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Maxine S. Simms	Date

HOW EFFECTIVE IS A FAITH-BASED INTERVENTION IN MOTIVATING AFRICAN—AMERICAN MEN TO OBTAIN THE PROSTATE SPECIFIC ANTIGEN (PSA) PROSTATE CANCER SCREENING TEST

BY

Maxine S. Simms

Degree to be awarded: M.P.H.

Career MPH

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BY

Maxine S. Simms M.P.H., Emory University, 2012 B.Sc., Open University (UK), 2004

Thesis Committee Chair: Iris Smith, Ph.D., M.P.H.

An abstract of
A Thesis submitted to the Faculty of the
Rollins School of Public Health of Emory University
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Abstract

HOW EFFECTIVE IS A FAITH-BASED INTERVENTION IN MOTIVATING AFRICAN—AMERICAN MEN TO OBTAIN THE PROSTATE SPECIFIC ANTIGEN (PSA) PROSTATE CANCER SCREENING TEST

BY Maxine S. Simms

<u>Background</u>: African-American men have a higher incidence of prostate cancer and have higher mortality rates than Caucasian men. African-American men are also diagnosed with prostate cancer at a younger age and delay in seeking treatment due to cultural and economic barriers. The study implemented and evaluated a faith-based prostate cancer education intervention that was designed for African-American men to promote informed decision making for prostate cancer. The study used a faith-based intervention, as the church is seen as a viable place to reach and educate African-American men.

<u>Methods</u>: The study used a mixed method approach with a non-experimental design. The study comprised of one small focus group to ascertain sufficient information to aid in the communication material for the education intervention. The 90 minute education intervention activities included a video, small interactive group discussions, and prostate cancer testimonies. The data collected at the education intervention included pre-/ post-test and end-of-session questionnaires, and a follow-up survey.

<u>Results</u>: The results of the education improved prostate cancer knowledge for the African-American men, increased awareness of risk factors for prostate cancer, improved confidence in African-American men discussing prostate cancer with their physicians and spouses, and motivated them to learn more about prostate cancer.

<u>Conclusion</u>: The results of the study gave an insightful view on educating African-American men. While not conclusive, interpersonal communication, through learning from each other in a church setting, helped the African-American men in their informed decision making on prostate cancer. Further studies are required to evaluate the role of the church in promoting interpersonal communication in prostate cancer education.

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Chapter 1 – Introduction

Introduction

Cancer is the growth of out-of-control abnormal cells in the body (American Cancer Society, 2012). The prostate is a gland that is situated under the bladder, shaped like a walnut, about an inch and a half long and is part of the male reproductive system (National Cancer Institute & US Centers For Disease Control and Prevention 2006). Prostate cancer is a common cancer and one man in six will be diagnosed with prostate cancer during his lifetime (American Cancer Society, 2010). Approximately 241,740 new cases of prostate cancer will be diagnosed in 2012 and 28,170 men will die from the disease (American Cancer Society, 2012). Unfortunately, African-American men have a higher incidence of being diagnosed and dying from the cancer.

African-Americans have the highest death rate in the US for most cancers. The reasons for the inequalities are complex and include social and economic disparities such as inequalities in work, wealth, income, education, housing, and overall standard of living; furthermore, barriers to prevention services, early detection and treatment services widens the disparity (American Cancer Society, 2011). Prostate cancer education is a problem that has been difficult to address in the male African-American community. African-American men have racial disparities due to the lower utilization of prostate cancer screening (Husaini et al., 2008). African-American men are diagnosed with a more advanced stage of cancer and die from a more biological aggressive form of prostate cancer; in addition, African-American men delay in seeking treatment due to cultural and economic barriers (The Association of State and Territorial Chronic Disease

Program Directors, 2001). The prostate cancer incidence rates per year between 2005 and 2009 are as follows: African-American men are 236 per 100,000 per year and 146.9 per 100,000 per year for Caucasian Men (National Cancer Institute, NCI 2011). Furthermore, the mortality rates per year between 2005 and 2009 are 53.1 per 100,000 for Africa-American men and 21.7 per 100,000 for Caucasian men (NCI, 2011). African-American men have a higher risk of dying from prostate cancer and are considered to be at 'increased risk' for prostate cancer (National Cancer Institute & US Centers For Disease Control and Prevention, 2006). The mortality rate of prostate cancer is 22 per 100,000 for all male deaths. However, the African-American rate is double the national average at 49.5 per 100,000 deaths (Kochanek et al., 2009). Also, men that are over the age of 65, men with a family history of prostate cancer, and men who eat a high-fat diet are at increased risk for developing cancer (Moyad, 2002). A close correlation exists between average per capita fat intake and prostate cancer (Moyad, 2002). According to Moyad (2002), Japanese and Chinese men who immigrated to the United States within one generation experienced dramatic increases in prostate cancer risk compared with their native counterparts.

The research is to understand and promote informed decision making among minority males about prostate education. African-American men are a difficult population to reach for health promotion. Many of them have a high mistrust in health professionals and delay in seeking treatment for medical problems. Researchers have undertaken qualitative studies among African-American men that attend church to understand the barriers, beliefs, and knowledge associated with prostate cancer (Blocker et al., 2006).

Spirituality is defined by Holt at al. (2012) as experiencing a meaningful connection to our core selves, others, the world, and a higher power. The role of the scripture in promoting prostate health has been promising in qualitative research, "Findings from these focus groups underscored the importance of faith in God and love for family as central/core values among these churchgoers that represent an important means of reaching men at risk with cancer risk-reduction messages" (Blocker et al., 2006, p. 1293). Therefore, incorporating the spiritual mission of the church into a health campaign that targets the health needs of African-American men is both innovative and creative as it influences the spiritual capacity of the individual to see their bodies as a 'Holy Temple' that needs nurturing, and to take care of their bodies is really 'proper worship'. The faith-based intervention will incorporate the mission of the Church's Family Life and Wellness ministry based upon biblical scripture, Romans Chapter 12, verse 1: "Therefore, I urge you, brothers and sisters, in view of God's mercy, to offer your bodies as a living sacrifice, holy and pleasing to God—this is your true and proper worship" (Holy Bible NIV, 2006). In addition, the intervention will emphasize the whole person has not just physical needs, but also spiritual needs that must be addressed to really have a change in behavior. Therefore, the church plays a critical role in the lives of most African-Americans in meeting spiritual, economic, cultural, and social needs (Blocker et al., 2006). In addition, there has been some research performed using scripture as a basis to deliver a health message and the results of the research have been encouraging.

Informed Decision Making

The decision to get screened is controversial within the medical profession as prostate screening is not 100% accurate. Presently, there is insufficient evidence to determine if

screening for prostate cancer reduces mortality (National Cancer Institute, NCI, 2012). The Prostate Specific Antigen (PSA) test is a blood test that screens for prostate cancer; in addition, the prostate cancer screening includes a digital rectal exam (DRE) to assess the size of the prostate gland (The Association of State and Territorial Chronic Disease Program Directors, 2001). Presently, doctors cannot differentiate if a growth is dangerous and life threatening without taking a biopsy of the prostate gland (American Cancer Society, 2012). Currently, the American Cancer Society does not recommend routine prostate cancer screening. The Society advocates for informed decision making for prostate cancer screening. Therefore, all men must have a conversation with a healthcare professional before prostate cancer screening to discuss the benefits and limitations of testing. The conversation should start at age 40 with men that have high risk factors for prostate cancer (American Cancer Society, 2012). To make an informed decision, African-American men need to discuss with their family physician the risks and benefits of prostate cancer based on their personal risk profile: family history, age, and race (The Association of State and Territorial Chronic Disease Program Directors, 2001).

