Ethnocentrism and racism further lead to social factors among minority groups, for example, crime, emotional troubles, alcoholism, and drugs (Zastrow & Kirst-Ashman, 2001). Afrocentric perspective seeks to dispel the negative distortions about African ancestry by legitimizing and disseminating a worldview that goes back thousands of years and that exists in the heart and minds of many people of African descent today (Schiele, 2000).
The Health Belief Model (HBM) and Systems Theory are psychosocial models that examine an individual's behaviors, attitudes, and beliefs associated with health behaviors. Factors related to the individual, such as demographic variables, personality factors, social support, or previous health experiences may play a role in influencing behavior, but they are not an explicit part of the HBM model (Poss, 2001).

The barrier variable of the Health Belief Model serves to identify the importance barriers play on prevention and identified specific prostate cancer prevention barriers in current literature. The Systems Theory explains interrelation of important social factors that enable barriers to prostate cancer prevention. When evaluating the social systems within the systems theory, it is appropriate to examine ethnocentrism and racism (Zastrow & Kirst-Ashman, 2001).

Poss (2001) states that the HBM being studied with a culturally based model, like the Afrocentric Perspective, is a profound approach research centered on health disparities. The HBM and Afrocentric perspective combined with the systems perspective examines beyond the presenting problems of the client, to assess the complexities and the interrelationships of the problem (Zastrow, 1995).
CHAPTER III
METHODOLOGY

Chapter III describes the methods and procedures used in the investigation of the influence of prostate cancer barriers on the participation in prostate cancer prevention measures in Georgia. The chapter is divided into the following sections: research design, description of the site sample and population, research question, hypothesis, and applied measures, instrumentation, treatment of the data, and limitations of the study.

Research Design

A descriptive and explanatory research design was used in this study. This study was designed to collect data in order to describe and explain the relationship of prostate cancer prevention and the routine screening barriers of African-American males in Georgia. A survey was used to examine the participants’ opinion of seven prostate cancer barriers and three prostate cancer risks.

The descriptive and explanatory research design allowed for the descriptive analysis of the demographic characteristics of the respondents. In addition, this research design facilitated the explanation of the statistical relationship between prostate cancer prevention and barriers to prostate cancer and prostate cancer risks.
Description of the Site

The research study was conducted in Georgia. This research was part of an IRB approved study on the relationship of prostate cancer prevention and the routine screening barriers of African-American males in Georgia. Convenient sampling was used in the study. The selection of participants was considered convenience samples because they were not randomly selected from a large population; the sample was from a predetermined population (Reichardt & Gollob, 1999).

Sample and Population

Participants were eligible to participate in the study if they were male, age eighteen or older, and reside in Georgia. Ultimately, one hundred and seven participants completed the seventeen-question survey on barriers to prostate cancer. One hundred and seven (107) men agreed to participate in the study via signing a consent of authorization form. Demographic data and survey results on 107 participants were collected, utilizing convenient sampling. The researcher disseminated and collected the surveys from participants. The survey obtained the following information: ethnicity, age, income, marital status, gender, educational level, knowledge of prostate cancer barriers, participation in prostate cancer prevention measures, previous diagnosis of prostate cancer, and family history of prostate cancer. Participants provided consent to participate in the study. All participants' identifying information used for research is protected.
Instrumentation

This study examined the relationship of prostate cancer prevention and the routine screening barriers of African-American males in Georgia. Men completing a survey for a small non-generalizable study exploring barriers and risk associated with prostate cancer prevention among African-American men in Georgia were intentionally sampled by age (18 years and older), race and ethnicity (Black/African American), and locality (Georgia). Men who met the criteria and indicated interest were approached to participate in this study. Eligible men were provided letters, authorization of consent and short surveys to complete and return to the researcher. The letters explained the purpose of the study, the nature of the survey, voluntary participation, confidentiality, and privacy.

Section I of the inventory consists of ten items (1 through 10) containing a demographic section that described age, education, income, race, gender, marital status, and prostate cancer information. These items will provide information for the presentation of a patient demographic profile and determines family history, knowledge of barriers, and diagnosis of prostate cancer.

Section II consist of seven barrier questions; men rated barriers based on medical professional interaction, culturally appropriate literature, family involvement, spiritual/religious involvement, attitudes towards screenings, perceived susceptibility, and financial influences to their participation in prostate cancer prevention. The seventeen-question survey was returned to the researcher with completed consent and all seventeen questions.
Treatment of the Data

Statistical treatment of the data employed descriptive statistics, including measures of central tendency, frequency distribution, and cross tabulation. Statistical analyses were performed by using a seventeen-question survey. The chi-squared test was used to test the hypothesis and determine if there is a relationship of prostate cancer prevention and the routine screening barriers of African-American males in Georgia.

Frequency distribution was used to analyze each of the variables of the study in order to summarize the basic measurements. It was further used to analyze the demographics of the study to gain an understanding of the participants.

Cross tabulations were utilized to demonstrate the statistical relationship between prostate cancer prevention and barriers to prostate cancer and prostate cancer risk among African-American men in Georgia.

The test statistics that was employed in this research study was chi square. Chi square allows the research to determine dependence and non-dependence on variables. The research can also determine relationships using chi square (Bresnahan & Shapiro, 1966).

Limitations of the Study

There were two limitations identified in this study. The research examined barriers & risks from previous studies instead of conducting a new qualitative study on African-American men in Georgia and the study’s demographics population was individuals who were 18 yrs and older and residing in Georgia, thus, a non-generalizeable study was conducted.
CHAPTER IV
PRESENTATION OF FINDINGS

The purpose of this chapter is to present the findings of the study in order to describe and explain the barriers of prostate cancer prevention among African-American males. The findings are organized into two sections: demographic data and research questions and hypotheses.

Demographic Data

This section provides a profile of the study respondents. Descriptive statistics were used to analyze the following: gender, age, ethnicity, marital status, educational level, income, knowledge of prostate cancer barriers, participation in prevention measures, diagnose of prostate cancer, and family history of prostate cancer. A target population for the research was composed of males age 18 years of age and older residing in the state of Georgia. These participants provided consent to participate in this study. The data was analyzed using SPSS.
Table 1
Demographic Profile of Participants (N=107)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>106</td>
<td>99.1</td>
</tr>
<tr>
<td>Female</td>
<td>1</td>
<td>0.9</td>
</tr>
<tr>
<td><strong>Age Group</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18-28</td>
<td>11</td>
<td>10.4</td>
</tr>
<tr>
<td>29-38</td>
<td>21</td>
<td>19.8</td>
</tr>
<tr>
<td>39-48</td>
<td>22</td>
<td>20.4</td>
</tr>
<tr>
<td>49-58</td>
<td>25</td>
<td>23.6</td>
</tr>
<tr>
<td>59 up</td>
<td>27</td>
<td>25.5</td>
</tr>
<tr>
<td><strong>Ethnicity</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>African American</td>
<td>95</td>
<td>88.8</td>
</tr>
<tr>
<td>Caucasian</td>
<td>7</td>
<td>6.5</td>
</tr>
<tr>
<td>Asian</td>
<td>1</td>
<td>0.9</td>
</tr>
<tr>
<td>Hispanic</td>
<td>2</td>
<td>1.9</td>
</tr>
<tr>
<td>Other</td>
<td>2</td>
<td>1.9</td>
</tr>
<tr>
<td><strong>Marital Status</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>67</td>
<td>62.6</td>
</tr>
<tr>
<td>Never Married</td>
<td>21</td>
<td>19.6</td>
</tr>
<tr>
<td>Divorced</td>
<td>15</td>
<td>14.0</td>
</tr>
<tr>
<td>Widowed</td>
<td>4</td>
<td>3.7</td>
</tr>
<tr>
<td><strong>Educational Level</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Some High School</td>
<td>4</td>
<td>3.7</td>
</tr>
<tr>
<td>High School Grad-GED</td>
<td>9</td>
<td>8.4</td>
</tr>
<tr>
<td>Some College</td>
<td>32</td>
<td>29.9</td>
</tr>
<tr>
<td>Bachelors Degree</td>
<td>36</td>
<td>33.6</td>
</tr>
<tr>
<td>Graduate Degree</td>
<td>26</td>
<td>24.3</td>
</tr>
<tr>
<td><strong>Total Income</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Under $20,000</td>
<td>7</td>
<td>6.5</td>
</tr>
<tr>
<td>$20,000 – 39,999</td>
<td>25</td>
<td>23.4</td>
</tr>
<tr>
<td>$40,000 – 59,999</td>
<td>39</td>
<td>36.4</td>
</tr>
<tr>
<td>$60,000 – 79,999</td>
<td>21</td>
<td>19.6</td>
</tr>
<tr>
<td>$80,000 up</td>
<td>15</td>
<td>14.0</td>
</tr>
</tbody>
</table>
As indicated in Table 1, the typical respondent of the study was an African-American male who was 59 years and older, with an income of $40,000-$59,999. The typical respondent was married and a bachelor's level of education.

Table 2 is a frequency distribution of the knowledge of barriers to prostate cancer (CA) prevention among the 107 respondents to this study. Table 2 indicates whether the respondent had knowledge of the barriers to prostate cancer prevention.

Table 2

<table>
<thead>
<tr>
<th>Knowledge of Barriers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value</td>
</tr>
<tr>
<td>-------</td>
</tr>
<tr>
<td>No</td>
</tr>
<tr>
<td>Yes</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

As indicated in Table 2, of the 104 participants, 64.4 % of the respondents to this study had knowledge of prostate cancer prevention barriers. However, this table also indicates that 35.6% of the respondents did not have knowledge of prostate cancer prevention barriers.

Table 3 is a frequency distribution of the respondents' participation in prostate cancer (CA) prevention measures. Table 3 indicates whether the 107 respondents previously participated in prostate cancer prevention measures.
Table 3

Participation in Prevention

<table>
<thead>
<tr>
<th>Value</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>59</td>
<td>55.7</td>
</tr>
<tr>
<td>Yes</td>
<td>47</td>
<td>44.3</td>
</tr>
<tr>
<td>Total</td>
<td>106</td>
<td>100.0</td>
</tr>
</tbody>
</table>

As indicated in Table 3, of the 106 participants, 44.3% of the respondents participated in prostate cancer prevention measures. Nonetheless, this table also indicates that 55.7% of the respondents have not previously participated in prostate cancer prevention measure.

Table 4 is a frequency distribution of the 107 respondents' prior diagnosis of prostate cancer (CA). Table 4 indicates whether the respondent had been previously diagnosed with prostate cancer.

Table 4

Diagnosed with Prostate CA

<table>
<thead>
<tr>
<th>Value</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>102</td>
<td>95.3</td>
</tr>
<tr>
<td>Yes</td>
<td>5</td>
<td>4.7</td>
</tr>
<tr>
<td>Total</td>
<td>107</td>
<td>100.0</td>
</tr>
</tbody>
</table>
As indicated in Table 4, of the 107 participants, 95.3% of the respondents had no previous diagnosis of prostate cancer. Conversely, this table also indicates that 4.7% of the respondents have been previously diagnosed with prostate cancer.

Table 5 is a frequency distribution of the respondents' family history of prostate cancer (CA). Table 5 indicates whether the respondent had any previous family history prostate cancer.

Table 5

<table>
<thead>
<tr>
<th>Family History of Prostate CA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value</td>
</tr>
<tr>
<td>-------</td>
</tr>
<tr>
<td>No</td>
</tr>
<tr>
<td>Yes</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

As indicated in Table 5, the 107 respondents with no family history of prostate cancer are 85.0%. Yet, 15.0% of the respondents illustrated in the table had a family history of prostate cancer.

Table 6 is a recoded frequency distribution of the respondents' belief that medical professionals discussing prostate cancer (CA) prevention with them is a barrier. The continuums were recoded from four responses to two. Table 6 indicates whether the respondent thought medical professional's involvement was unimportant or important to prostate cancer prevention.
Table 6

Barrier 1: Medical Professionals

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unimportant</td>
<td>5</td>
<td>4.7</td>
</tr>
<tr>
<td>Important</td>
<td>102</td>
<td>95.3</td>
</tr>
<tr>
<td>Total</td>
<td>107</td>
<td>100.0</td>
</tr>
</tbody>
</table>

As indicated in Table 6, the percentage of the 107 respondents who considered medical professional’s involvement in prostate cancer prevention important are 95.3%. Yet, 4.7% of the respondents as illustrated in the table believe medical professional’s involvement was unimportant.

Table 7 is a recoded frequency distribution of the respondents’ belief that culturally appropriate literature is a barrier to prostate cancer (CA) prevention. The continuums were recoded from four responses to two. Table 7 indicates whether the respondent thought that culturally appropriate literature was unimportant or important to prostate cancer prevention.
Table 7
Barrier 2: Appropriate Literature

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unimportant</td>
<td>7</td>
</tr>
<tr>
<td>Important</td>
<td>100</td>
</tr>
<tr>
<td>Total</td>
<td>107</td>
</tr>
</tbody>
</table>

As indicated in Table 7, of the 107 participants 93.5% believed that culturally appropriate literature was important. Yet, 6.5% of the respondents illustrated in the table felt that culturally appropriate literature is unimportant.

Table 8 is a recoded frequency distribution of the respondents' belief that family involvement is a barrier to prostate cancer (CA) prevention. The continuums were recoded from four responses to two. Table 8 indicates whether the respondent thought that family involvement was unimportant or important to prostate cancer prevention.

Table 8
Barrier 3: Family Involvement

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unimportant</td>
<td>10</td>
</tr>
<tr>
<td>Important</td>
<td>97</td>
</tr>
<tr>
<td>Total</td>
<td>107</td>
</tr>
</tbody>
</table>
As indicated in Table 8, the percentage of the 107 respondents who believe that family involvement was important to prostate cancer prevention was 90.7%. However, 9.3% of the respondents illustrated in the table thought that family involvement was unimportant.