The Program

The program is a health intervention that is focused on prostate cancer to educate and improve knowledge. The intervention will address the question by stating that cancer communications, which have a spiritual message, will be more effective in influencing decisions. The health intervention should provide sufficient information for the men to be confident in taking action. In addition, providing testimonies from prostate cancer survivors should also motivate men to take action. Also, the intervention will try to correct any barriers about prostate cancer by correcting any misinformation embraced by

the men. The goal of the program is to hypothesize that spiritually-based interventions will increase prostate cancer knowledge, to empower men to feel confident in talking to their health professional about prostate cancer, to increase confidence in talking with family, peers, and spouses on the benefits of prostate cancer education, and to decrease fearful prostate cancer screening information.

The role of the church in healthcare prevention is seen as beneficial as church attendance is associated with positive health benefits. Cancer communication interventions provide one effective approach to increased informed decision making for prostate cancer screening (Holt et al., 2009). Informed decision making as defined by Bowen et al. (2006), "is the process that patients go through to make a decision about engaging in a medical or health-related procedure or activity, considering the benefits, harms, risks, health improvements, the match between these properties and personal values and preferences, and understanding the uncertainty and limitations of the procedures" (pg. 202). Many African-American men have a fatalistic attitude towards disease and perceive cancer as 'bad' and not worth the effort in trying to do anything about the disease; in addition, some men believe that prostate cancer is a punishment for sinful behavior (Blocker et al., 2006). The pastor of the church, in supporting prostate education, is seen as an inspiring factor that motivates the congregation to personally take action in their own health (Blocker et al., 2006).

The research study will consist of two phases. The first phase is to develop and pilot test a culturally and linguistically appropriate health promotion intervention, such as a faith-based prostate cancer education intervention. The second phase is to evaluate the extent that the prostate cancer education intervention made a difference in the lives of African-

American men. The purpose of the evaluation is to appraise the effectiveness of the faithbased intervention in promoting prostate cancer information. The program will be a ninety minute health intervention on prostate cancer. The goal of the intervention is not to promote religion, but to use an appropriate culturally sensitive intervention that has a meaningful message that gets 'right to the heart' of the target population. The independent variable is the awareness faith campaign. The dependent variable is increased knowledge regarding prostate cancer and influencing participant's confidence in talking with their doctor, family, peers, and spouses about prostate cancer information. The short term outcomes are to have a change in attitude in prostate cancer knowledge, reduce barriers towards prostate cancer education, and to have increased confidence in talking about prostate cancer with their spouse, peers and family. The medium outcomes are to have an increased confidence in talking with their physician about prostate cancer and using the conversation to enable them to make an informed decision. The long term outcome is to have an annual prostate cancer intervention at the church that will ultimately reduce prostate cancer mortality.

Stakeholder Involvement

The church is located in Mecklenburg County, North Carolina. The county had a population of 913,639 in 2009 (Mecklenburg County Needs Assessment, 2010). Mecklenburg has a diverse population with 64% White, 30% Black and 6% Other Races (Mecklenburg County Needs Assessment, 2010). The county has four cancers that are responsible for nearly half of cancer deaths: lung, colon, breast, and prostate (Mecklenburg County Needs Assessment, 2010). The four cancers account for 49% of the cancer deaths in Mecklenburg County and account for 57% of the new cancer

diagnoses from 2003-2007, with 15% of men having a prostate cancer diagnosis (Mecklenburg County Needs Assessment, 2010). The church has three different locations within Mecklenburg County. The church started in 1913 as a prayer group and has grown into a large church with approximately 4,000 members. The men's ministry will be involved in promotion of the health intervention and two weeks prior to the intervention will host a media campaign to promote the event. After each service on Sunday, the men will host a display table with information from the American Cancer Society regarding all cancers. At the table, more information will be provided for the prostate intervention. In addition, one week prior to the intervention the leader of the men's ministry will announce the event via a recorded video message that will be shown at all four services held on Sunday.

Purpose

The primary goals of the outcome evaluation are:

- To measure the extent that the prostate cancer education intervention made a difference, such as increased prostate cancer knowledge, among the African-American men with regard to anatomy & physiology, risks factors for prostate cancer, diagnosis, and treatment.
- To increase empowerment skills for men to participate in the decision making process for prostate cancer (confidence building in informed decision making).
- To understand the attitudes of African-American men towards prostate cancer.
- To ascertain the extent of satisfaction for the intervention from the participants.

Outcome Evaluation Questions

The evaluation questions are listed in categories.

To increase knowledge:

- 1. Was the faith-based intervention effective in promoting prostate cancer awareness and screening recommendations?
- 2. Were the educational activities used in the intervention conducive to learning about prostate cancer?

To increase informed decision making:

- 3. Did the faith-based intervention provide sufficient information for the men, to enable them, to make an informed decision about prostate cancer screening?
- 4. Did the faith-based intervention enhance confidence for informed decision making?

Attitudes of African-American men towards prostate cancer:

5. What are the negative/positive attitudes among African-American men with regard to prostate cancer?

Satisfaction Level:

6. Did the intervention motivate men to continue learning about prostate cancer?

The Logic Model (See Figure 1)

Inputs:

The main inputs: the church leadership team, the men's health ministry, the program coordinator, healthcare ministry, the leader of the congregational health promoters' team, volunteers, and the American Cancer Society.

Activities

The program starts with promotion via the men's ministry. Then a small focus group prior to the intervention will explore the men's attitudes and beliefs about prostate cancer

education. The focus group will help to inform both the positives and negative attitudes towards cancer education. The information from this discussion will help to inform the messaging for the intervention and how best to enable men to open up and talk about a very sensitive topic. The focus group will also complete a questionnaire on God in relation to their general health beliefs. The use of an already developed Likert instrument (Wallston, 2007) that assesses spirituality will be complemented with qualitative questions (see Appendix J). The intervention will run for 90 minutes and will start and close with a prayer from the pastor of the men's ministry. After the prayers, the principal investigator (PI) will provide an overview of the intervention for that evening and then proceed to talk about prostate cancer. The PI will discuss the signs, symptoms and the benefits of prostate cancer education. The explanation of an informed decision will be provided to the participants and why it is important to know about informed decision making in prostate cancer. The video from the National Cancer Institute called, 'The Right Decision is Yours' will be watched by participants and targets African-American men. The video is a research-tested intervention that was used in a community-based research study in Washington DC. The video is approximately 25 minutes long and is about informed decision making. The video is about an African-American man that is reluctant to talk about prostate cancer, but gradually learns to talk about this disease with his family and then finally with his physician. The video shows the client going to his African-American physician to discuss prostate cancer. The doctor is also African-American and the doctors explains the anatomy and function of the prostate, prostate cancer risk factors, the different screening tests for prostate cancer, the incidence and mortality of prostate cancer in