Table 9 is a recoded frequency distribution of the respondents' belief that religious involvement is a barrier to prostate cancer (CA) prevention. The continuums were recoded from four responses to two. Table 9 indicates whether the respondent thought that religious involvement was unimportant or important to prostate cancer prevention.

Table 9: Religious Involvement

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unimportant</td>
<td>23</td>
<td>21.5</td>
</tr>
<tr>
<td>Important</td>
<td>84</td>
<td>78.5</td>
</tr>
<tr>
<td>Total</td>
<td>107</td>
<td>100.0</td>
</tr>
</tbody>
</table>

As indicated in Table 9, the percentage of the 107 respondents who believed that religious involvement was important to prostate cancer prevention was 78.5%. However, 21.5% of the respondents illustrated in the table thought that religious involvement was unimportant.

Table 10 is a recoded frequency distribution of the respondent's belief that their attitudes towards prostate screenings are a barrier to prostate cancer prevention. The continuums were recoded from four responses to two. Table 10 indicates whether the
respondent thought their attitude towards prostate screenings was unimportant or important to prostate cancer prevention.

Table 10

Barrier 5: Screening Attitudes

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unimportant</td>
<td>10</td>
<td>9.3</td>
</tr>
<tr>
<td>Important</td>
<td>97</td>
<td>90.7</td>
</tr>
<tr>
<td>Total</td>
<td>107</td>
<td>100.0</td>
</tr>
</tbody>
</table>

As indicated in Table 10, the percentage of the 107 respondents who believed that their attitudes towards prostate screenings were important to prostate cancer prevention were 90.7%. However, 9.3% of the respondents illustrated in the table thought that their attitudes towards prostate screenings were unimportant.

Table 11 is a recoded frequency distribution of the respondents’ belief that their perceived susceptibility to prostate cancer was a barrier to prostate cancer (CA) prevention. The continuums were recoded from four responses to two. Table 11 indicates whether or not the respondent perceived their susceptibility of prostate cancer as unimportant or important to prostate cancer prevention.
As indicated in Table 11, the percentage of the 107 respondents who believed that their perceived susceptibility of prostate cancer was important to prostate cancer prevention was 94.4%. However, 5.6% of the respondents illustrated in the table thought that their perceived susceptibility of prostate cancer was unimportant.

Table 12 is a recoded frequency distribution of the respondents' belief that finances are a barrier to prostate cancer prevention. The continuums were recoded from four responses to two. Table 12 indicates whether the respondent thought finances was unimportant or important to prostate cancer prevention.
Table 12

Barrier 7: Importance of Finances

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unimportant</td>
<td>12</td>
</tr>
<tr>
<td>Important</td>
<td>95</td>
</tr>
<tr>
<td>Total</td>
<td>107</td>
</tr>
</tbody>
</table>

As indicated in Table 12, the percentage of the 107 respondents who believed that finances were important to prostate cancer prevention was 88.8%. However, 11.2% of the respondents illustrated in the table thought that finances were unimportant.

Table 13 is a cross tabulation of the importance of medical professionals discussing prostate cancer prevention with participants by the participation in prostate cancer prevention measures. The table shows the association of the participation in prostate cancer prevention measures with the importance of medical professional's discussing prostate cancer prevention with participants and indicated whether there was a statistically significant relationship between the two variables.
Table 13

Discussion with Medical Professionals

<table>
<thead>
<tr>
<th></th>
<th>Participation in Prostate Cancer Prevention Measures</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No</td>
<td>%</td>
<td>Yes</td>
<td>%</td>
</tr>
<tr>
<td>Discussed with medical professionals</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unimportant</td>
<td>5</td>
<td>4.7</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Important</td>
<td>54</td>
<td>50.9</td>
<td>47</td>
<td>44.3</td>
</tr>
<tr>
<td>Total</td>
<td>59</td>
<td>55.7</td>
<td>47</td>
<td>44.3</td>
</tr>
</tbody>
</table>

As indicated in Table 13, of the 106 respondents 4.7% indicated that it was unimportant to discuss prostate cancer prevention with medical professionals and did not participate in prostate cancer prevention measures. A majority (95.3%) indicated that it was important to discuss prostate cancer prevention with medical professionals. However, when the discussion with medical professionals variable was cross-tabulated with participation in prostate cancer prevention measures 50.9% of the respondents indicated that although it was important to discuss prostate cancer prevention with medical professionals, they did not participate in prostate cancer prevention measures.

As shown in table 13, when the chi square statistical test for significance was applied, the null hypothesis was rejected (p=.041) indicating that there was a statistically significant relationship between the two variables at the .05 level of probability.
Table 14 is a cross tabulation of the importance of culturally appropriate prostate cancer prevention literature with participants by the participation in prostate cancer prevention measures. The table shows the association of the participation in prostate cancer prevention measures with the importance of culturally appropriate prostate cancer prevention literature with participants and indicated whether there was a statistically significant relationship between the two variables.

Table 14

<table>
<thead>
<tr>
<th>Culturally Appropriate Literature</th>
<th>Participation in Prostate Cancer Prevention Measures</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>-----------------------------------</td>
<td>-----------------------------------------------</td>
<td>-----</td>
</tr>
<tr>
<td></td>
<td>#</td>
<td>%</td>
</tr>
<tr>
<td>Unimportant</td>
<td>6</td>
<td>5.7</td>
</tr>
<tr>
<td>Important</td>
<td>53</td>
<td>50.0</td>
</tr>
<tr>
<td>Total</td>
<td>59</td>
<td>55.7</td>
</tr>
</tbody>
</table>

As indicated in Table 14, of the 106 respondents 5.7% indicated that it was unimportant to have culturally appropriate prostate cancer prevention literature and did not participate in prostate cancer prevention measures. A majority (93.4%) indicated that it was important to have culturally appropriate prostate cancer prevention literature. However, when the culturally appropriate prostate cancer prevention literature variable was cross-tabulated with participation in prostate cancer prevention measures 50.0% of
the respondents indicated that although it was important to have culturally appropriate prostate cancer prevention literature, they did not participate in prostate cancer prevention measures.

As shown in table 14, when the chi square statistical test for significance was applied, the research did not reject the null hypothesis (p=.098) indicating that there was not a statistically significant relationship between the two variables at the .05 level of probability.

Table 15 is a cross tabulation of the importance of the involvement of family and others in the prevention of prostate cancer among participants by the participation in prostate cancer prevention measures. The table shows the association of the participation in prostate cancer prevention measures with the importance of the involvement of family and others in the prevention of prostate cancer among participants and indicated whether there was a statistically significant relationship between the two variables.
Table 15

Family Involvement

<table>
<thead>
<tr>
<th>Participation in Prostate Cancer Prevention Measures</th>
<th>No</th>
<th>%</th>
<th>Yes</th>
<th>%</th>
<th>Total</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>#</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unimportant</td>
<td>6</td>
<td>5.7</td>
<td>4</td>
<td>3.8</td>
<td>10</td>
<td>9.4</td>
</tr>
<tr>
<td>Important</td>
<td>53</td>
<td>50.0</td>
<td>43</td>
<td>40.6</td>
<td>96</td>
<td>90.6</td>
</tr>
<tr>
<td>Total</td>
<td>59</td>
<td>55.7</td>
<td>47</td>
<td>44.3</td>
<td>106</td>
<td>100.0</td>
</tr>
</tbody>
</table>

df=1  p=.772

As indicated in Table 15, of the 106 respondents 5.7% indicated that it was unimportant to have the involvement of family and others in the prevention of prostate cancer and did not participate in prostate cancer prevention measures. A majority (90.6%) indicated that it was important to have family and others involved in prostate cancer prevention measures. However, when family and others involvement in prostate cancer prevention variable was cross tabulated with participation in prostate cancer prevention measures 50.0% of the respondents indicated that although it was important to have family and others involved in prostate cancer prevention, they did not participate in prostate cancer prevention measures.

As shown in table 15, when the chi square statistical test for significance was applied, the research did not reject the null hypothesis (p=.772) indicating that there was
not a statistically significant relationship between the two variables at the .05 level of probability.

Table 16 is a cross tabulation of the importance of the involvement of religion in the prevention of prostate cancer among participants by the participation in prostate cancer prevention measures. The table shows the association of the participation in prostate cancer prevention measures with the importance of the involvement of religion in the prevention of prostate cancer among participants and indicated whether there was a statistically significant relationship between the two variables.

Table 16

Religion Involvement

<table>
<thead>
<tr>
<th>Religious Involvement</th>
<th>Participation in Prostate Cancer Prevention Measures</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No</td>
<td>%</td>
</tr>
<tr>
<td>Unimportant</td>
<td>16</td>
<td>15.1</td>
</tr>
<tr>
<td>Important</td>
<td>43</td>
<td>40.6</td>
</tr>
<tr>
<td>Total</td>
<td>59</td>
<td>55.7</td>
</tr>
</tbody>
</table>

As indicated in Table 16, of the 106 respondents 15.1% indicated that it was unimportant to have the involvement of religion in the prevention of prostate cancer and did not participate in prostate cancer prevention measures. A majority (78.3%) indicated that it was important to have religion in prostate cancer prevention. However, when the
importance of religion & prostate cancer prevention literature variable was cross-tabulated with participation in prostate cancer prevention measures forty point six percent (40.6%) of the respondents indicated that although it was important to have religion in prostate cancer prevention, they did not participate in prostate cancer prevention measures.

As shown in table 16, when the chi square statistical test for significance was applied, the research did not reject the null hypothesis (p=.129) indicating that there was not a statistically significant relationship between the two variables at the .05 level of probability.

Table 17 is a cross tabulation of the importance of the participants’ attitudes towards the digital rectal exam (DRE) and PSA by the participation in prostate cancer prevention measures. It shows the association of the participation in prostate cancer prevention measures with the participants’ attitudes towards the digital rectal exam (DRE) and PSA and indicated whether there was a statistically significant relationship between the two variables.
As indicated in Table 17, of the 106 respondents 5.7% indicated participant’s attitudes towards the digital rectal exam (DRE) and PSA and did not participate in prostate cancer prevention measures. A majority (90.6%) indicated that participant’s attitudes towards the digital rectal exam (DRE) and PSA affects prostate cancer prevention. However, when the importance of participants’ attitudes towards the digital rectal exam (DRE) and PSA variable was cross tabulated with participation in prostate cancer prevention measures fifty percent (50.0%) of the respondents indicated that although participants’ attitudes towards the digital rectal exam (DRE) and PSA was important to prostate cancer prevention, they did not participate in prostate cancer prevention measures.

As shown in table 17, when the chi square statistical test for significance was applied, the research did not reject the null hypothesis (p=.772) indicating that there was
not a statistically significant relationship between the two variables at the .05 level of probability.

Table 18 is a cross tabulation of the importance of the participants' perceived susceptibility of having prostate cancer by the participation in prostate cancer prevention measures. It shows the association of the participation in prostate cancer prevention measures with the participants' perceived susceptibility of having prostate cancer and indicated whether there was a statistically significant relationship between the two variables.

Table 18

Perceived Susceptibility

<table>
<thead>
<tr>
<th>Perceived Susceptibility</th>
<th>Participation in Prostate Cancer Prevention Measures</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No</td>
<td>%</td>
</tr>
<tr>
<td>Unimportant</td>
<td>4</td>
<td>3.8</td>
</tr>
<tr>
<td>Important</td>
<td>55</td>
<td>51.9</td>
</tr>
<tr>
<td>Total</td>
<td>59</td>
<td>55.7</td>
</tr>
</tbody>
</table>

df=1  p=.576

As indicated in Table 18, of the 106 respondents 3.8% indicated the participants perceived susceptibility of having prostate cancer and did not participate in prostate cancer prevention measures. A majority (94.3%) indicated that the participant has
perceived susceptibility of having prostate cancer affects prostate cancer prevention. However, when the importance the participants perceived susceptibility of having prostate cancer variable was cross tabulated with participation in prostate cancer prevention measures fifty one point nine percent (51.9%) of the respondents indicated that although their perceived susceptibility of having prostate cancer was important to prostate cancer prevention, they did not participate in prostate cancer prevention measures.

As shown in table 18, when the chi square statistical test for significance was applied, the research did not reject the null hypothesis (p=.576) indicating that there was not a statistically significant relationship between the two variables at the .05 level of probability.

Table 19 is a cross tabulation of the importance of the participants’ financial status in prostate cancer prevention by the participation in prostate cancer prevention measures. The table shows the association of the participation in prostate cancer prevention measures with the importance of the participants’ financial status in prostate cancer prevention and indicated whether there was a statistically significant relationship between the two variables.
Table 19

Finances and Screenings

<table>
<thead>
<tr>
<th>Participation in Prostate Cancer Prevention Measures</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No</td>
<td>%</td>
<td>Yes</td>
<td>%</td>
</tr>
<tr>
<td><strong>Finances and Screenings</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unimportant</td>
<td>6</td>
<td>5.7</td>
<td>6</td>
<td>5.7</td>
</tr>
<tr>
<td>Important</td>
<td>53</td>
<td>50.0</td>
<td>41</td>
<td>38.7</td>
</tr>
<tr>
<td>Total</td>
<td>59</td>
<td>55.7</td>
<td>47</td>
<td>44.3</td>
</tr>
</tbody>
</table>

df=1, p=.675

As indicated in Table 19, of the 106 respondents 5.7% indicated the importance of the participant’s financial status in prostate cancer prevention and did not participate in prostate cancer prevention measures. A majority (88.7%) indicated the importance of the participant’s financial status in prostate cancer prevention. However, when the importance of the participant’s financial status in prostate cancer prevention variable was cross tabulated with participation in prostate cancer prevention measures fifty percent (50.0%) of the respondents indicated their financial status was important to prostate cancer prevention, they did not participate in prostate cancer prevention measures.