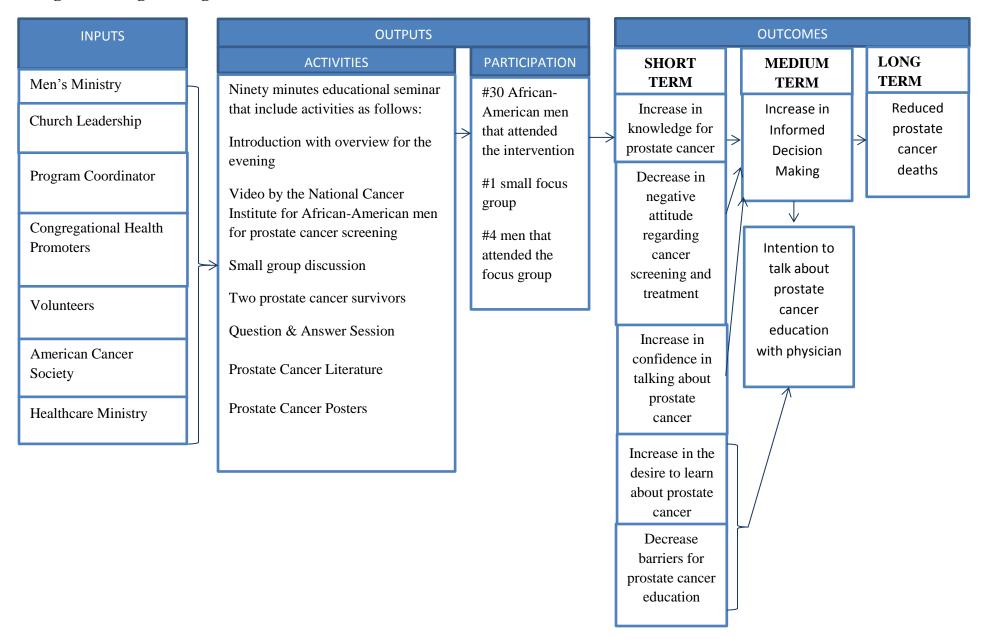
African-American men, and limitations and benefits of screening. The video does not provide recommendations, for or against, but encourages men to make their own decisions in collaboration with their physician and family (National Cancer Institute, The booklet includes the same information as the video but has sample RTIPS). questions for men to ask their doctors (National Cancer Institute, RTIPS). intervention will use the sample questions in the booklet in the small group discussion section of the program. Each group will have one person that will provide feedback on their discussions. The premise of the small group discussion is for brainstorming for answers to the questions. Two prostate cancer survivors will also be guest speakers and provide personal testimonies of their experiences of prostate cancer. The cancer survivors would be available to answer any questions after their testimonies. Literature will also be provided by the American Cancer Society, and the National Cancer Institute for more independent reading. In addition, a list of resources for more prostate cancer information will be made available.

Summary

The role of interpersonal communication is not well understood in influencing behavior change (Valente and Saba, 2001). The research will be using interpersonal prostate communications (video, small group discussion and personal testimonies) to set in motion a behavior change: making appointments to discuss prostate cancer education with their physician. The short term outcomes are to have a change in attitude in prostate cancer knowledge, reduce barriers towards prostate cancer education, and to have increased confidence in talking about prostate cancer with their spouse, peers and family. The medium outcomes are to have an increased confidence in talking with their physician

about prostate cancer and using the conversation to enable them to make an informed decision. The long term outcome is to have an annual prostate cancer intervention at the church that will ultimately reduce prostate cancer mortality.

Figure 1: Program Logic Model - Faith-Based Intervention



Chapter 2 – Review of the Literature

Introduction - Health Promotion and Theory

A theory is defined as a systematic way of understanding events or situations and is a set of concepts, definitions, and propositions that explain or predict events or situations by illustrating the relationship between variables (Glanz & Rimer, 2005). The correct behavior theory should be chosen according to the outcomes that drives the planning process (Glanz & Rimer, 2005). Targeting health communication for African-American men involves using information about them to create a single intervention that comprises their behavioral risk factors and beliefs (Glanz & Rimer, 2005). The intervention uses the theory of planned behavior (TPB) to ascertain the intention of obtaining the PSA or to enable the men to feel confident in discussing prostate cancer screening with their physician.

The TPB explains the relationships between behavior and beliefs, attitudes and intentions (Ajzen & Madden, 1985). The theory has three main aspects: an attitudinal factor, subjective norm and perceived behavioral control. The most important aspect of behavior is the intention to perform an action and various factors that can influence behavior. The stronger a person's intention the more likelihood of the behavior being performed (Ajzen & Madden, 1985). The person's attitude can be favorable or unfavorable towards the behavior (Ajzen, & Madden 1985). For example, if prostate cancer screening is seen as beneficial then the individual will participate. A research study by Watson et al. (2006) reported that men who were convinced of the benefits of

the PSA were more likely to be tested than men who were unconvinced. In addition, men with a positive attitude towards the test were twice as likely, compared to men with negative attitudes, to report positive testing intentions (Watson et al., 2006).

Interpersonal relations can influence the intended behavior and is termed 'subjective norm' (Ajzen & Madden 1985). According to Pierce, Chadiha, Vargas, and Mosley 2003, there is compelling evidence that significant others, such as peers and professionals, can be effective in prompting men to participate in cancer screening. For example, whether 'key people' of the African-American men desire, or do not desire, the intended behavior, can motivate the men to behave in a way that gains the approval of the 'key person' (Ajzen & Madden, 1985). The men will have a higher intention to perform the behavior if 'key people' deem the behavior as important (Ajzen & Madden, 1985, Glanz & Rimer, 2005). The term 'perceived behavioral control' has been added to the theory and postulates that the person has to believe he or she can exercise control over the behavior (Ajzen & Madden, 1985). Perceived behavioral control is the belief that the individual can perform the behavior with ease, or belief that he will have difficulty in performing the behavior; therefore, behavior is strongly influenced by an individual's confidence in being able to perform the behavior (Ajzen & Madden, 1985). The more resources and opportunities individuals think they possess, and the fewer obstacles they anticipate, the greater the perceived behavioral control (Ajzen & Madden, 1985).

TBP has been used in previous prostate cancer research. Bergland, Nilsson, and Nordin, 2005, used TPB in a study that assessed the intention to take the PSA test offered by a

doctor, or on the men's own initiative. The study comprised of 1000 men that were selected randomly from a population-based database. The intervention group of 500 men was mailed a prostate cancer leaflet developed by the Swedish Cancer Society called, "Good to Know about PSA", and a control group of 500 men that did not receive the leaflet (Bergland, Nilsson, & Nordin, 2005). The intention to take the PSA test among men who had the opportunity to read the leaflet was compared to men who did not read the leaflet. The leaflet comprised of the pros and cons of PSA tests and was impartial (Bergland, Nilsson, & Nordin, 2005). The no intervention group, like the intervention group, was mailed the survey questionnaire for completion. The attitude factor was measured by 'belief-based attitudes' that are described as the imagination of the individual concerning probability of the behavior multiplied by the evaluation of it (Bergland, Nilsson, & Nordin, 2005). Subjective norm was the perceived social pressure from significant others multiplied by the motivation of the individual to consider their opinion (Bergland, Nilsson, & Nordin, 2005). Perceived control focused on barriers or facilitating factors (Bergland, Nilsson, & Nordin, 2005). The response rate was 63 percent among the informed group and 62 percent from the control group. The results were that the men intended to take the PSA test if a doctor offered the test but would not request the test themselves (Bergland, Nilsson, & Nordin, 2005). The men that had received the leaflet about the PSA test had a lower degree on intention than patients who did not receive the leaflet (Bergland, Nilsson, & Nordin, 2005). The most important factor for intention to take the PSA test when offered by the doctor or when requested by the man was their attitude. The most important attitude was prognosis health information

of the cancer. Thus prognosis health information on early diagnosis, to be cured of cancer, and feeling safe if the men had a low PSA was important to the men (Berglund, Nilsson, & Nordin, 2005). Subjective norms and perceived control had limited influence on the intended behavior. The findings of the study suggest that patient information is very important for men to decide on initiating prostate cancer education with the doctor. Therefore, if the uninformed are relying on doctors to initiate prostate cancer education then men are not being proactive in the decisions making process. The limitation of the research was that the study sample participants were Swedish Caucasian men, which cannot be generalized to African-American men.