As shown in table 19, when the chi square statistical test for significant was applied, the research did not reject the null hypothesis (p=.675) indicating that there was not a statistically significant relationship between the two variables at the .05 level of probability.
The purpose of this exploratory study was to assess the knowledge of low-income African-American men regarding prostate health and prostate cancer, and reveal myths and misinformation that are barriers to prostate cancer health decisions and behaviors. African-American men participated in focus groups that openly discuss prostate health, prostate cancer screening, diagnosis, and treatment, and factors influencing prostate health decisions and behaviors (Richardson, 2004).

Participants revealed sociocultural and psychological barriers myths and lack of accurate and adequate knowledge about prostate health and cancer, fear, denial and apathy. The findings suggest dynamics that explain the lack of participation in prostate health screenings and services among the medically underserved and socioeconomically poor, African-American men. It was revealed that lack of knowledge affects all barriers to participation. Progress in prostate cancer outcomes are attainable when culturally and linguistically suitable prostate cancer health education is tailored to the needs of African-American men (Richardson, 2004).

Audio taped focus groups and interviews were conducted to analyze embryonic themes. The male participants had insufficient information about the prostate cancer, its risk among African-American men, or the controversy concerning screening, except for prostate cancer survivors. Significant informants and focus group participants allude to inadequate access to services, mistrust of the health system, poor relationships with medical providers, and perceived threats to male sexuality as major barriers to participation in prostate cancer screenings (Allen, Kennedy, & Wilson-Glover, 2007).
Participants and informants suggested that interventions be rooted in a community settings, address men's overall health, and be administered by culturally competent providers, emphasized & foster trust among the community and providers, and have sustainability in the community. Screening efforts may be hindered by persistent mistrust of the healthcare system and inadequate relationships between patients and providers. Fervent support for screenings was apparent in previous program participants. (Allen et al., 2007).

Weinrich, Boyd, Weinrich, Greene, Reynolds, & Metlin (1998) states fewer African-American men participate in prostate cancer screening, although they have higher prostate cancer incidence and mortality rates. This study documents the benefits of two educational methods, the peer-educator method, and the client-navigator method, in increasing their participation. Sixty-one percent of the one thousand two hundred eleven African-American men who received an educational program on prostate cancer participated in the free prostate cancer screening.

Men who received the peer-educator method intervention, which included a testimony in support of prostate cancer screening given by an African-American man, were more likely to participate than were men who received a standard educational program. The client-navigator method intervention included a phone call aimed at overcoming screening barriers and reminders for screening. Findings suggest an increased participation by African-American men in prostate cancer screening following the peer-education and client-navigator interventions (Weinrich et al., 1998).
Importance of Family Involvement in Prevention Measures

Studies show that marriage significantly improves prostate cancer screening participation among men. Marriage significantly improves health compliance altogether (Reis-Starr et al., 1998). The social support from a significant other has been shown to influence screening behaviors (Plowden, 2006). Cancer is often referred to as a family disease; the psychological consequences of the illness and its treatments affect the quality of life experienced by partners and other family members, as well as that of patients/survivors (Baiden, Cooper, & Kaplan, 2000).

Prostate cancer is a significant health problem for African-American men intensified by low participation in screenings, clinical trials, and prospective cohort studies. Ten focus groups were conducted with African-American males and their female partners/spouses. Perceptions and knowledge about prostate cancer, as well as willingness to participate in screening and research studies were measured. Participants had a basic level of knowledge about prostate cancer, and the importance of education was a unified theme (Hughes, Sellers, Fraser, Teague, & Knight, 2007).

Dialogue with targeted African-American men and their partners/spouses may increase awareness and retention in medical research. Partner- or spouse-influenced health promotion, education and behavior might be effective (Hughes et al., 2007).

The purpose of this study was to develop and test the efficacy of a prostate health curriculum designed to train African-American and Afro-Caribbean barbers to deliver prostate cancer control messages to their customers. Focus groups were conducted that further inform the curriculum, which was pilot tested in training sessions. The high
incidence of late-stage diagnosis prostate cancer in African Americans has often been attributed to lack of screening. In surveys administered to ninety-two customers and nineteen barbers, only 26% of customers and 42% of barbers reported having some knowledge of the prostate-specific antigen (PSA) screening test. More than 90% of the barbers expressed a willingness to obtain prostate cancer information to specifically share with their customers, and 83% of customers expressed an interest in obtaining prostate cancer information and willingness to receive that information from their barbers (Fraser, Brown, Homel, Macchia, LaRosa, Clare, Davis-King, Collins, Samuel, Macalino, & Browne, 2009).

This pilot study suggests that there is a need for intervention programs that increase awareness and prostate health knowledge and behavior in communities with elevated incidence of prostate cancer. The study further suggests that barbers that are willing to use their leadership skills to educate and encourage their customers to engage in informed decision making is a positive intervention (Fraser et al., 2009).

Hart, Underwood, Smith, Bowen, Rivers, Jones, Parker, & Allen (2008) acknowledges that prostate cancer is the most common cause of cancer in men and the second leading cause of cancer deaths. African-American men bear a disproportionate burden of prostate cancer diagnosis and mortality. It is imperative that African-American men have the appropriate information needed to make informed decisions about prostate cancer screening. Large numbers of African-American men could potentially be excluded from receiving culturally appropriate prostate cancer education, which inspired
this study designed to recruit and intervene with African-American men and barbershops for increasing prostate cancer screening decision-making.

The purpose of this study was to learn effective strategies for recruiting African-American barbershops for prostate cancer education and to determine barbershop proprietors' willingness to allow their barbershops to be used for research. The study concluded that African-American barbershops in general are welcoming environments in which to implement community-based prostate cancer education and public health research (Hart et al., 2008).

This study was designed to determine the feasibility of collaborating with barbershops to implement a community-based prostate cancer preparatory educational decision aid for African-American men. Trained research interviewers conducted proprietor surveys and client surveys. Ninety-six percent of the proprietors surveyed reported they would allow their clients to learn about prostate cancer and seventy-five percent reported they would consider allowing a computer to be installed to provide information about prostate cancer. Ninety-seven percent of clients reported that they would be willing to look at information about prostate cancer in their barbershops. The study concluded that it would be viable to work with barbershops and their clients for a community-based prostate cancer screening decision-aid intervention for African-American men (Hart and Bowen, 2004).

Cancer is often referred to as a family disease with psychological consequences of the illness and its treatments that affect the quality of life experienced by partners and other family members (Baider, Cooper, & Kaplan et al., 2000). Studies show that
marriage significantly improves prostate cancer screening participation among men. Marriage significantly improves health compliance altogether (Reis-Starr et al., 1998). The social support from significant others has been shown to influence screening behaviors (Plowden, 2006).

**Importance of Religious & Spiritual Involvement in Prevention**

Emerging research suggests that interventions tailored to specific spiritual and cultural dimensions and involving culturally similar role models are promising means for reaching diverse groups who might not be readily accessed conventionally (Bailey, Erwin, & Belin, 2000). It has been proven that spirituality, especially religiosity, is highly important to adults in the second half of life, with an estimated 52% reporting regular participation in some type of religious activity (McFadden, 1995).

Religion is a type of spirituality characterized by an institutionalized body of belief, rituals, and practices and an identifiable community of believers or may be rooted in a less formalized, more personally derived belief system. Many religious traditions reflect a common appreciation for the painful emotions inherent in human existence, view adversity as a pathway to understanding, and enunciate ways of framing and responding to life’s challenges. Spirituality based resources are beliefs, values, and practices grounded in a relationship with a sacred source such as God, Higher Power, nature, or however the divine is held. In the face of adversity, spirituality based resources may be used to clarify and reorder life priorities such that values of enduring importance are conserved (Pargament, 1997).
Spirituality is the reliance on a sacred being in pursuit of meaning, purpose, and significance. Discussion around spirituality and religious belief and practices are meaningful during value-laden encounters with providers who have their own values, stereotypes, and biases (Ka'opua, Gotay, & Boehm, 2007).

A respectful curiosity about spirituality and religion is suggested in patient interaction. Across specialty practice areas, social workers and other providers might benefit from education on spiritual and religious transitions, as well as supervision, case conferences, and other opportunities for increasing awareness of group norms and individual variation within groups sharing a similar tradition (Ka’opua et al., 2007).

In times of adversity, spiritually based resources may inform coping with daily challenges and guide construction of meanings that allow integration of significant events into a perspective on life (Gall, Miguez de Renart, & Boonstra, 2000). The diversity of spiritual traditions used in coping with cancer suggests consideration of and a need for interrelatedness of race and ethnicity, culture, and spiritual based resources in healthcare education (Ashing-Giwa, et al., 2004). It has been found that African-American men perceive their cancer as the will of God (Underwood, 1991).

There is a correlation between the use of the church as the educational site, support from church leadership, and lay church educators contributing to the initial interest and willingness of the men who participate in prostate cancer prevention (Boehm, et. al, 1995). Minority churches and other faith-based organizations should impart information on prostate cancer to African-American men (Cowart et al., 2004). Public support by
church and community leaders facilitates acceptance among African Americans for messages about prostate cancer (Cowart et al., 2004).

Boehm (1995) discussed educational and screening programs for prostate cancer designed to strengthen knowledge and self-efficacy in African-American men through African-American churches. Education was provided by trained lay educators who were African-American men previously diagnosed and treated for prostate cancer.

The lay educators serve as role models of the desired behaviors. The pretests and posttests study was developed using the Prostate Cancer Screening Knowledge Inventory and the Prostate Cancer Screening Self-Efficacy Scale. Paired t tests demonstrated that church-based intervention significantly improves knowledge and self-efficacy scores related to prostate cancer screening (Boehm, 1995).

Weinrich, Holdford, & Boyd (1998) used churches to recruit African Americans into a health promotion study. The research measured the impact of previous exposure to cancer on participation in educational programs and free prostate cancer screenings. The Health Belief Model provided the conceptual framework for the study. Over five hundred men attended a prostate cancer educational program at their church. Men who participated in this educational program completed a questionnaire and were provided vouchers for a free prostate cancer examination.

Having a member of the congregation previously diagnosed with cancer significantly prompted participation in the cancer education program. The Health Belief Model inferred that a person might participate in a health promotion behavior if they have cues to action. Indications to action are receiving information about cancer, participation
in prostate cancer screening, and/or experiencing an event such as the diagnosis or death of a loved one from cancer. This study triggered recommendations for future cancer screening in church settings (Weinrich et al., 1998).

African-American men have the highest prostate cancer statistics worldwide. This is an indication for inventive and groundbreaking efforts being implemented to increase cancer prevention and screening behaviors among this population. This significant investigation was conducted to assess attitudes and behaviors associated with prostate cancer prevention activities that can be used to develop a culturally relevant intervention for an African-American church-based population (Blocker, Romocki, Thomas, Jones, Jackson, Reid, & Campbell, 2006).

Four focus groups of twenty-nine men and women at two African-American churches were conducted. Themes discussed consisted of culturally and gender-influenced beliefs and barriers about cancer prevention and screening, healthcare systems barriers and religious impacts, including the importance of spiritual beliefs and church support (Blocker et al., 2006).

The investigation discovered the importance of the black family, the positive influence of spouses/partners on promoting cancer screening and healthy behaviors, the roles of faith and church leadership, and beliefs about God's will for good health. African Americans continue to exemplify mistrust of the medical community and negative attitudes toward specific screening tests. Prostate cancer prevention interventions designed for church-based audiences was identified in this study as significant (Blocker et al., 2006).
African-American men have significantly higher occurrences of prostate cancer, are diagnosed at younger ages and at more advanced stages of prostate cancer, and have higher mortality rates than Caucasian men. The analysis was a community-based, quasi-experimental, delayed-control design with randomization in churches. A convenience sample consisted of four hundred and thirty African-American men age 40 to 70. A culturally appropriate group educational program was enacted, which included a video and interaction with an African-American physician with knowledge, perceived threat, and screening prevalence all increased significantly (Husaini, Reece, Emerson, Scales, Hull, & Levine, 2008).

Outcomes indicated that a low-cost prostate cancer awareness campaign within a church might be enough to affect prostate cancer knowledge, attitudes, and behaviors among African-American men. The awareness should comprise church-specific intervention elements and cultural appropriate messages (Husaini, et al., 2008).

The development of culturally appropriate health communication in the African-American churches includes developing spiritually based interventions with a health message structured in relevant spiritual themes and scripture. The study illustrates community health advisor led intervention that increase informed decision-making for prostate cancer screening among church-attending African-American men using educational booklets. Recommendations suggest an importance of working closely with the community when developing interventions and the importance of pilot testing of educational materials (Holt, Wynn, Southward, Litaker, Jeames, & Schulz, 2009).
Friedman, Corwin, Dominick, & Rose (2009) states prostate cancer is the most commonly diagnosed cancer among men in the United States, particularly among African-American men. The formative study was conducted on twenty-five African-American men, to explore the application of Nutbeam's multidimensional health literacy framework to African-American men's understanding of Prostate Cancer information. The African-American men's functional health literacy was assessed as well as participation in interviews or focus groups to analyze prostate cancer risk, prevention, and screening.

Participants displayed satisfactory literacy test scores, however, results from interviews and focus groups revealed participants' limited understanding and misconceptions about prostate cancer risk. Participants desired information about screening and family history delivered word-of-mouth by African-American women and church pastors as few of them had ever received or actively sought out prostate cancer resources. Study findings provide important implications for prostate cancer communication with African-American men to correct misperceptions about cancer risk and motivate preventive behaviors (Friedman et al., 2009).

**Attitudes Towards Screening Measures**

Pierce et al. (2003) states that African-American men's negative perception about an annual rectal exam, pain, and embarrassment associated with the exam, wearing diapers, and impotence may hinder their participation in cancer screenings. Behaviors related to screening are lacking that follow-up to initial screening needed among African-American men (Boehm, et al., 1995). It has been stated that African-American men and
Caucasian men are quite apprehensive about having blood samples drawn and/or rectal examinations completed (Reis-Starr et al., 1998).