Another research study by Hervey et al. (2008) used TPB to examine prostate cancer intentions to attend PSA testing, when offered by a doctor or self-initiated. The study consisted of 223 at-risk men over the age of 40 using a convenience sample of the general public at different locations in Ireland using a TPB-based questionnaire (Hervey, et al., 2008). The PROCASE, a patient education pamphlet, was used in the study to facilitate the informed patient decision making process (Partin, 2001). The PROCASE pamphlet was given to the research group and no pamphlet was given to the control group. The two groups completed a TPB questionnaire. The attitude towards PSA tests were measured, subjective norms were measured by the motivation to comply to significant others' view, and perceived control indicated the extent to which they would have control over taking the PSA test. The results indicated that intentions to take the PSA test were greater if the test was recommended by a physician than if it was self-initiated. Furthermore, a positive attitude towards the PSA test was a good predictor of whether

men would take the test. However, unlike the research done by Berglund's et al. (2005), this research found perceived control was also an intention to take the test (Hervey et al., 2008). The subjective norm had no influence on the intention for prostate cancer screenings. The research undertaken by both of the studies did not provide information about self-efficacy and the men's confidence in initiating prostate cancer information with a healthcare professional. Therefore, if clients are being influenced by their physician then informed decision making for prostate cancer is unlikely to occur (Hervey et al., 2008).

Informed Decision Making In The Community

Informed decision making (IDM) is defined as the strategy that patients go through in making a decision about medical or health-related activity so that the patient can understand the benefits, harms, and risks (Briss et al, 2004). IDM remains the core strategy for prostate cancer (Sajid, Kotwal, & Dale, 2012). IDM for prostate cancer has grown recently as patients want to be involved in decision making (Bowen et al., 2006). IDM interventions can be delivered outside of healthcare systems by community groups and faith-based organizations (Briss et al, 2004). Furthermore, according to Briss et al. (2004), community settings can promote IDM by providing more efficient provision of information; thus, the burden on the health care providers are reduced as patients are already prepared for the clinical encounter. Finally, IDM promoted in the community can provide information to patients that do not have easy access to a healthcare provider (Briss et al., 2004). In addition, Briss et al. (2004) argued that minority populations have had less exposure to IDM principles and practices; furthermore, Briss et al. (2004) argued

that interventions that promote IDM might increase the demand for IDM in the minority populations. According to Sajid et al. (2012) cultural barriers may prevent African-American men from seeking emotional support regarding prostate cancer. However, not all tests and topics are suitable for IDM; but, prostate cancer screening interventions are deemed as a 'high-priority criteria' for IDM interventions (Briss et al., 2004 pg. 77).

The media for communication of prostate education is variable but education programs are the best at prostate cancer information. However, this can be challenged as African-American men do not like to talk about their health with anybody. Promoting prostate cancer education for ethnic minority men was evaluated by researchers, Sajid et al. The researchers reviewed nineteen intervention studies for prostate cancer promotion and the outcomes were reported by a combination of intervention types: education seminar, printed material, telephone-based, video, and web-based (Sajid et al., 2012). The education programs included a combination of lectures provided by trained experts or didactic seminars to teach prostate cancer information. The results concluded that educational programs were the most effective for improving knowledge among minority men (Sajid et al., 2012). Carter et al., (2010) implemented a prostate cancer education intervention that consisted of a gender-based focus group, an education component and a follow-up survey. The findings from the focus group highlighted the fear of having being diagnosed with prostate cancer and the reluctance of African-American men to talk about their health with anybody. The main findings were that spouses or significant others influenced the men to get screened as 45 percent of the men

were likely to discuss screenings with their spouses. The education finding based on the pre/post-tests concluded that the intervention increased prostate cancer knowledge.

Community Intervention

The church is seen as a viable place to reach African-Americans as they have looked to the church for leadership in areas beyond spirituality (Holt et al., 2009). According to Blocker et al. (2006), the Africa American church is a promising site for health promotion activities. Furthermore, prostate cancer studies have suggested that recruitment of African-American men must focus on community orientation rather than on provider site orientation (Tingen et al., 1998). Research by Holt et al. (2009) delivered a spiritual-based intervention for IDM for African-American men that consisted of developing spiritual-based print materials that were used in a 'Sunday School' class led by a trained Community Health Advisor that was trained by the researchers. The intervention materials were developed by the researchers using focus groups and cognitive response interviews. The printed materials had spiritual testimonials from cancer survivors, relevant scripture, information that God would take care of them, and general prostate information (Holt et al., 2009). The results of the study were that the men recommended the use of cancer survivors as educators and that prostate cancer information should be easy to understand (Holt et al., 2009).

The incorporation of spiritual messages into cancer health education is an emerging area of research. Several studies have supported the integration of spiritual content into church-based interventions (Holt et al., 2012). The use of sacred texts, and religious

themes, such as the concept of God as a healer of the body and the power of prayer, has been incorporated as spiritual messages in health interventions (Holt et al., 2012). The role of religion and spirituality is also seen as empowering to cancer patients as it allows patients to have more control and power in managing their disease (Vornarx and Hyppolite, 2012).

Cultural Awareness

Cultural awareness is central to an education intervention and is the process of learning and understanding differences. The concept involves empathy and being able to understand the positive and negative attitudes those African-American populations have for prostate cancer education. The attitudes of screening for prostate cancer for African-American men were evaluated in a qualitative research study by Blocker et al. (2006). The study consisted of four gender-specific focus groups that were questioned on knowledge of prostate cancer, beliefs and perceptions about prostate cancer and its prevention (Blocker et al., 2006). The results were analyzed and important themes emerged. The importance of work, family, and faith were important themes that emerged from the study. The spouses reported that African-American men tended to place the needs of their families before their own needs and those wives had to urge the men to take better care of themselves (Blocker et al., 2006). Fear of screening procedures was also cited with fear of going to the doctor (Blocker et al., 2006). In addition, many of the respondents in the study reported the quality of the patient-doctor interaction was important as men would take the PSA test if recommended by his physician (Blocker et al, 2006). Another qualitative research study by Plowden, John, Vasquez, and Kimani,

(2006), explored factors that would influence African-American men in participating in community outreach. Three factors were documented: a respected community member providing the outreach, a perceived safe and caring environment, and perceived benefit in participating in the outreach (Plowden et al., 2006). If a person perceived a benefit from screening then that person is more likely to participate in screening (Plowden et al., 2006).

Barriers

African-American men delay in seeking prostate cancer screening and have a higher recurrence rate compared to Caucasians when the disease is detected later and is more locally advanced (Woods, Montgomery, Herring, Gardner, and Stokols, 2006). In addition, African-American men are less likely to participate in health-related activities such as prevention and self-care practices (Woods et al., 2006). The negative influence of the PSA and the DRE is based on fear of cancer, cancer related problems and side effect of cancer treatments (Woods et al., 2006). Furthermore, in a focus group finding by Carter et al. (2010) found that African-American men do not talk about their health with anybody. However, if the African-American man had a positive relationship with his physician then he is more likely to participate in prostate cancer screening; especially if the preventative prostate screening message targets African-American men (Woods et al., 2006). In addition, the primary care physician recommendation of cancer tests can influence the uptake of the PSA (Watson et al., 2006).

The DRE is suggested by Lee, Consedine, and Spencer (2010) as a barrier for prostate cancer screening as African-American men have less DRE tests than Caucasian men; in addition, according to Lee et al. (2011) African-American men fear the DRE test. The researchers concluded that African-American men that did not have contact with a regular physician or that did not have comprehensive prostate cancer screening discussions were less likely to initiate screening (Lee et al., 2011).