Forrester-Anderson (2005) affirms that the knowledge, perceptions, attitudes, and behavior of African-American men related to prostate cancer and screening limits the participation in prostate cancer screening using the PSA and DRE examinations. There were twelve focus groups of one hundred four African-American men, 40 years of age and older, that resided in the metropolitan area of Baltimore, Maryland. The study indicated that there is a variety of barriers to screening among the African-American population.

The noted barriers are limited knowledge about the disease, lack of access to screening services, embarrassment, and fear of a positive diagnosis. Other barriers conveyed include distrust of medical professionals and the government, disinclination about sex-related health problems, complacency about the possibility of having prostate cancer, and belief that prostate cancer has a relation to sexual behavior. Positive reinforcement, optimism, and knowledge about prostate cancer are enabling factors associated with prostate cancer screening (Forrester-Anderson, 2005).

The purpose of this study was to examine the knowledge and perceptions of Jamaican and Haitian men regarding prostate cancer. The men were knowledgeable of the signs, symptoms, and risks for prostate cancer. The participants understood that early detection is connected with positive outcomes. All of the Jamaican men previously participated in screening within the past five years. The Haitian men were less well-informed, had more misconceptions than the Jamaican men, were less sanguine that
prostate cancer could be alleviated, and were less likely to have been screened (Kleier, 2004).

Qualitative findings are usually not generalized, however, language and cultural differences give the impression of negative impact on the level of knowledge that Haitian men have regarding prostate cancer. The Haitian men’s perception of the severity and outcomes was also attributed to language and culture. This study determined that these factors hinder efforts to recruit Haitian men as screening and research participants (Kleier, 2004).

Robinson, Ashley, & Haynes (1996) study was designed to identify attitudes associated with the willingness of African Americans to participate in prostate cancer screening. Fifty-six respondents, age forty and older were divided into low or middle class socioeconomic groups based on education and occupation. Focus group discussions were implemented to measure knowledge, attitudes, and beliefs about prostate cancer screening and treatment, willingness to participate in screening, incentives and barriers toward participating in screening, and source of medical care.

The middle class socioeconomic respondents conveyed an augmented compliance with participating in prostate cancer screenings. Differences that were accredited to the middle socioeconomic class were an increased knowledge about the disease and screening procedures, enhanced access to health promotion activities, being less fearful of discovering abnormal results, exposure to more aggressive behavior on the part of the provider with respect to screening, and receiving medical care in an atmosphere respectful of the consumer. The study’s outcome indicates that efforts to increase
minority participation in prostate cancer screening or prevention must consider these findings (Robinson et al., 1996).

**Perceived Susceptibility**

Susceptibility of prostate cancer hinders participation in screening measures. Behavioral and social factors include the proclivity to underrate risk for health problems, perceptions of invulnerability, and inadequate knowledge of disease. These are some of the most significant factors associated with the lack of participation in prostate cancer screenings among African-American men (Courtenay, 2000).

Susceptibility is a person’s notion about acquiring a disease (Pierce et al., 2003). Men tend to underestimate their risk of dying from cancer or being diagnosed with prostate cancer (McCreary, Gray, & Grace, 2006). Thirty-six percent of African-American men over age fifty in a telephone survey were unaware or reported they did not believe they were at increased risk of developing prostate cancer (Steele et al., 2000).

Shavers, Underwood, & Moser (2009) affirm the higher risk of prostate cancer for African-American men is well-known in the medical community; conversely, it is not clear how prevalent this knowledge is among African-American men themselves. Side effects of treatment and lack of a demonstrated mortality benefit of routine screening have increased the focus on patient participation in decision making about prostate cancer screening. Respondents were 1075 males whose responses to the 2003 Health Information National Trends Study were collected and analyzed to examine the associations among race/ethnicity, demographic characteristics, and the perception of the
risk of developing prostate cancer for African-American, Hispanic, and non-Hispanic white men, age forty-five and older, without a history of prostate cancer.

Men perceive their likelihood of getting prostate cancer as somewhat or very low with some respondents perceiving themselves to be more likely to get prostate cancer than the average man of the same age. The results exemplify that few African-American men perceived themselves to have a higher-than-average risk of prostate cancer, while a higher percentage of Hispanic men perceived their risk to be higher than that of the average man of the same age. Suggestions are that all men, but particularly African-American and Hispanic men, could benefit from information regarding their specific risk of developing prostate cancer before making a decision about prostate cancer screening (Shavers et al., 2009).

Financial Barriers to Prostate Cancer Screenings

Socioeconomic positions of young urban African-American men, with higher rates of unemployment and lower-skilled jobs, have less access to health insurance. Insurance plays an important part in the affordability of healthcare services among African-American men. Medicaid overage prevents men 18 and older from qualifying unless, they have been defined as being unable to become employed for two years or greater (Rich, 2000).

Black men still face the challenge of access to appropriate care and preventative services with health insurance due to managed care. When men lack health insurance coverage, they tend to prolong care until it becomes an emergency. Consequently, they
may receive care in an emergency room or urgent care settings that are not properly equipped to provide preventative care (Rich, 2000).

Each race and sex group has a percentage of individuals without health insurance. This generally declined as education level increased (Albano et al., 2007).

Theoretical Framework

This section elaborates on three theoretical frameworks on which this study is based. The objective is providing a framework around which the study will be centered. These frameworks include the Health Belief Model, Systems Theory, and Afrocentric Perspective.

Health Belief Model

The Health Belief Model (HBM) is designed to precipitate the health-related behaviors of African Americans with prostate cancer. It seeks an understanding of an individual’s motivation to engage or not to engage in certain health prevention programs and/or measured to determine patterns of preventive health practices (Pierce et al., 2003).

Developed in the 1950’s, the Health Belief Model (HBM) was designed to explain the failure of people to engage in preventative health behaviors and programs. HBM originated from psychosocial theory, designed by Lewin, which is based on a phenomenological orientation to positive and negative influences in the individual’s subjective world as they affect behavior. The model is a value expectancy model that examines an individual’s behavior, values, and judgment of how an action will provide a
positive outcome. The HBM is generalizeable in numerous settings, it is cost-conscious, and prompts hypotheses for testing, not to mention it is a proficient predictor of participation in prevention screening programs (Poss, 2001).

The examination of the components associated with the HBM model will further justify its worthiness. A perceived benefit is the individual belief that a specific action will be beneficial in reducing the health threat. The lack of uniformity in testing the model, especially in the way variables are operationalized that the measures and components used in the HBM have not been refined or standardized (Poss, 2001).

HBM examines the effects of health beliefs and decisions methods in making behavioral changes. This model is appropriate for this study because it examines the psychosocial factors associated with compliance to prostate cancer prevention. Severity is a person's perception of the symptoms from contracting the illness. HBM examines difficulties in performing the specific behaviors of interest and the negative things that could happen from performing those behaviors, cues to action such as environmental events, bodily events, or stories in the media that trigger perceptions of susceptibility (Daddario, 2007).

Neff and Crawford (1998), states the HBM posits that illness knowledge factors, perceived susceptibility to a disease and perceived severity of the disease influence preventative health behaviors. The effects of these factors are influenced by the benefits and efficacy of preventive action and perceived barriers to preventive activities. This indicates that there is a lack of clarity in terms of the structural relationships between model variables. Perceived barriers are the most consistent predictors across the study.
HBM focuses on the attitudes and beliefs of individuals. The HBM is based on individual participation in health-related action if that individual: (1) feels that a negative health condition can be avoided; (2) has a positive expectation that he/she will avoid a negative health condition by participation in prevention measures; and (3) believes that he/she can successfully participate in the health-related action. Health Belief Model attempts to reduce the health epidemic by incorporating prevention components susceptibility, severity, benefits, barriers, actions, and self-efficacy (Eisen, 1992). Health Belief Model examines dependably related variables for preventative health behavior outcomes. Severity has been deemed as the least reliable among HBM variables (Neff & Crawford, 1998).

Action is the link between intention and implementation—execution of the preventative measure. Self-efficacy is an individual’s belief that they have the power to implement an action to prevent prostate cancer. The model reviews demographics and socio-psychological factors that are related to healthcare behavior. Self-report that has commonly been used in empirical studies on the HBM conveys concern about recall or other biases associated with this reporting style (Burns, 1992).

The HBM does not apply numeric coefficients to the concepts of susceptibility, severity, benefits, and barriers, nor does it delineate the specific nature of the relationships among the variables. Some researchers add variables and others delete variables from the original model. The HBM includes normative or cultural factors that may influence health-seeking behaviors (Poss, 2001).
The HBM examines perceived barriers to seeking care. Factors that hinder people from engaging in health-seeking behaviors are analyzed (Rosenstock, 1960).

Barriers as defined by the HBM are the individual's perception about illness and disease. Studies show that African-American men's own perceptions may be a barrier to early prostate cancer detection. It is imperative that African-American males not feel they have overcome obstacles, perceived barriers, to obtain the benefits of prostate cancer prevention (Poss, 2001).

A thirty-two focus group study using the Health Belief Model was conducted with individuals of a lower socioeconomic class to address their attitudes concerning physical examinations, prostate cancer, and their foundation of health-care information. The Health Belief Model provided a framework to evaluate the perceptions of men of lower socioeconomic status toward the early detection of prostate cancer (Dale et al., 1999).

Most men of lower socioeconomic status viewed physical examinations pessimistically. Barriers to examinations include time, monetary costs, negative impressions of the prostate examination, and lack of belief in early detection. On average, minority men who participated in prostate examinations did so as part of examinations for chronic medical conditions or because of employer requirements for routine checkups. The rectal exam was viewed very negatively due to physical pain, social embarrassment, and uncertain value. Fear and fatalism regarding prostate cancer diagnosis and treatment were expressed by the majority of attendees. Men typically received healthcare information from the media, with television being the most common source (Dale et al., 1999).
No significant differences in barriers to early detection efforts were observed between focus groups composed of Caucasian versus African-American impecunious men. Cynical perceptions regarding physical examinations and skepticism about the value of early detection were the chief barriers to early detection (Dale, et al., 1999).

The Price, Desmond, Wallace, Smith, & Stewart (1988) study determined the difference between African-American and Caucasian adolescents’ cancer knowledge, attitudes, and beliefs. The Health Belief Model, a 97-item questionnaire, was developed and completed by 573 African-American and 297 Caucasian junior and senior high school students. Chi-square analyses yielded nine significant differences between African Americans and Caucasians on cancer knowledge.

Cancer knowledge examined the etiology, warning signs, and prevention techniques. African Americans and Caucasians differed significantly on cues to action, perceived susceptibility, perceived severity, perceived barriers, perceived benefits, and interpersonal relationships. African Americans and Caucasians received cancer information from the same sources, with the exception of books, which African Americans used more (Price et al., 1988).

Systems Theory

A system is a set of components that are arranged and interconnected to make a whole. Systems Theory concentrates on the interaction between individuals and multiple systems that comprise their environment. The theory assesses the relationship of the
family, friends, work, social services, political, employment, religious, goods and services, and educational systems in the environment (Zastrow & Kirst-Ashman, 2001).

The most important concepts that are examined in this theory as it pertains to social work include systems, boundaries, subsystems, homeostasis, role, relationship, input, output, feedback, interface, differentiation, entropy—disorganization, negative entropy, and equifinality—different means to the same end. The social environment includes home, work, money, laws and rules of the community, family, friends, work organizations, government, healthcare, housing, social welfare, and educational systems (Zastrow & Kirst-Ashman, 2001).

The Systems Theory describes and evaluates individuals, other living systems, and their surroundings (Beckett & Johnson, 1995). It is believed that systems perspective is practical in evaluating persons in situation relationships, nonetheless, it has restrictions in providing the basis for interventions (Whittaker & Tracy, 1989).

The Systems Theory emphasizes the relationships among individuals, groups, organizations, or communities. Ethnocentrism is an orientation or set of beliefs that holds one's own culture, ethnic or racial group, or nation is superior to others. Racism stereotypes and generalizes about people in a negative manner because of their race and is commonly a basis of discrimination against members of racial minority groups. When examining discrimination within a social system, prejudgment and negative treatment of people based on identifiable characteristics such as race, gender, religion, or ethnicity must be reviewed (Barker, 1999).
The limitations to the Systems Theory include not adding much to domain specific knowledge. Terms such as equifinality and multifinality are not generalizeable (Hepworth, Rooney, & Larsen, 2002).

Afrocentric Perspective

Asante (1988) defines Afrocentricity as a commitment to African values, morals, and beliefs, which leads to a positive self-persona and positive ethnic association. Afrocentric ethnical dynamics are based on the principle that African Americans share an exclusive cultural belief system that is ingrained in their African heritage, yet incongruent with the domineering Eurocentric culture.

The objective of Afrocentricity is to decrease all forms of oppression, racism, classism, homophobia, patriarchy, child abuse, pedophilia, and white racial domination. This perspective is in opposition to Eurocentric rationalism and empiricism and for emphasizing African significant customs and ethnicity as a standard and not a deviance (Asante, 1988).

Afrocentricity is a transforming perspective from what once was the norm, to what will be a new way of thinking. The strategy of the Afrocentric Perspective is uncovering all falsehoods, to expose fake issues, to demonstrate the overpowering effect of committed will-changing behaviors. It is designed to prevent African descendants from becoming victims of self-deception and to reconstruct their lives on an Afrocentric basis. It goes on to alleviate actions that prevent the incorporation of Afrocentric living, teachings, values, purpose, and activities. Afrocentricity is based on reality, a reality that is grounded in an African historical framework (Asante, 2003).
Afrocentrism encourages social scientists to use their scholarship and knowledge to analyze Eurocentric domination and empower the African culture. European attributes are those that shape the social service field as individualistic, materialistic, mechanistic, and pessimistic. These attributes separate the person from the situation, alleviate the importance of spirituality, psychosocial development based on the influence of previous stages on the later stage, and a prominence of conflict (Schiele, 2000).