A lower socioeconomic status has been associated with poor cancer screening. AfricanAmerican men with less than a high school education ranked highest among men most
likely to postpone or avoid testing and screening because of a lack of insurance or health
care plans (Pierce, Chadiha, Vargus, & Mosley, 2003). Low rates prostate cancer
screening has been associated with less prostate cancer knowledge, lack of insurance,
lower socioeconomic status and weaker physician recommendations (Lee, et al., 2011).

Empowerment

Empowerment is the ability to become a better self-advocate and is comprised of several key outcomes: increased self-esteem, confidence, and optimism for the future, greater treatment intention, and satisfaction (Pickett et al., 2012). Self-advocacy is the ability to talk with health providers, to discuss preferred treatment options, and establish collaborative relationships (Pickett, et al 2012). Self-advocacy skills can be reinforced by problem solving, and improved communication skills.

Summary

There is limited knowledge in how at-risk populations for prostate cancer make decisions. As African-American men are reluctant to talk about prostate cancer there is limited information on the proactivity of at-risk populations towards prostate cancer education, and how African-American men utilize others in the decision making process. The research will address the knowledge gap on how African-American men, by using education structured in a format that uses the informal network of peers from the faith community, can change their attitude for sharing prostate cancer information. program encourages individual choice and making an informed decision by communication with cancer survivors, family, peers, and healthcare providers. Using the theory of planned behavior, the education intervention will create positive attitudes for prostate cancer education by hearing testimonies from other prostate cancer survivors, and by discussing prostate cancer amongst peers in small groups to determine how much can the men influence each other (subjective norm). In addition, at the end of the intervention, the men will have an increase in confidence to share the new information with family, peers and health care professionals (perceived behavioral control).

Chapter 3 - Methodology

Introduction

The research study was in two phases. The first phase was to develop and pilot-test a culturally and linguistically appropriate health promotion intervention, namely, a faith-based prostate cancer education intervention. The second phase was to undertake an outcome evaluation that would measure the extent that the prostate cancer education intervention made a difference in the lives of African-American men. The goal of the program was to increase prostate cancer knowledge, to increase the perceived benefits of prostate cancer screening, and to decrease the perceived barriers. The chapter first describes how the stakeholders were involved in the evaluation process and a description of the stakeholders, and next describes the research methodology. The intervention consisted of an initial focus group and then the health intervention.

Stakeholder Involvement

The intervention took place as a faith-based intervention in a church in Mecklenburg County. The church has three locations in Charlotte: north, south, and east. The main stakeholders were the men congregant of the church. However, the health care ministry, and the church leaders were also stakeholders. Permission was granted by the church leadership to conduct the health intervention and evaluation. The Principle Investigator collaborated with the men's ministry leadership team and decided on the date, time, and the duration of the intervention. The men's ministry met weekly for bible study at the north and south locations and held a joint bible study with all the men on the fourth Monday each month at the east location. The men's ministry

decided that as they already had a regular group of men that attended the bible study each month for 90 minutes, the intervention fitted easily into the church's schedule. In addition, the stakeholders decided that not many men would attend on the week-end if the intervention was held on a Saturday. Therefore, it was decided to have the intervention on the fourth Monday in September at the east location, which is generally used for special services such as Easter. Discussions with the men's ministry included monthly telephone calls to discuss the recruitment of the men and to promote the health intervention. Discussions also involved collaboration with the healthcare ministry and the men's ministries to ensure promotion of the health intervention. The healthcare ministry had a permanent display table for health promotion activities after each Sunday service, which the men's ministry staffed to promote the event at the north and south locations. Also, the leader of the healthcare ministry provided one of the guest speakers and the Principal Investigator was advised by the healthcare ministry to contact the Congregational Health Promoters Ministry for the second guest speaker. The consensus among these groups was that the intervention be promoted two weeks prior to the intervention on Sundays during the service. The men's ministry led the promotion. Two weeks prior to the intervention the men hosted a media campaign to promote the event. After each service on Sunday the men also hosted a table with information from the American Cancer Society regarding all cancers. One week prior to the intervention the leader of the men's ministry announced the event via a recorded video message that was shown at all church services at the north and south location on Sunday.

Population and Sample

The research study was conducted at a Church in Charlotte, North Carolina. The subjects were African-American adult men, aged between 40 and 70, from the congregation of the Church. This was a non-random convenience sample of men that volunteered through a mass publicity drive at the church. The non-random convenience sample was chosen so as not to deny any men from participating in the intervention. The sample size was 30-50 adults. The Principal Investigator negotiated with the church that instead of the regular bible study on Monday September 24, the church would host the prostate education intervention seminar.

Research Design

This was a non-experimental design using a convenience sample. The design was chosen due to the ease of implementing the research at the church and preventing potential study participants not being able to participate in the education being offered. Thus, prohibiting men from participating, after an extensive promotion by the church and the men's ministry, would be unwarranted. Therefore, the design was to maximize the program by allowing as many men to participate and to utilize the information being presented in the program. The program would empower men by stimulating dialogue with peers and thus raising awareness of prostate cancer.

The primary goals of the outcome evaluation were:

 To measure the extent that the prostate cancer education intervention made a difference, such as increase prostate cancer knowledge amongst the AfricanAmerican men: anatomy & physiology, risks factors for prostate cancer, diagnosis, prevention, and treatment

- To increase empowerment skills for men to participate in the decision making process for prostate cancer education (confidence building in informed decision making)
- To understand the attitudes of African-American towards prostate cancer education
- To ascertain the extent of satisfaction for the intervention from the participants

Institutional Review Board

The research proposal was submitted and approved by Emory's Institutional Review Board. Authorization was also obtained from the church to conduct the study. After an explanation of the process was provided by the Principal Investigator, all participants were asked to sign two consents forms, one for himself and one for the Principal Investigator. The Principal Investigator provided her contact information on all the consent forms if the participants had any follow-up questions. The participants were informed that data collection was anonymous and each participant was given a random number to be used on all data collection instruments.

Procedures

Focus Group

Learning about Africa-Americans' beliefs about prostate cancer were important when designing an education intervention. The attitude of the population would enable the communication of the health education message to fit the target audience.

The Principal Investigator (PI) first conducted a small focus group to ascertain any participant barriers to prostate cancer screening education. The research initially started with a small focus group of four African-American men to obtain any opinions and feelings to prostate cancer education. The qualitative data provided information that helped improve the delivery of the prostate health education by providing information on negative or positive attitudes to prostate cancer. The information revealed how health prevention beliefs informed the men's decision making process. It also informed the role of spirituality in their health prevention activities. The information discovered any negative or positive attitudes towards their healthcare provider and addressed any barriers. It was important to discuss the barriers, as the intervention is to promote positive interactions with their physicians and to visit them for prostate cancer education.

The purpose of the focus groups was to ascertain sufficient information to aid in the communication material for the health intervention as follows:

- How best to target communication for African-American men
- What fears should be addressed in prostate cancer education

 What messages should be avoided when communicating to African-American men

Education Seminar

The second phase of the research implemented a prostate cancer health education. The intervention educated the men on prostate cancer awareness, anatomy & physiology, risks factors for prostate cancer, diagnosis, prevention, and treatment. The intervention provided sufficient information about prostate cancer and used the strategy of informed decision making so that the men could be empowered to feel confident in discussing prostate cancer with their physician. The education occurred for 90 minutes in a conference room at the Church and consisted of: consent form, opening prayer, pre-test, introduction speech by the PI, video, small group discussion, feedback from group discussion, testimonies by two prostate cancer survivors, question and answers session, post-test, end-of-session questionnaire, and closing prayer. At the end of the seminar, literature provided by the American Cancer Society and the National Cancer Institute on prostate cancer was distributed to each participant.