The need for this perspective arises to establish an African-American-specific theoretical base that will create new human service practice paradigms and methods centered on the African culture. The cultural values of people of color and Eurocentric domination are critical areas that need to be considered when delivering human services and when developing theoretical foundations for establishing additional human service paradigms. Since most human service consumers are of color, paradigms should reflect their cultural values and worldviews (Schiele, 2000).

Developing an Afrocentric paradigm will incorporate new strategies that are harmonious with the particular cultural styles, experiences, traditions, and interpretations of these groups, which can lead to more effective human services practice. When cultural values are incorporated into social service interventions, then, treatment objective achievements are greater. Not incorporating an Afrocentric paradigm makes people of color feel as though the Eurocentric values, norms, and visions are dominant during interventions and theirs are substandard and irrelevant. Afrocentrism promotes an alternative social science paradigm more reflective of the cultural and political reality of African Americans (Schiele, 2000).
Afrocentrism is designed to dispel the negative distortions about people of African ancestry by legitimizing and disseminating a worldview that goes back thousands of years and that exists in the hearts and minds of many people of African descent today. The goal of Afrocentrism is to promote a worldview that will facilitate human and societal transformation toward spiritual, moral, and humanistic ends and that will persuade people of different cultural and ethnic groups that they share a mutual interest in this regard (Schiele, 2000).

Ethnocentrism and racism are factors that can affect the growth and development of minority group members. Racial or ethnic discrimination involves denying members of minority groups equal access to opportunities. Ethnocentrism and racism are best demonstrated in the systems perspective as discrimination within the systems, manifested in the way the system treats the consumers. Ethnocentrism and racism create barriers within the society that limit obtaining the necessary resources to lead a secure and comfortable lifestyle. Examples include adequate housing, education, employment, healthcare, and justice in the legal system (Zastrow & Kirst-Ashman, 2001).

Ethnocentrism and racism further lead to social factors among minority groups, for example, crime, emotional troubles, alcoholism, and drugs (Zastrow & Kirst-Ashman, 2001). Afrocentric perspective seeks to dispel the negative distortions about African ancestry by legitimizing and disseminating a worldview that goes back thousands of years and that exists in the heart and minds of many people of African descent today (Schiele, 2000).
The Health Belief Model (HBM) and Systems Theory are psychosocial models that examine an individual’s behaviors, attitudes, and beliefs associated with health behaviors. Factors related to the individual, such as demographic variables, personality factors, social support, or previous health experiences may play a role in influencing behavior, but they are not an explicit part of the HBM model (Poss, 2001).

The barrier variable of the Health Belief Model serves to identify the importance barriers play on prevention and identified specific prostate cancer prevention barriers in current literature. The Systems Theory explains interrelation of important social factors that enable barriers to prostate cancer prevention. When evaluating the social systems within the systems theory, it is appropriate to examine ethnocentrism and racism (Zastrow & Kirst-Ashman, 2001).

Poss (2001) states that the HBM being studied with a culturally based model, like the Afrocentric Perspective, is a profound approach research centered on health disparities. The HBM and Afrocentric perspective combined with the systems perspective examines beyond the presenting problems of the client, to assess the complexities and the interrelationships of the problem (Zastrow, 1995).
CHAPTER III
METHODOLOGY

Chapter III describes the methods and procedures used in the investigation of the influence of prostate cancer barriers on the participation in prostate cancer prevention measures in Georgia. The chapter is divided into the following sections: research design, description of the site sample and population, research question, hypothesis, and applied measures, instrumentation, treatment of the data, and limitations of the study.

Research Design

A descriptive and explanatory research design was used in this study. This study was designed to collect data in order to describe and explain the relationship of prostate cancer prevention and the routine screening barriers of African-American males in Georgia. A survey was used to examine the participants’ opinion of seven prostate cancer barriers and three prostate cancer risks.

The descriptive and explanatory research design allowed for the descriptive analysis of the demographic characteristics of the respondents. In addition, this research design facilitated the explanation of the statistical relationship between prostate cancer prevention and barriers to prostate cancer and prostate cancer risks.
Description of the Site

The research study was conducted in Georgia. This research was part of an IRB approved study on the relationship of prostate cancer prevention and the routine screening barriers of African-American males in Georgia. Convenient sampling was used in the study. The selection of participants was considered convenience samples because they were not randomly selected from a large population; the sample was from a predetermined population (Reichardt & Gollof, 1999).

Sample and Population

Participants were eligible to participate in the study if they were male, age eighteen or older, and reside in Georgia. Ultimately, one hundred and seven participants completed the seventeen-question survey on barriers to prostate cancer. One hundred and seven (107) men agreed to participate in the study via signing a consent of authorization form. Demographic data and survey results on 107 participants were collected, utilizing convenient sampling. The researcher disseminated and collected the surveys from participants. The survey obtained the following information: ethnicity, age, income, marital status, gender, educational level, knowledge of prostate cancer barriers, participation in prostate cancer prevention measures, previous diagnosis of prostate cancer, and family history of prostate cancer. Participants provided consent to participate in the study. All participants' identifying information used for research is protected.
Instrumentation

This study examined the relationship of prostate cancer prevention and the routine screening barriers of African-American males in Georgia. Men completing a survey for a small non-generalizeable study exploring barriers and risk associated with prostate cancer prevention among African-American men in Georgia were intentionally sampled by age (18 years and older), race and ethnicity (Black/African American), and locality (Georgia). Men who met the criteria and indicated interest were approached to participate in this study. Eligible men were provided letters, authorization of consent and short surveys to complete and return to the researcher. The letters explained the purpose of the study, the nature of the survey, voluntary participation, confidentiality, and privacy.

Section I of the inventory consists of ten items (1 through 10) containing a demographic section that described age, education, income, race, gender, marital status, and prostate cancer information. These items will provide information for the presentation of a patient demographic profile and determines family history, knowledge of barriers, and diagnosis of prostate cancer.

Section II consist of seven barrier questions; men rated barriers based on medical professional interaction, culturally appropriate literature, family involvement, spiritual/religious involvement, attitudes towards screenings, perceived susceptibility, and financial influences to their participation in prostate cancer prevention. The seventeen-question survey was returned to the researcher with completed consent and all seventeen questions.
Treatment of the Data

Statistical treatment of the data employed descriptive statistics, including measures of central tendency, frequency distribution, and cross tabulation. Statistical analyses were performed by using a seventeen-question survey. The chi-squared test was used to test the hypothesis and determine if there is a relationship of prostate cancer prevention and the routine screening barriers of African-American males in Georgia.

Frequency distribution was used to analyze each of the variables of the study in order to summarize the basic measurements. It was further used to analyze the demographics of the study to gain an understanding of the participants.

Cross tabulations were utilized to demonstrate the statistical relationship between prostate cancer prevention and barriers to prostate cancer and prostate cancer risk among African-American men in Georgia.

The test statistics that was employed in this research study was chi square. Chi square allows the research to determine dependence and non-dependence on variables. The research can also determine relationships using chi square (Bresnahan & Shapiro, 1966).

Limitations of the Study

There were two limitations identified in this study. The research examined barriers & risks from previous studies instead of conducting a new qualitative study on African-American men in Georgia and the study’s demographics population was individuals who were 18 yrs and older and residing in Georgia, thus, a non-generalizeable study was conducted.
CHAPTER IV
PRESENTATION OF FINDINGS

The purpose of this chapter is to present the findings of the study in order to describe and explain the barriers of prostate cancer prevention among African-American males. The findings are organized into two sections: demographic data and research questions and hypotheses.

Demographic Data

This section provides a profile of the study respondents. Descriptive statistics were used to analyze the following: gender, age, ethnicity, marital status, educational level, income, knowledge of prostate cancer barriers, participation in prevention measures, diagnose of prostate cancer, and family history of prostate cancer. A target population for the research was composed of males age 18 years of age and older residing in the state of Georgia. These participants provided consent to participate in this study. The data was analyzed using SPSS.
Table 1
Demographic Profile of Participants (N=107)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>106</td>
<td>99.1</td>
</tr>
<tr>
<td>Female</td>
<td>1</td>
<td>0.9</td>
</tr>
<tr>
<td>Age Group</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18-28</td>
<td>11</td>
<td>10.4</td>
</tr>
<tr>
<td>29-38</td>
<td>21</td>
<td>19.8</td>
</tr>
<tr>
<td>39-48</td>
<td>22</td>
<td>20.4</td>
</tr>
<tr>
<td>49-58</td>
<td>25</td>
<td>23.6</td>
</tr>
<tr>
<td>59 up</td>
<td>27</td>
<td>25.5</td>
</tr>
<tr>
<td>Ethnicity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>African American</td>
<td>95</td>
<td>88.8</td>
</tr>
<tr>
<td>Caucasian</td>
<td>7</td>
<td>6.5</td>
</tr>
<tr>
<td>Asian</td>
<td>1</td>
<td>0.9</td>
</tr>
<tr>
<td>Hispanic</td>
<td>2</td>
<td>1.9</td>
</tr>
<tr>
<td>Other</td>
<td>2</td>
<td>1.9</td>
</tr>
<tr>
<td>Marital Status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>67</td>
<td>62.6</td>
</tr>
<tr>
<td>Never Married</td>
<td>21</td>
<td>19.6</td>
</tr>
<tr>
<td>Divorced</td>
<td>15</td>
<td>14.0</td>
</tr>
<tr>
<td>Widowed</td>
<td>4</td>
<td>3.7</td>
</tr>
<tr>
<td>Educational Level</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Some High School</td>
<td>4</td>
<td>3.7</td>
</tr>
<tr>
<td>High School Grad-GED</td>
<td>9</td>
<td>8.4</td>
</tr>
<tr>
<td>Some College</td>
<td>32</td>
<td>29.9</td>
</tr>
<tr>
<td>Bachelors Degree</td>
<td>36</td>
<td>33.6</td>
</tr>
<tr>
<td>Graduate Degree</td>
<td>26</td>
<td>24.3</td>
</tr>
<tr>
<td>Total Income</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Under $20,000</td>
<td>7</td>
<td>6.5</td>
</tr>
<tr>
<td>$20,000 – 39,999</td>
<td>25</td>
<td>23.4</td>
</tr>
<tr>
<td>$40,000 – 59,999</td>
<td>39</td>
<td>36.4</td>
</tr>
<tr>
<td>$60,000 – 79,999</td>
<td>21</td>
<td>19.6</td>
</tr>
<tr>
<td>$80,000 up</td>
<td>15</td>
<td>14.0</td>
</tr>
</tbody>
</table>
As indicated in Table 1, the typical respondent of the study was an African-American male who was 59 years and older, with an income of $40,000-$59,999. The typical respondent was married and a bachelor’s level of education.

Table 2 is a frequency distribution of the knowledge of barriers to prostate cancer (CA) prevention among the 107 respondents to this study. Table 2 indicates whether the respondent had knowledge of the barriers to prostate cancer prevention.

Table 2
Knowledge of Barriers

<table>
<thead>
<tr>
<th>Value</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>37</td>
<td>35.6</td>
</tr>
<tr>
<td>Yes</td>
<td>67</td>
<td>64.4</td>
</tr>
<tr>
<td>Total</td>
<td>104</td>
<td>100.0</td>
</tr>
</tbody>
</table>

As indicated in Table 2, of the 104 participants, 64.4% of the respondents to this study had knowledge of prostate cancer prevention barriers. However, this table also indicates that 35.6% of the respondents did not have knowledge of prostate cancer prevention barriers.

Table 3 is a frequency distribution of the respondents’ participation in prostate cancer (CA) prevention measures. Table 3 indicates whether the 107 respondents previously participated in prostate cancer prevention measures.
Table 3

Participation in Prevention

<table>
<thead>
<tr>
<th>Value</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>59</td>
<td>55.7</td>
</tr>
<tr>
<td>Yes</td>
<td>47</td>
<td>44.3</td>
</tr>
<tr>
<td>Total</td>
<td>106</td>
<td>100.0</td>
</tr>
</tbody>
</table>

As indicated in Table 3, of the 106 participants, 44.3% of the respondents participated in prostate cancer prevention measures. Nonetheless, this table also indicates that 55.7% of the respondents have not previously participated in prostate cancer prevention measure.

Table 4 is a frequency distribution of the 107 respondents’ prior diagnosis of prostate cancer (CA). Table 4 indicates whether the respondent had been previously diagnosed with prostate cancer.

Table 4

Diagnosed with Prostate CA

<table>
<thead>
<tr>
<th>Value</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>102</td>
<td>95.3</td>
</tr>
<tr>
<td>Yes</td>
<td>5</td>
<td>4.7</td>
</tr>
<tr>
<td>Total</td>
<td>107</td>
<td>100.0</td>
</tr>
</tbody>
</table>
As indicated in Table 4, of the 107 participants, 95.3% of the respondents had no previous diagnosis of prostate cancer. Conversely, this table also indicates that 4.7% of the respondents have been previously diagnosed with prostate cancer.

Table 5 is a frequency distribution of the respondents’ family history of prostate cancer (CA). Table 5 indicates whether the respondent had any previous family history of prostate cancer.

Table 5

<table>
<thead>
<tr>
<th>Value</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>91</td>
<td>85.0</td>
</tr>
<tr>
<td>Yes</td>
<td>16</td>
<td>15.0</td>
</tr>
<tr>
<td>Total</td>
<td>107</td>
<td>100.0</td>
</tr>
</tbody>
</table>

As indicated in Table 5, the 107 respondents with no family history of prostate cancer are 85.0%. Yet, 15.0% of the respondents illustrated in the table had a family history of prostate cancer.