The first activity was a prayer by the leader of the men's ministry. Praying was important for the men to feel the importance of God during the prostate education and for them to feel safe and secure in sharing information. The men were given a pre-test to assess prostate cancer knowledge. The PI discussed the signs, symptoms and the benefits of prostate cancer education. The explanation of an informed decision was

given and why it was important to know about informed decision making in prostate cancer. The next activity was to watch the video.

Media

The video was about prostate cancer made by the National Cancer Institute called, 'The Right Decision is Yours: A Guide to Prostate Cancer Checkups", and targets African-American men. The video was approximately 20 minutes long and was about informed decision making. The video was a research-tested intervention that was used in a community-based research study in Washington DC. The video was about an African-American man who is reluctant to talk about prostate cancer, but gradually learned to talk about this disease with his family and then finally with his physician. The video had the man going to his African-American physician to discuss prostate cancer. The doctor explained the anatomy and function of the prostate, prostate cancer risk factors, the different screening tests for prostate cancer, the incidence and mortality of prostate cancer in African-American men, and limitations and benefits of screening. The video did not provide recommendations for or against but encouraged men to make their own decisions in collaboration with their physician and family (National Cancer Institute, RTIPS).

Small Group Discussions

The next activity was small group discussions for 15 minutes and then feedback for 10 minutes. The intervention used the sample questions in the booklet in the small group discussion section of the program. The booklet included the same information as the

video but had sample questions for men to ask their doctors (National Cancer Institute, RTIPS). Each group had one person provide feedback on their discussions. The premise of the small group discussion was for brainstorming for answers to the sample questions.

Prostate Cancer Survivors

After the discussion groups' session, the men heard testimonials from two prostate cancer survivors and had the opportunity to ask questions. The prostate cancer survivors provided personal testimonies of their experiences of prostate cancer, diagnosis, and treatment.

<u>Instrument</u>

The men were given a pre-test questionnaire prior to any activities. A post-test and an end-of-session questionnaire were administered before the men departed from the intervention. This was to assess the knowledge of the men post intervention. Demographic information was collected during the intervention using an instrument developed by Stanford University School of Medicine (2007). Participants were contacted three weeks after the intervention by the PI for a follow-up survey conducted by telephone.

Figure 2: List of evaluation questions and data collection instruments

1.	Was the faith-based intervention effective in promoting	Pre/Post Tests
	prostate cancer awareness and screening	
	recommendations?	

2.	Were the educational activities used in the intervention conducive to learning about prostate cancer?	End-of-session questionnaire
3.	What are the positive/ negative attitudes among African-American men with regard to prostate cancer?	Focus group
4.	Did the faith-based intervention provide sufficient information for the men, to enable them, to make an informed decision about prostate cancer?	End-of-session questionnaire Follow-up survey
5.	Did the faith-based intervention enhance confidence to enable informed decision making?	End-of-session questionnaire
6.	Did the intervention motivate men to continue learning about prostate cancer?	End-of-session questionnaire Follow-up survey

Plans for Data Analysis

Qualitative analysis

The qualitative analysis consisted of a small focus group that discussed barriers to prostate cancer screening. The focus group lasted for 45 minutes and also included spiritual questions using the questionnaire, 'The God Locus of Health Control' (Wallston, 2007). This data ascertained from the men how 'God' was perceived in relation to their health. The criteria for the focus group were men over the age of 40 years, African-American and members of the church congregant. There were no income or education restrictions. The data was analyzed by the PI using manual content analysis.

Quantitative analysis

Participants benefitted by gaining more knowledge about prostate cancer and being more informed about prostate cancer screening at the end of the session. Therefore, pre-/post-test and end-of-session questionnaires were collected anonymously with each man using a unique identifier. The outcome measures were increased prostate cancer knowledge, increased attitude, and increased decision making for prostate cancer screening. The end-of-session questionnaire assessed participant's satisfaction of the health intervention with questions assessing increased informed decision making, increased attitude for prostate cancer, and attitudes toward prostate cancer screening. Also, socio-demographic data was collected as a baseline prior to the intervention.

The PI used descriptive statistical analysis using EPI Info software. The descriptive analysis included tables and charts to measure percentages, numerical counts, and measures of central tendency, frequencies of responses to various questions asked, and cross tabulations on intent to contact a physician and any changed attitude towards prostate cancer.

A follow-up survey was conducted three-four weeks after the intervention to ascertain if participants made an appointment to visit with their physician. The education empowered men to have a frank and meaningful discussion with their physician about prostate cancer information.

Limitations

The convenience sample recruited for this pilot study introduced a potential selection bias in that all the participants were church members. The results were only of benefit to the church population; therefore, this limited the findings of the evaluation to the general African-American men population in the local region. The sample population only represented men that attended church and therefore men that did not go to church were not included in the sample. If religion changed the thought process by enabling men to reflect on the Holy Scriptures by using prayer, fellowship and bible study, then men that did not attend church were not exposed to this principle. Also, not having a control group limited the finding of the results to the stakeholders as there was no comparison group to compare the results of the study.

Delimitations

The sample of men was restricted to individuals over 40 years of age as prostate cancer screening was not recommended for a younger population. The study was limited to men that regularly attended the church. The small sample size limited scope of the findings but this was an education seminar that would benefit the stakeholders of the church. The observed recalcitrant nature of African-American men towards prostate cancer prior to the education seminar only allowed for one education seminar.

Summary

A convenience sample of African-American men over 40 years of age from the church attended a small focus group to ascertain any barriers to prostate cancer screening

education. The information provided negative and positive attitudes on prostate cancer education, which was used for communication messaging for the intervention. Next, a prostate cancer education intervention was implemented for African-American at the church and then evaluated for the effectiveness of the education.

Chapter 4 - Results

Introduction

The purpose of the study was to investigate if a faith-based intervention would increase prostate cancer education and increase informed decision making. The results of the study included a small focus group to collect qualitative data and quantitative frequency analysis distribution of outcome variables: knowledge, confidence, attitude, motivation, and empowerment. The faith-based intervention should change behavior by increasing African-American men's confidence, motivation and increased attitude in discussing prostate cancer with his physician. The sample consisted of 26 African-American men (four for the focus group and 22 for the intervention) between the ages of 40 and 66. The educational background of the majority of the sample was college educated, with 50.0% (n=13) holding graduate degrees. 30.8% (n=8) of the sample were college undergraduates, 15.3% (n=4) high school graduates, and 3.9% (n=1) holding a doctorate degree. Most of the participants are married (n=20), and the remaining being divorced (n=2), widowed (n=1) and single (n=3). See Appendix A.

Research Findings for Qualitative Data

The small focus group consisted of four African-American men from the church and the session was 45 minutes in duration. The qualitative data was recorded and then transcribed by the PI. The transcript was reviewed by the PI using manual content analysis. Firstly, the transcript was coded by recreating codes for attitudes that were either positive or negative. Then the codes were grouped into positive or negative attitudes. Themes that emerged from the focus group discussion to the research question,

"What are the negative/positive attitudes among African-American men with regard to prostate cancer?" are as follows: awareness, knowledge, attitude, and empowerment. The results of the God Locus of Health Control Scale are shown at Appendix B.

Awareness

The word awareness is mentioned seven times in the transcript. Education is seen as positive and negative. Positive prostate cancer education is seen as promoting health and saving lives. The men expressed the importance of talking about prostate cancer.

"Makes me feel good. Cause of awareness".

"Makes you realize that if you deal with it early it's a curable disease".

"Early diagnosis leads to early intervention, and prolong life".

"The chance of recovery is very high".

"If prostate cancer is genetic and there is not a lot of prevention there. Then it's awareness".

Negative prostate cancer education is seen as alarmist. The men felt that healthcare professionals can make the information too scary and make some men feel afraid. Therefore, the men expressed sensitivity, empathy, and thoughtfulness in prostate cancer communication.