Table 6 is a recoded frequency distribution of the respondents’ belief that medical professionals discussing prostate cancer (CA) prevention with them is a barrier. The continuums were recoded from four responses to two. Table 6 indicates whether the respondent thought medical professional’s involvement was unimportant or important to prostate cancer prevention.
Table 6

Barrier 1: Medical Professionals

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unimportant</td>
<td>5</td>
<td>4.7</td>
</tr>
<tr>
<td>Important</td>
<td>102</td>
<td>95.3</td>
</tr>
<tr>
<td>Total</td>
<td>107</td>
<td>100.0</td>
</tr>
</tbody>
</table>

As indicated in Table 6, the percentage of the 107 respondents who considered medical professional’s involvement in prostate cancer prevention important are 95.3%. Yet, 4.7% of the respondents as illustrated in the table believe medical professional’s involvement was unimportant.

Table 7 is a recoded frequency distribution of the respondents’ belief that culturally appropriate literature is a barrier to prostate cancer (CA) prevention. The continuums were recoded from four responses to two. Table 7 indicates whether the respondent thought that culturally appropriate literature was unimportant or important to prostate cancer prevention.
Table 7

Barrier 2: Appropriate Literature

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unimportant</td>
<td>7</td>
<td>6.5</td>
</tr>
<tr>
<td>Important</td>
<td>100</td>
<td>93.5</td>
</tr>
<tr>
<td>Total</td>
<td>107</td>
<td>100.0</td>
</tr>
</tbody>
</table>

As indicated in Table 7, of the 107 participants 93.5% believed that culturally appropriate literature was important. Yet, 6.5% of the respondents illustrated in the table felt that culturally appropriate literature is unimportant.

Table 8 is a recoded frequency distribution of the respondents’ belief that family involvement is a barrier to prostate cancer (CA) prevention. The continuums were recoded from four responses to two. Table 8 indicates whether the respondent thought that family involvement was unimportant or important to prostate cancer prevention.

Table 8

Barrier 3: Family Involvement

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unimportant</td>
<td>10</td>
<td>9.3</td>
</tr>
<tr>
<td>Important</td>
<td>97</td>
<td>90.7</td>
</tr>
<tr>
<td>Total</td>
<td>107</td>
<td>100.0</td>
</tr>
</tbody>
</table>
As indicated in Table 8, the percentage of the 107 respondents who believe that family involvement was important to prostate cancer prevention was 90.7%. However, 9.3% of the respondents illustrated in the table thought that family involvement was unimportant.

Table 9 is a recoded frequency distribution of the respondents' belief that religious involvement is a barrier to prostate cancer (CA) prevention. The continuums were recoded from four responses to two. Table 9 indicates whether the respondent thought that religious involvement was unimportant or important to prostate cancer prevention.

<table>
<thead>
<tr>
<th>Table 9: Religious Involvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency</td>
</tr>
<tr>
<td>Unimportant</td>
</tr>
<tr>
<td>Important</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

As indicated in Table 9, the percentage of the 107 respondents who believed that religious involvement was important to prostate cancer prevention was 78.5%. However, 21.5% of the respondents illustrated in the table thought that religious involvement was unimportant.

Table 10 is a recoded frequency distribution of the respondent’s belief that their attitudes towards prostate screenings are a barrier to prostate cancer prevention. The continuums were recoded from four responses to two. Table 10 indicates whether the
respondent thought their attitude towards prostate screenings was unimportant or important to prostate cancer prevention.

Table 10

Barrier 5: Screening Attitudes

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unimportant</td>
<td>10</td>
</tr>
<tr>
<td>Important</td>
<td>97</td>
</tr>
<tr>
<td>Total</td>
<td>107</td>
</tr>
</tbody>
</table>

As indicated in Table 10, the percentage of the 107 respondents who believed that their attitudes towards prostate screenings were important to prostate cancer prevention were 90.7%. However, 9.3% of the respondents illustrated in the table thought that their attitudes towards prostate screenings were unimportant.

Table 11 is a recoded frequency distribution of the respondents’ belief that their perceived susceptibility to prostate cancer was a barrier to prostate cancer (CA) prevention. The continuums were recoded from four responses to two. Table 11 indicates whether or not the respondent perceived their susceptibility of prostate cancer as unimportant or important to prostate cancer prevention.
Table 11

Barrier 6: Susceptibility

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unimportant</td>
<td>6</td>
<td>5.6</td>
</tr>
<tr>
<td>Important</td>
<td>101</td>
<td>94.4</td>
</tr>
<tr>
<td>Total</td>
<td>107</td>
<td>100.0</td>
</tr>
</tbody>
</table>

As indicated in Table 11, the percentage of the 107 respondents who believed that their perceived susceptibility of prostate cancer was important to prostate cancer prevention was 94.4%. However, 5.6% of the respondents illustrated in the table thought that their perceived susceptibility of prostate cancer was unimportant.

Table 12 is a recoded frequency distribution of the respondents’ belief that finances are a barrier to prostate cancer prevention. The continuums were recoded from four responses to two. Table 12 indicates whether the respondent thought finances was unimportant or important to prostate cancer prevention.
Table 12

Barrier 7: Importance of Finances

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unimportant</td>
<td>12</td>
<td>11.2</td>
</tr>
<tr>
<td>Important</td>
<td>95</td>
<td>88.8</td>
</tr>
<tr>
<td>Total</td>
<td>107</td>
<td>100.0</td>
</tr>
</tbody>
</table>

As indicated in Table 12, the percentage of the 107 respondents who believed that finances were important to prostate cancer prevention was 88.8%. However, 11.2% of the respondents illustrated in the table thought that finances were unimportant.

Table 13 is a cross tabulation of the importance of medical professionals discussing prostate cancer prevention with participants by the participation in prostate cancer prevention measures. The table shows the association of the participation in prostate cancer prevention measures with the importance of medical professional's discussing prostate cancer prevention with participants and indicated whether there was a statistically significant relationship between the two variables.
Table 13
Discussion with Medical Professionals

<table>
<thead>
<tr>
<th>Participation in Prostate Cancer Prevention Measures</th>
<th>No</th>
<th>%</th>
<th>Yes</th>
<th>%</th>
<th>Total</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>#</td>
<td></td>
<td>#</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Discussed with medical professionals</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unimportant</td>
<td>5</td>
<td>4.7</td>
<td>0</td>
<td>0</td>
<td>5</td>
<td>4.7</td>
</tr>
<tr>
<td>Important</td>
<td>54</td>
<td>50.9</td>
<td>47</td>
<td>44.3</td>
<td>101</td>
<td>95.3</td>
</tr>
<tr>
<td>Total</td>
<td>59</td>
<td>55.7</td>
<td>47</td>
<td>44.3</td>
<td>106</td>
<td>100.0</td>
</tr>
</tbody>
</table>

As indicated in Table 13, of the 106 respondents 4.7% indicated that it was unimportant to discuss prostate cancer prevention with medical professionals and did not participate in prostate cancer prevention measures. A majority (95.3%) indicated that it was important to discuss prostate cancer prevention with medical professionals. However, when the discussion with medical professionals variable was cross-tabulated with participation in prostate cancer prevention measures 50.9% of the respondents indicated that although it was important to discuss prostate cancer prevention with medical professionals, they did not participate in prostate cancer prevention measures.

As shown in table 13, when the chi square statistical test for significance was applied, the null hypothesis was rejected (p=.041) indicating that there was a statistically significant relationship between the two variables at the .05 level of probability.
Table 14 is a cross tabulation of the importance of culturally appropriate prostate cancer prevention literature with participants by the participation in prostate cancer prevention measures. The table shows the association of the participation in prostate cancer prevention measures with the importance of culturally appropriate prostate cancer prevention literature with participants and indicated whether there was a statistically significant relationship between the two variables.

Table 14

<table>
<thead>
<tr>
<th>Culturally Appropriate Literature</th>
<th>Participation in Prostate Cancer Prevention Measures</th>
<th>No</th>
<th>%</th>
<th>Yes</th>
<th>%</th>
<th>Total</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unimportant</td>
<td></td>
<td>6</td>
<td>5.7</td>
<td>1</td>
<td>0.9</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>Important</td>
<td></td>
<td>53</td>
<td>50.0</td>
<td>46</td>
<td>43.4</td>
<td>99</td>
<td>93.4</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>59</td>
<td>55.7</td>
<td>47</td>
<td>44.3</td>
<td>106</td>
<td>100.0</td>
</tr>
</tbody>
</table>

df=1  p=.098

As indicated in Table 14, of the 106 respondents 5.7% indicated that it was unimportant to have culturally appropriate prostate cancer prevention literature and did not participate in prostate cancer prevention measures. A majority (93.4%) indicated that it was important to have culturally appropriate prostate cancer prevention literature. However, when the culturally appropriate prostate cancer prevention literature variable was cross-tabulated with participation in prostate cancer prevention measures 50.0% of
the respondents indicated that although it was important to have culturally appropriate prostate cancer prevention literature, they did not participate in prostate cancer prevention measures.

As shown in table 14, when the chi square statistical test for significance was applied, the research did not reject the null hypothesis (p=.098) indicating that there was not a statistically significant relationship between the two variables at the .05 level of probability.

Table 15 is a cross tabulation of the importance of the involvement of family and others in the prevention of prostate cancer among participants by the participation in prostate cancer prevention measures. The table shows the association of the participation in prostate cancer prevention measures with the importance of the involvement of family and others in the prevention of prostate cancer among participants and indicated whether there was a statistically significant relationship between the two variables.
Table 15

Family Involvement

|                     | Participation in Prostate Cancer Prevention Measures |                         |                   |                   |
|---------------------|-----------------------------------------------------|--------------------------|-------------------|
|                     | No | % | Yes | % | Total | # | % |
| Family Involvement  |    |   |     |   |       |   |    |
| Unimportant         | 6  | 5.7 | 4  | 3.8 | 10  | 9.4 |
| Important           | 53 | 50.0 | 43 | 40.6 | 96  | 90.6 |
| Total               | 59 | 55.7 | 47 | 44.3 | 106 | 100.0 |

As indicated in Table 15, of the 106 respondents 5.7% indicated that it was unimportant to have the involvement of family and others in the prevention of prostate cancer and did not participate in prostate cancer prevention measures. A majority (90.6%) indicated that it was important to have family and others involved in prostate cancer prevention measures. However, when family and others involvement in prostate cancer prevention variable was cross tabulated with participation in prostate cancer prevention measures 50.0% of the respondents indicated that although it was important to have family and others involved in prostate cancer prevention, they did not participate in prostate cancer prevention measures.

As shown in table 15, when the chi square statistical test for significance was applied, the research did not reject the null hypothesis (p=.772) indicating that there was
not a statistically significant relationship between the two variables at the .05 level of probability.

Table 16 is a cross tabulation of the importance of the involvement of religion in the prevention of prostate cancer among participants by the participation in prostate cancer prevention measures. The table shows the association of the participation in prostate cancer prevention measures with the importance of the involvement of religion in the prevention of prostate cancer among participants and indicated whether there was a statistically significant relationship between the two variables.

Table 16

Religion Involvement

<table>
<thead>
<tr>
<th>Religious Involvement</th>
<th>Participation in Prostate Cancer Prevention Measures</th>
<th>#</th>
<th>%</th>
<th>#</th>
<th>%</th>
<th>#</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unimportant</td>
<td>No</td>
<td>16</td>
<td>15.1</td>
<td>7</td>
<td>6.6</td>
<td>23</td>
<td>21.7</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>43</td>
<td>40.6</td>
<td>40</td>
<td>37.7</td>
<td>83</td>
<td>78.3</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>59</td>
<td>55.7</td>
<td>47</td>
<td>44.3</td>
<td>106</td>
<td>100.0</td>
</tr>
</tbody>
</table>

As indicated in Table 16, of the 106 respondents 15.1% indicated that it was unimportant to have the involvement of religion in the prevention of prostate cancer and did not participate in prostate cancer prevention measures. A majority (78.3%) indicated that it was important to have religion in prostate cancer prevention. However, when the
importance of religion & prostate cancer prevention literature variable was cross
        tabulated with participation in prostate cancer prevention measures forty point six percent
        (40.6%) of the respondents indicated that although it was important to have religion in
        prostate cancer prevention, they did not participate in prostate cancer prevention
        measures.
        As shown in table 16, when the chi square statistical test for significance was
        applied, the research did not reject the null hypothesis (p=.129) indicating that there was
        not a statistically significant relationship between the two variables at the .05 level of
        probability.
        Table 17 is a cross tabulation of the importance of the participants' attitudes
        towards the digital rectal exam (DRE) and PSA by the participation in prostate cancer
        prevention measures. It shows the association of the participation in prostate cancer
        prevention measures with the participants' attitudes towards the digital rectal exam
        (DRE) and PSA and indicated whether there was a statistically significant relationship
        between the two variables.
As indicated in Table 17, of the 106 respondents 5.7% indicated participant’s attitudes towards the digital rectal exam (DRE) and PSA and did not participate in prostate cancer prevention measures. A majority (90.6%) indicated that participant’s attitudes towards the digital rectal exam (DRE) and PSA affects prostate cancer prevention. However, when the importance of participants’ attitudes towards the digital rectal exam (DRE) and PSA variable was cross tabulated with participation in prostate cancer prevention measures fifty percent (50.0%) of the respondents indicated that although participants’ attitudes towards the digital rectal exam (DRE) and PSA was important to prostate cancer prevention, they did not participate in prostate cancer prevention measures.

As shown in table 17, when the chi square statistical test for significance was applied, the research did not reject the null hypothesis (p=.772) indicating that there was
not a statistically significant relationship between the two variables at the .05 level of probability.

Table 18 is a cross tabulation of the importance of the participants’ perceived susceptibility of having prostate cancer by the participation in prostate cancer prevention measures. It shows the association of the participation in prostate cancer prevention measures with the participants’ perceived susceptibility of having prostate cancer and indicated whether there was a statistically significant relationship between the two variables.