"I think the fear factor is a good thing maybe for cigarettes but not for prostate cancer for the way you put the packaging, messaging in such a way that it scares the life out of people to get peoples' attention".

Knowledge

Prostate Cancer knowledge is seen as "lacking" by some of the men. The men believed that more information on prostate cancer would lead to prevention because of early diagnosis, and lead to cost savings. However, education is perceived as important due to new information emerging about prostate treatments; yet the group thought that more information about "prostate cancer triggers" was needed. In addition, education is viewed more broadly as a way to "connect the dots" for health disparities that affect certain populations. Prostate cancer knowledge is seen as negative if educators misinform people and are presenting the information that is not sensitive but fearful. Prevention knowledge of cancer was discussed as lifestyle changes that many people avoided:

"I don't think I know enough".

"My knowledge is scant, so I think it's important to fill that up a bit more because I don't know enough".

"Education is kind of connecting the dots particularly for population groups that have disproportionately tendencies in that space".

"Because of what-ever they learn [non-medical people] running around and start taking the place of the doctor and its Mis-education." "It could be that they don't talk about prevention as much because they don't think people are going to be willing to do the things that might cause them not to have the issues".

"The material presented in a way that it puts the fear more than knowledge".

Attitude

Education about prostate cancer is seen as beneficial as talking helps to cope with feelings not usually expressed by the men. The men expressed feelings of hope and not worrying about cancer, i.e. prostate cancer is not seen as a death sentence, but curable. The negative attitudes were perceived as coming from the side effects of treatment. The men believed that prostate cancer education is not communicated among men as ignorance may be perceived as "bliss". The men expressed an observation of other men's ignorance, and their not wanting to discuss prostate cancer due to having to confront the side effects of treatment.

"Makes you realize if you can deal with it early it's a curable disease".

"I know people that got talking about it help to realize [that] if you can deal with it early it's curable".

"I don't think you should worry about it at all".

"There is a kinda of a feeling that guys I speak to rather not know".

"One thing that bothers African-American men is when talking about side effects is the known fact that it severely reduces your sexual drive".

"Ignorant mentality that clouds people's judgment. It's a strong deterrent".

Empowerment

Overall, the education is seen as positive as it builds confidence, as some of the men discussed the "power" relationship that some doctors have in clinical practice. Education was seen as not accepting the status-quo, but challenging the doctors' authority in making health decisions. However, the negative aspect of empowerment was being too assertive and portraying a distrust of medical doctors.

"I have been intimated to inquire to the doctor. So whatever they say they are God's as far as I am concerned".

"We should be challenging [our] physicians".

"It's my life. Uumm you're gonna have more people challenging".

"The minute you can make those connections then you really have the motivation to push harder with the doctor to have that comprehensive follow-up".

"Can we trust that person enough to say are they really looking for prostate cancer or should we be saying I want to be seeing an urologist?"

Research findings for outcome evaluation questions. See Appendix C for results.

Q.1 Was the faith-based intervention effective in promoting prostate cancer awareness and screening recommendations?

A questionnaire that had six questions on prostate cancer was developed to test the men pre- and post-intervention. All the results show an improvement in knowledge except for question number six (see Table 1). The results are as follows:

- 1. The prostate gland is situated in front of the rectum and bladder? "True" improved from pre-test 90.9% to post-test 100%.
- 2. A man with prostate cancer may not have any symptoms? "True" improved from pre-test 72.7% to post-test 95.5%.
- 3. Men who have a father or brother with prostate cancer have a greater chance of developing prostate cancer? "True" improved from pre-test 86.4% to post-test 100%.
- 4. Is prostate more common amongst Latino men than African-American men? "False" improved from pre-test 77.3% to post-test 86.4%.
- 5. A PSA test detects all prostate cancers. "False" improved from pre-test 77.3% to post-test 90.9%.
- 6. Which is the best method for detecting prostate cancer? The pre-test was 100% before and post-test 100% for the combination choice of the PSA and DRE choice.

The results of the pre-/post-test improved knowledge on five questions. Question number six gave the same result as all participants gave the correct answer before and after the intervention.

Q.2 Were the educational activities used in the intervention conducive to learning about prostate cancer?

The intervention had five small groups of six men in each group that discussed questions on prostate cancer. Diet was the main area discussed and agreed that it was a risk factor that could be controlled by reducing red meat in the diet. Age, race, and family history were not seen as risk factors that could be controlled. The men also mentioned maintaining a healthy lifestyle by exercising and generally following a healthy diet. The men's qualitative response to, 'what did you like best about the prostate health education today', included a lot of comments regarding the testimonies and the personal sharing of information (see table 2, question 8). The results are as follows: group activity (n=1), DVD (n=1), everyone needs to be tested (n=1), group session (n=1), I like the response the prostate cancer survivor gave. It was a first-hand account (n=1), individual open testimony (n=1), information I didn't know (n=1), information sharing (n=1), options (n=1), options of surgery/treatment (n=1), real life testimony (n=1), speakers (n=1), the complete prostate discussion, the survivor's stories (n=1), the testimonies of the cancer survivors (n=1), very informative and transparent (n=1), very informative and people talked freely and without fear (n=1), video (n=1). The quantitative results are as follows: The activities that were conducive to learning about prostate cancer were watching the DVD 54.55 (n=12), group discussion 68.2% (n=15), the interaction of group members 59.1% (n=13), and what was learned 31.8% (n=7) (see Table 2, questions 10 & 11).

To increase informed decision making

Q.3 Did the faith-based intervention provide sufficient information to enable participants to make informed decisions about prostate cancer?

To make an informed decision regarding prostate cancer, the men needed to learn the benefits and limitation of screening, different treatments, and early diagnosis. The men first watched a video on informed decision making on prostate cancer, then had small group discussions, feed-back and then two testimonies from prostate cancer survivors.

Group Discussion

Diet was seen as important because age and race could not be controlled. Prostate cancer education was seen as important and many men had not realized that there was so much to know and ask before seeing their doctor. Many of the groups discussed the risk factors of prostate cancer and the limitations of the PSA test. In addition, in one of the small groups it was discovered that a group participant (a member of the church) shared without being asked during the small group discussion that he had been recently diagnosed with prostate cancer; the new revelation made the men cognizant that others had actually gone through cancer and treatment and realized that African-American men should discuss prostate cancer more "openly".

Testimonies

The men heard from two prostate cancer survivors regarding their testimonies on treatments, diagnosis, involvement of diet, and screening of prostate cancer. The first testimony included a first-hand account on how the participant went through a lot of education regarding prostate surgery, after he was diagnosed with prostate cancer. He spoke about post-surgery challenges around, incontinence and sexual dysfunction (short term side effects) and medication he took to regulate the challenges of his surgery. He

spoke of being free of cancer and getting regular check-ups. The second speaker shared that he had invasive surgery, but there is still some traces of cancer in his body. He spoke about having additional scans in detecting traces, but they cannot localize where the cancer is in his body and he is having more tests. The speaker emphasized that he did not have a family history of prostate cancer but ate a lot of burned charcoal grilled red meat and believed his diet was a contributory factor. The qualitative data to inform prostate cancer decision making were stated as: different treatments (n=6), surgery (n=2), early detection (n=1) and the importance of regular check-ups (n=1) (see Table 2, question 7).

The quantitative results are as follows: the increased benefit of learning about prostate cancer was 'a lot' at 85.7% (n=18) compared to 'somewhat' at 14.3% (n=3). While on the other hand, looking at risk factors, 94.7 (n=18) answered 'a lot' for the risks factors of prostate cancer compared to 'somewhat' at 5.3% (n=1). The treatment options were answered by 93.8% (n=15) as 'a lot' compared to 'somewhat' at 6.2% (n=1) (see Table 2, question 5).