Table 18

Perceived Susceptibility

<table>
<thead>
<tr>
<th>Perceived Susceptibility</th>
<th>Participation in Prostate Cancer Prevention Measures</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No</td>
<td>%</td>
</tr>
<tr>
<td>Unimportant</td>
<td>4</td>
<td>3.8</td>
</tr>
<tr>
<td>Important</td>
<td>55</td>
<td>51.9</td>
</tr>
<tr>
<td>Total</td>
<td>59</td>
<td>55.7</td>
</tr>
</tbody>
</table>

As indicated in Table 18, of the 106 respondents 3.8% indicated the participants perceived susceptibility of having prostate cancer and did not participate in prostate cancer prevention measures. A majority (94.3%) indicated that the participant has
perceived susceptibility of having prostate cancer affects prostate cancer prevention. However, when the importance the participants perceived susceptibility of having prostate cancer variable was cross tabulated with participation in prostate cancer prevention measures fifty one point nine percent (51.9%) of the respondents indicated that although their perceived susceptibility of having prostate cancer was important to prostate cancer prevention, they did not participate in prostate cancer prevention measures.

As shown in table 18, when the chi square statistical test for significance was applied, the research did not reject the null hypothesis (p=.576) indicating that there was not a statistically significant relationship between the two variables at the .05 level of probability.

Table 19 is a cross tabulation of the importance of the participants’ financial status in prostate cancer prevention by the participation in prostate cancer prevention measures. The table shows the association of the participation in prostate cancer prevention measures with the importance of the participants’ financial status in prostate cancer prevention and indicated whether there was a statistically significant relationship between the two variables.
Table 19

Finances and Screenings

<table>
<thead>
<tr>
<th>Participation in Prostate Cancer Prevention Measures</th>
<th>No</th>
<th>%</th>
<th>Yes</th>
<th>%</th>
<th>Total</th>
<th>#</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finances and Screenings</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unimportant</td>
<td>6</td>
<td>5.7</td>
<td>6</td>
<td>5.7</td>
<td>12</td>
<td>11.3</td>
<td></td>
</tr>
<tr>
<td>Important</td>
<td>53</td>
<td>50.0</td>
<td>41</td>
<td>38.7</td>
<td>94</td>
<td>88.7</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>59</td>
<td>55.7</td>
<td>47</td>
<td>44.3</td>
<td>106</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

As indicated in Table 19, of the 106 respondents 5.7% indicated the importance of the participant’s financial status in prostate cancer prevention and did not participate in prostate cancer prevention measures. A majority (88.7%) indicated the importance of the participant’s financial status in prostate cancer prevention. However, when the importance of the participant’s financial status in prostate cancer prevention variable was cross tabulated with participation in prostate cancer prevention measures fifty percent (50.0%) of the respondents indicated their financial status was important to prostate cancer prevention, they did not participate in prostate cancer prevention measures.

As shown in table 19, when the chi square statistical test for significant was applied, the research did not reject the null hypothesis (p=.675) indicating that there was not a statistically significant relationship between the two variables at the .05 level of probability.
Table 20 is a cross tabulation of the risk of ethnicity by participation in prevention measures. The table shows the association of the risk of ethnicity and the participation in prostate cancer prevention measures to indicate whether there was a statistically significant relationship between the two variables.

Table 20

Risk of Ethnicity

<table>
<thead>
<tr>
<th>Participation in Prostate Cancer Prevention Measures</th>
<th>No</th>
<th>%</th>
<th>Yes</th>
<th>%</th>
<th>Total</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>#</td>
<td></td>
<td>#</td>
<td></td>
<td>#</td>
<td></td>
</tr>
<tr>
<td>Risk: Ethnicity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>African American</td>
<td>52</td>
<td>49.1</td>
<td>42</td>
<td>39.6</td>
<td>94</td>
<td>88.7</td>
</tr>
<tr>
<td>Other</td>
<td>7</td>
<td>6.6</td>
<td>5</td>
<td>4.7</td>
<td>12</td>
<td>11.3</td>
</tr>
<tr>
<td>Total</td>
<td>59</td>
<td>55.7</td>
<td>47</td>
<td>44.3</td>
<td>106</td>
<td>100.0</td>
</tr>
</tbody>
</table>

df=1 p=.843

As indicated in Table 20, of the 106 respondents 39.6% of the African-American respondents indicated the importance of participation in prostate cancer prevention measures. A majority (49.1%) indicated that participation in prostate cancer prevention is not important. Compared to the 6.6% of other races who felt participation in prostate cancer prevention is not important and 4.7% that indicated an importance to participation in prostate cancer prevention measures. However, when the importance of the participants to participate in prostate cancer prevention measures 55.7% of the respondents indicated they did not participate in prostate cancer prevention measures.
As shown in table 20, when the chi square statistical test for significance was applied, the research did not reject the null hypothesis ($p=0.297$) indicating that there was not a statistically significant relationship between the two variables at the .05 level of probability.

Table 21 is a cross tabulation of the risk of family history of prostate cancer by participation in prevention measures. The table shows the association of the risk of family history of prostate cancer and the participation in prostate cancer prevention measures to indicate whether there was a statistically significant relationship between the two variables.

Table 21

<table>
<thead>
<tr>
<th>Risk of Family History</th>
<th>Participation in Prostate Cancer Prevention Measures</th>
<th>#</th>
<th>%</th>
<th>#</th>
<th>%</th>
<th>#</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>No</td>
<td>55</td>
<td>51.9</td>
<td>35</td>
<td>33.0</td>
<td>90</td>
<td>84.9</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>4</td>
<td>3.8</td>
<td>12</td>
<td>11.3</td>
<td>16</td>
<td>15.1</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>59</td>
<td>55.7</td>
<td>47</td>
<td>44.3</td>
<td>106</td>
<td>100.0</td>
</tr>
</tbody>
</table>

As indicated in Table 21, of the 106 respondents 11.3% indicated family history of prostate cancer prevention and participation in prostate cancer prevention measures. A majority (51.9%) indicated that there was no participation in prostate cancer prevention
or family history of prostate cancer. However, when family history of prostate cancer variable was cross-tabulated with participation in prostate cancer prevention measures three point eight percent (3.8%) of the respondents who indicated family history of prostate cancer did not participate in prostate cancer prevention measures.

As shown in table 21, when the chi square statistical test for significant was applied, the research rejected the null hypothesis (p=.007) indicating that there is a statistically significant relationship between the two variables at the .05 level of probability.

Table 22 is a cross tabulation of the risk of educational level by participation in prevention measures. The table shows the association of the risk of educational level and the participation in prostate cancer prevention measures to indicate whether there was a statistically significant relationship between the two variables.

Table 22
Risk of Educational Level

<table>
<thead>
<tr>
<th>Participation in Prostate Cancer Prevention Measures</th>
<th>No</th>
<th></th>
<th>Yes</th>
<th></th>
<th>Total</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>#</td>
<td>%</td>
<td>#</td>
<td>%</td>
<td>#</td>
<td>%</td>
</tr>
<tr>
<td>Risk: Educational Level</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Some High School to Grad-GED</td>
<td>9</td>
<td>8.5</td>
<td>4</td>
<td>3.8</td>
<td>13</td>
<td>12.3</td>
</tr>
<tr>
<td>Some College-Graduate Degree</td>
<td>50</td>
<td>47.2</td>
<td>43</td>
<td>40.6</td>
<td>93</td>
<td>87.7</td>
</tr>
<tr>
<td>Total</td>
<td>59</td>
<td>55.7</td>
<td>47</td>
<td>44.3</td>
<td>106</td>
<td>100.0</td>
</tr>
</tbody>
</table>

df=1\[\text{p}=.293\]
As indicated in Table 22, of the 106 respondents 8.5% have some high school education to high school graduate or GED and indicated participation in prostate cancer prevention measures. A majority (47.2%) of respondents with some college to graduate degree education indicated no participation in prostate cancer prevention measures. When examining participation in prostate cancer prevention measures among college level participants 43% of the respondents participated and 3.8% of the respondents with a high level of education indicated they did participate in prostate cancer prevention measures. Table 22 indicates that participation increases from high school level to college level of education among respondents.

As shown in table 22, when the chi square statistical test for significant was applied, the research did not reject the null hypothesis (p=.102) indicating that there was not a statistically significant relationship between the two variables at the .05 level of probability.

Table 23 is a cross tabulation of the risk of age by participation in prevention measures. The table shows the association of the risk of age and the participation in prostate cancer prevention measures to indicate whether there was a statistically significant relationship between the two variables.
Table 23

Risk of Age by Participation in Prostate Cancer Prevention Measures

<table>
<thead>
<tr>
<th>Participation in Prostate Cancer Prevention Measures</th>
<th>No</th>
<th>%</th>
<th>Yes</th>
<th>%</th>
<th>Total</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>#</td>
<td>%</td>
<td>#</td>
<td>%</td>
<td>#</td>
<td>%</td>
</tr>
<tr>
<td>Risk: Age Group</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18-38</td>
<td>27</td>
<td>25.7</td>
<td>5</td>
<td>4.8</td>
<td>32</td>
<td>30.5</td>
</tr>
<tr>
<td>39 up</td>
<td>32</td>
<td>30.5</td>
<td>41</td>
<td>39.0</td>
<td>73</td>
<td>69.5</td>
</tr>
<tr>
<td>Total</td>
<td>59</td>
<td>56.2</td>
<td>46</td>
<td>43.8</td>
<td>105</td>
<td>100.0</td>
</tr>
</tbody>
</table>

df=4  
P=.004

As indicated in Table 23, of the 105 respondents 43.8% in both age groups indicated the importance of participating in prostate cancer prevention measures. A majority (39.0%) in age group 39 and older indicated that participation in prostate cancer prevention is important. However, in age group 18 to 38 years of age, 25.7% of the respondents indicated they did not participate in prostate cancer prevention measures.

As shown in table 23, when the chi square statistical test for significant was applied, the research accepted the null hypothesis (p=.000) indicating that there was not a statistically significant relationship between the two variables at the .05 level of probability.

Research Question and Hypothesis

There were eleven research questions and eleven null hypotheses in the study. This section provides an analysis of the research questions and a testing of the null hypotheses.
Research Question 1 examined the relationship between prostate cancer prevention and the interaction with the medical profession and chi squares showed a relationship between the two variables (p=.041). Null Hypothesis 1 states there is no statistically significant relationship between prostate cancer prevention and the interaction with the medical profession. The hypothesis was rejected (p=.041) indicating that there was a statistically significant relationship between the two variables at the .05 level of probability.

Research Question 2 studied the relationship between prostate cancer prevention and the culturally appropriate prostate cancer prevention literature and no statistical relationship between these two variables was determined. Null Hypothesis 2 stated there is no statistically significant relationship between prostate cancer prevention and the culturally appropriate prevention literature about prostate cancer. When the chi square statistical test for significant was applied, the research did not reject the null hypothesis (p=.772) indicating that there was not a statistically significant relationship between the two variables at the .05 level of probability.

Research Question 3 investigated the relationship between prostate cancer prevention and the importance of involvement of family and others in prevention measures and no statistical relationship between these two variables was determined. Null Hypothesis 3 states there is no statistically significant relationship between prostate cancer prevention and the involvement of family and others in prostate cancer prevention measures. When the chi square statistical test for significant was applied, the research
did not reject the null hypothesis (p=.772) indicating that there was not a statistically significant relationship between the two variables at the .05 level of probability.

Research Question 4 explored the relationship between prostate cancer prevention and the importance of religious involvement in prevention measures and chi square showed no statistical relationship between these two variables (p=.129). Null Hypothesis 4 states there is no statistically significant relationship between prostate cancer prevention and the importance of religious involvement in prevention measures. When the chi square statistical test for significant was applied, the research did not reject the null hypothesis (p=.129) indicating that there was not a statistically significant relationship between the two variables at the .05 level of probability.

Research Question 5 researched the relationship between prostate cancer prevention and the attitudes of males towards prostate cancer screening measures, which showed no statistical relationship between the variables examined in question five. Null Hypothesis 5 states there is no statistically significant relationship between prostate cancer prevention and the attitudes of males towards prostate cancer screening measures. When the chi square statistical test for significant was applied, the research did not reject the null hypothesis (p=.772) indicating that there was no: a statistically significant relationship between the two variables at the .05 level of probability.

Research Question 6 explored the relationship between prostate cancer prevention and the male’s perceived susceptibility of prostate cancer. The study indicated no statistical relationship between prostate cancer prevention and participants’ susceptibility. Null Hypothesis 6 states there is no statistically significant relationship between prostate
cancer prevention and the male's perceived susceptibility of prostate cancer. When the chi square statistical test for significant was applied, the research did not reject the null hypothesis (p=.576) indicating that there was not a statistically significant relationship between the two variables at the .05 level of probability.

Research Question 7 investigated the relationship between prostate cancer prevention and financial barriers to screening and no statistical relationship was indicated. Null Hypothesis 7 states there is no statistically significant relationship between prostate cancer prevention and financial barriers to screening. When the chi square statistical test for significant was applied, the research did not reject the null hypothesis (p=.675) indicating that there was not a statistically significant relationship between the two variables at the .05 level of probability.

Research Question 8 studied the relationship between participation in prostate cancer prevention measures and the ethnicity risk factor of prostate cancer. There is no relationship between risk ethnicity and participation in prostate cancer prevention. Null Hypothesis 8 states there is no statistically significant relationship between participation in prostate cancer prevention measures and the ethnicity risk factor of prostate cancer. When the chi square statistical test for significant was applied, the research did not reject the null hypothesis (p=.297) indicating that there was not a statistically significant relationship between the two variables at the .05 level of probability.

Research Question 9 researched the relationship between participation in prostate cancer prevention measures and the educational risk factor of prostate cancer. The findings conclude that there is no relationship between these two variables. Null
Hypothesis 9 states there is no statistically significant relationship between participation in prostate cancer prevention measures and the educational risk factor of prostate cancer. When the chi square statistical test for significant was applied, the research did not reject the null hypothesis (p=.102) indicating that there was not a statistically significant relationship between the two variables at the .05 level of probability.

Research Question 10 evaluates the relationship between participation in prostate cancer prevention measures and the age risk factor of prostate cancer. Results illustrate no statistical relationship between age risk factor and prostate cancer prevention. Null Hypothesis 10 states there is no statistically significant relationship between participation in prostate cancer prevention measures and the age risk factor of prostate cancer. When the chi square statistical test for significant was applied, the research accepted the null hypothesis (p=.000) indicating that there was not a statistically significant relationship between the two variables at the .05 level of probability.

Research Question 11 examined the relationship between participation in prostate cancer prevention measures and the family history of prostate cancer risk factor of prostate cancer. Statistically, there is a relationship between family history of prostate cancer and participation in prostate cancer prevention measures. Null Hypothesis 11 states there is no statistically significant relationship between participation in prostate cancer prevention measures and the family history of prostate cancer risk factor of prostate cancer. When the chi square statistical test for significant was applied, the research rejected the null hypothesis (p=.007) indicating that there is a statistically significant relationship between the two variables at the .05 level of probability.
CHAPTER V
CONCLUSION AND RECOMMENDATIONS

The research study was designed to answer the questions concerning the influence of prostate cancer prevention barriers and risks on the participation in prevention measures. The conclusions and recommendations of the research findings are presented in this chapter. Recommendations are proposed for future discussions for social workers, health care practitioners, administrators, and policymakers. The research questions are presented to summarize the significant findings of interest.

The researcher examined seven barriers to prostate cancer prevention and the only statistically significant relationship between barriers and prostate cancer prevention was the interaction with the medical profession. This hypothesis was rejected (p=.041) indicating that there was a statistically significant relationship between the two variables at the .05 level of probability.

There were four prostate cancer risks that were examined to determine their effects on the participation in prostate cancer screenings. The participation in prostate cancer prevention measures in correlation with family history as a prostate cancer risk factor and the correlation with age as a prostate cancer risk showed a statistically significant relationship. When the chi square statistical test for significant relationship was applied, the research rejected the null hypothesis of family history as a risk factor
(p=.007), indicating that there is a statistically significant relationship between the two variables at the .05 level of probability. When the chi square statistical test for significant relationship was applied, the research rejected the null hypothesis of family history as a risk factor (p=.007), indicating that there is a statistically significant relationship between the two variables at the .05 level of probability. When the chi square statistical test for significant relationship was applied, the research rejected the null hypothesis of age as a risk factor (p=.000) indicating that there was not a statistically significant relationship between the two variables at the .05 level of probability.

Recommendations

Because of the findings of this study, the researcher is recommending the following:

1. A study is conducted to determine if participants participated in prostate cancer prevention after completion of the survey.

2. A pretest/posttest longitudinal study be conducted to determine if a prostate cancer prevention program that addresses these barriers makes a difference in the participants’ participation in prostate cancer prevention and significance of the barriers.

3. Policy makers should further examine aspects that encourage African-American men to participate in prostate cancer prevention and implement these aspects to design effective prevention programs.

4. Social Workers should ensure that they are aware of the barriers that are important to African-American men and prostate cancer prevention to provide support and foster education to address these barriers.
5. Social workers should become advocates for this population when discussing prevention with policy makers, co-workers, and others who are not knowledgeable about the important barriers to prostate cancer prevention.

Implications for Social Work Practice

Findings offer information that may be relevant to social workers who specialize in health care promotion, prevention, and oncology. It informs social workers of the most important barriers to African-American men that prevent participation in prostate cancer prevention. In this study, African-American men identify medical professionals not discussing prostate cancer prevention as a very significant barrier and previous family history of prostate cancer as a significant risk. Thus, social workers might use these points as opportunities for increased knowledge in these areas; as a result, attenuation of barriers and incidents of mortality will occur. Additionally, consideration will be made to the importance of religion and spirituality, family, and patient-doctor relationship in prevention of prostate cancer. In addition, age, education, and socio-economic status are other barriers to take into account. Social workers might see the significance of collaborating with churches and culturally significant beliefs, practitioners, and family-based organizations to increase screenings in the prevention of prostate cancer among African-American men. Such integration may possibly promote the respectful relationships needed to gain a culturally appropriate prevention program to use in developing a prostate cancer prevention program that specifically targets African-American males.
APPENDICES
Ms. Ebony L. McGriff <mcgriffe@gmail.com>
School of Social Work
Clark Atlanta University
Atlanta, GA 30314

Dear Ms. McGriff:

The Human Subjects Committee of the Institutional Review Board (IRB) has reviewed your protocol and approved of it as exempt in accordance with 45 CFR 46.101 (b)(2).

Your Protocol Approval Code is HR2009-11-344-1

This permit will expire on November 29, 2010. Thereafter, continued approval is contingent upon the annual submission of a renewal form to this office.

The CAU IRB acknowledges your timely completion of the CIIRB Training in Protection of Human Subjects - "Social and Behavioral Sciences Track". Your certification is valid for two years.

If you have any questions, please contact Dr. Georgianna Bolden at the Office of Sponsored Programs (404) 880-6979 or Dr. Paul L. Musey, (404) 880-6829.

Sincerely:

[Signature]

Paul L. Musey, P.
Chair
IRB: Human Subjects Committee
RRRRRRRRR. Office of Sponsored Programs, "Dr. Georgianna Bolden"
<gbolden@cau.edu>
Dr. Richard Lyle <rlyle@cau.edu>
223 James P. Brawley Drive, SW* ATLANTA, GA 30314-4391 * (404) 880-8000

Formed in 1988 by consolidation of Atlanta University, 1865 and Clark College, 1869
Appendix B: Consent Form

INFORMED CONSENT

Dear Participants:

I am a student in the PhD Program at the Whitney M. Young Jr. School of Social Work at Clark Atlanta University. I invite you to participate in a study that explores African-American males and prostate cancer prevention barriers. The questionnaire will take only five minutes to complete.

The purpose of the study is to learn about the barriers that prevent African-American males from participating in prostate cancer prevention measures. The findings will be used in an analysis for my dissertation. I would appreciate your cooperation.

Because we want all of these responses to remain confidential, please do not put your name on the questionnaire answer sheet. Choose only one answer for each question. Please respond to all questions. There are two questionnaires. Record your answers on one of the questionnaires and return it in the enclosed envelope along with this signed consent form. You may keep the other questionnaire for your records.

All responses to the questionnaire will remain private, confidential, and physically secured. There are no known risks or personal benefits to participants who agree to take part in this research. However, it is hoped that this study will advance research in the field of social work. Participation in this study is voluntary.

If you have any questions about this study, you may contact the principal investigator Ebony McGriff by email at mcgriffe@hotmail.com or Whitney M. Young Jr. School of Social Work at (404) 880-8006.

My signature below verifies that I have read the statement above and agree to participate in this study.

_________________________________________  ___________________________  ____________
Print Name                                      Signature                           Date
Appendix C: Survey Questionnaire

A STUDY OF THE RELATIONSHIP OF PROSTATE CANCER PREVENTION AND THE ROUTINE SCREENING BARRIERS OF AFRICAN-AMERICAN MALES IN GEORGIA

Section I: Background
Place a mark (x) next to the appropriate item. Choose only one answer for each question.
1. Race: 1) ___ African American 2) ___ Caucasian 3) ___ Asian 4) ___ Hispanic 5) Other
2. Age: 1) ___ 18-28 2) ___ 29-38 3) ___ 39-48 4) ___ 49-58 5) ___ 59 and older
3. Income: 1) ___ Under $20,000 2) ___ $20,000-$39,999 3) ___ $40,000-$59,999 4) ___ $60,000-$79,999 5) ___ $80,000 and higher
4. Marital Status: 1) ___ Married 2) ___ Never Married 3) ___ Divorced 4) ___ Widowed
5. Gender: 1) ___ Male 2) ___ Female
6. Educational Level: 1) ___ Some High School Education 2) ___ High School Diploma/GED 3) ___ Some College Education 4) ___ Bachelors Degree 5) ___ Graduate Degree
7. Do you have knowledge of the barriers to prostate cancer prevention? 1) ___ No 2) ___ Yes
8. Have you participated in prostate cancer prevention measures within the last year? 1) ___ No 2) ___ Yes
9. Have you been diagnosed with prostate cancer? 1) ___ No 2) ___ Yes
10. Do you have a family history of prostate cancer? 1) ___ No 2) ___ Yes
Section II: The following statements are designed to get your opinion on the importance of the prostate cancer prevention and prevention barriers to you. Write the appropriate number (1 thru 4) in the blank space in front of each statement on the questionnaire. Please respond to all questions.

1 = Least Important  2 = Unimportant  3 = Important  4 = Significantly Important

_____ 11. Your medical professional discussing prostate cancer prevention with you
_____ 12. Culturally appropriate prostate cancer prevention literature and flyers
_____ 13. The involvement of family and others in prevention of prostate cancer
_____ 14. The importance of religious involvement in the prevention of prostate cancer
_____ 15. Attitudes towards digital rectal exams and screenings
_____ 16. Perceived possibility of having prostate cancer

_____ 17. The importance finances in the prevention of prostate cancer
Appendix D: SPSS Program Analysis

TITLE 'A STUDY OF PROSTATE CANCER PREVENTION AMONG AFRIAMERICANS'.
SUBTITLE 'Ebony L McGriff PhD Program CAU School of Social Work'.

DATA LIST FIXED/
   ID 1-3
   RACE 4
   AGEGRP 5
   INCOME 6
   MARITAL 7
   GENDER 8
   EDUCA 9
   KNOW 10
   PARTIC 11
   DIAGNO 12
   HISTORY 13
   MEDICAL 14
   CULTURL 15
   INVOLVE 16
   RELIGIO 17
   EXAMS 18
   POSSIBL 19
   FINANCE 20.

VARIABLE LABELS
   ID   'Case Number'
   RACE 'Q1 Ethnicity of respondent'
   AGEGRP 'Q2 Age Group'
   INCOME 'Q3 Income'
   MARITAL 'Q4 Marital Status'
   GENDER 'Q5 Gender'
   EDUCA 'Q6 Educational Level'
   KNOW 'Q7 Do you have knowledge of the barriers to prostrate cancer prevention'
   PARTIC 'Q8 Have you participated in prostate cancer prevention measures within the last year'
   DIAGNO 'Q9 Have you been diagnosed with prostate cancer'
   HISTORY 'Q10 Do you have a family history of prostate cancer'
   MEDICAL 'Q11 Your medical professional discussing prostate cancer prevention with you'
   CULTURL 'Q12 Culturally appropriate prostate cancer prevention literature and flyers'
   INVOLVE 'Q13 The involvement of family and others in prevention of prostate cancer'
   RELIGIO 'Q14 The importance of religious involvement in the prevention of prostate cancer'
   EXAMS 'Q15 Attitudes towards digital rectal exams and screenings'
Appendix D: SPSS Program Analysis, continued

POSSIBL 'Q16 Perceived possibility of having prostate cancer'
FINANCE 'Q17 The importance of finances in the prevention of prostate cancer'.

VALUE LABELS
RACE
1 'African American'
2 'Caucasian'
3 'Asian'
4 'Hispanic'
5 'Other'/

AGEGRP
1 '18-28'
2 '29-38'
3 '39-48'
4 '49-58'
5 '59 up'/

INCOME
1 'Under $20,000'
2 '$20,000-39,999'
3 '$40,000-59,999'
4 '$60,000-79,999'
5 '$80,000 up'/

MARITAL
1 'Married'
2 'Never Married'
3 'Divorced'
4 'Widowed'/

GENDER
1 'Male'
2 'Female'/

EDUCA
1 'Some High School'
2 'High School Grad-GED'
3 'Some college'
4 'Bachelors Degree'
5 'Graduate Degree'/

KNOW
1 'No'
2 'Yes'/

PARTIC
1 'No'
2 'Yes'/

DIAGNO
1 'No'
HISTORY
1 'No'
2 'Yes'

MEDICAL
1 'Least Important'
2 'Unimportant'
3 'Important'
4 'Significantly Important'

CULTURAL
1 'Least Important'
2 'Unimportant'
3 'Important'
4 'Significantly Important'

INVOLVE
1 'Least Important'
2 'Unimportant'
3 'Important'
4 'Significantly Important'

RELIGIOUS
1 'Least Important'
2 'Unimportant'
3 'Important'
4 'Significantly Important'

EXAMS
1 'Least Important'
2 'Unimportant'
3 'Important'
4 'Significantly Important'

POSSIBLE
1 'Least Important'
2 'Unimportant'
3 'Important'
4 'Significantly Important'

FINANCE
1 'Least Important'
2 'Unimportant'
3 'Important'
4 'Significantly Important'

RECODE MEDICAL CULTURAL INVOLVE (1 THRU 2.99=2)(3 THRU 4.99=3).
RECODE RELIGIOUS EXAMS POSSIBLE FINANCE (1 THRU 2.99=2)(3 THRU 4.99=5).
RECODE RACE (1 THRU 1.99=1)(2 THRU 5=5).
RECODE EDUCATION (1 THRU 2=2)(3 THRU 5=3).
RECODE AGEGRP (1 THRU 2=2)(3 THRU 5=5).

MISSING VALUES
RACE AGEGRP INCOME MARITAL GENDER EDUCA KNOW PARTIC DIAGNO
HISTORY MEDICAL CULTURL INVOLVE RELIGIO EXAMS POSSIBL FINANCE
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Appendix D: SPSS Program Analysis, continued

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Appendix D: SPSS Program Analysis, continued

DATA.
FREQUENCIES
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REFERENCES


Reichardt, C.S., & Gollob, H.F. (1999). Justifying the use and increasing the power of a t-test for a randomized experiment with a convenience sample. *Psychological Methods, 4*