Q.4 Did the faith-based intervention enhance confidence informed decision making?

This question was answered as 'very confident' by 95.5% (n=21) and 'somewhat confident by 4.5% (n=1) (see Table 2, question 3). This is important as the information must be understood and the men have to be able to speak confidently about prostate cancer.

Attitudes of African-American men towards prostate cancer

Q.5 Has your attitude changed about prostate cancer as a result of this education seminar?

The intervention measured the change in attitude to prostate cancer information with 85.7% (n=18) of the men who answered 'a great deal' compared to 'a little' 9.5% (n=2), and 'not at all' 4.8% (n=1) (see Table 2, question 6). The attitude for prostate cancer post intervention was cross-tabulated with the intention to contact their physician and there was not a significant relationship (p=0.4641) between an increased attitude and intention to contact their physician (see Table 3).

Satisfaction Level

Q.6 Did the intervention motivate men to continue learning about prostate cancer?

The intervention was seen as stimulating new interest in learning more about prostate cancer with 81.9% (n=18) who agreed and 18.1% (n=4) who disagreed (see Table 2, question 2). The greatest benefit from the intervention was increased motivation to learn about prostate cancer with 59.1% (n=13). 85% (n=17) of the men were going to discuss the sharing of information with spouse, 95% (n=19) were going to discuss information with their physician, and 95% (n=21) would make a list of questions to bring with them to their physician's office (see Table 2, questions 1 & 4). Of the men that attended the intervention 88.9 % (n=16) were planning to contact their doctor to learn more about prostate cancer information (see Table 2, question 9).

Follow-up survey

Three to four weeks post-intervention, 82% (n=18) of the men were followed up on a survey who responded to the question at the end of the intervention session on their intention to visit their physician. The survey highlighted that 44% (n=7) had made an appointment, but 56% (n=9) had not made an appointment. Attempts to reach the other two men who responded of their intention to visit their physician were unsuccessful. Therefore, 16 men (100%) said that they intend to speak with their physician about prostate cancer, and 16 men (100%) had increased desire for learning by accessing more prostate cancer resources (see Table 4).

Summary

The implementation and evaluation of a faith-based intervention for prostate cancer was analyzed using a focus group and an education intervention at a church. A total of 30 participants attended the intervention but only 22 were analyzed. One participant did not want to participate in the study and seven were under the age of 40. These eight are not included in the study. All of the participants were over 40 years. From the qualitative data, the men perceived prostate cancer education as a topic to avoid because most prostate education focused on negative aspects of the side effects of treatment, which is a contributing factor in the reluctance to discuss prostate matters amongst African-American men. However, the intervention using small group discussions and the safety of the church environment was able to use interpersonal interaction to help educate the men. The knowledge increased for prostate cancer information and the attitude for prostate cancer was positive with 85.7% (n=18) of men having a changed attitude and having

good intentions to discuss prostate cancer with their physician (see Table 2, question 6). However, the follow-up result for discussing prostate cancer information with physicians was 43.8% (n=7), and 56.2% (n=9) did not contact physicians; therefore, the good intentions did not translate to any behavioral change (see Table 4).

Chapter 5 - Discussion

Introduction

The purpose of the study is to investigate if a faith-based intervention will increase prostate cancer education and increase informed decision making. Results of the data show an improvement in prostate cancer knowledge, awareness, positive attitude, and motivation for prostate cancer education. However, the results for behavior change are low. The theory of planned behavior will be used to discuss the results for behavioral change, attitudes, perceived behavioral control, and subjective norm.

Summary of Study

The study is a faith-based intervention that consists of a focus group and an education intervention. The results show an improvement in the knowledge of cancer, more awareness of risk factors, and prevention from eating a healthier diet low in fat. African-American men are reluctant to openly converse with other men regarding prostate cancer due to the negative aspects of the side effects of surgery. However, the faith-based intervention, using interpersonal interactive discussions, creates an environment for the men being transparent and open about prostate cancer. The results give an insightful view on how best to educate African-American men on prostate cancer.

Conclusions

Behavioral Intention

This is the perceived likelihood of performing the behavior. The men are encouraged to contact their physician to discuss prostate cancer. The study measured the intentions of the men to contact their physician for prostate cancer information against the actual number of men that actually went to their physicians. The number of men that were planning to visit their physician was 16. But on the follow-up survey, only seven men went to visit their physician. The short follow-up period of three-four weeks may justify the low contact for physicians as the study is a short pilot study. Also, some of the men may have already visited the physician prior to the study. However, all of the 16 men on the follow-up survey were planning to discuss prostate cancer information with their physician at their next appointment and this is a positive result, as some men are reluctant to initiate prostate cancer discussions with their doctor. A previous study by Berglund, Nilsson, and Nordin (2005) noted that patients were reluctant to initiate prostate cancer screening education with their physician unless the physician initiated the discussion. The intention to discuss prostate cancer with physician is also due to the increase in feeling confident in discussing prostate cancer information with 91.5% (n=21) of the men feeling 'very confident' (Table 2, question 3). The finding is important because if the relationship is positive with his physician the men are more likely to discuss prostate cancer information with them (Woods, Montgomery, Herring, Gardner, and Stokols, 2006).

Attitude

The attitude towards seeking information about prostate cancer is the personal evaluation of the behavior and whether the men perceive the behavior as good, neutral, or bad (Glanz 2005). The intervention increased the desire to learn more about prostate cancer and had increased the desire for the men to converse with their physician. The qualitative data revealed that the negative attitude of prostate cancer was the fear of the side effects of surgery and some men not wanting to discuss prostate cancer. Therefore, it is important for prostate cancer education to be culturally sensitive to the barriers. However, from the qualitative data, prostate cancer education is seen as beneficial as talking helps to cope with feelings not usually expressed by the men. Hence, to achieve the increased attitude for prostate cancer, the education intervention had to be sensitive to the opinions and feelings of the men. From the intervention 85.7% (n=18) of the men had an increased attitude change with the change being "a great deal" (Table 2, question 6). The intervention made the men confront the side effects of prostate cancer treatments in a truthful way that did not put the fear into the men. The prostate cancer survivors information were frank and open and many of the men (n=6) liked the testimonies of the survivors (Table 2, question 8).

Subjective Norms

The testimonies of the prostate cancer survivors and the small group discussions had significant influence on how the men perceived prostate cancer. The men had an increased desire to learn and talk openly about prostate cancer after participating. Usually, African-American men are reluctant to talk about their health with anybody

(Carter et al, 2010); yet, the small group discussions, the intervention, and the focus group enabled the men to be intimate and reveal personal testimonies of prostate issues. The testimonies assisted the men with decision making as prostate cancer survivors spoke candidly about the challenges of the side effects of surgery. The straightforward conversation by the prostate cancer survivors permitted the men to talk open and freely about prostate cancer. The results of the discussions are reflected in the favorable responses for prostate cancer education: treatment options for prostate cancer (n=15) (see Table 2, question 5), to discuss prostate cancer with spouse or partner (n=17), and to discuss prostate cancer with their physician (n=19) (see table 2, question 1). Originating from the focus group discussion was an observation that some African-American men are reluctant to talk about prostate cancer due to unwitting ignorance; in contrast, the African-American men were willing to talk freely during the intervention. According to the study, 68.2% men (n=15) professed to enjoying the small group discussions (Table 2, questions 10 and 11).

Perceived behavioral control

The activity of discussing prostate cancer information with their physician requires feeling empowered and confident to have the conversation. From the qualitative study, some of the men felt their prostate cancer knowledge was "scant"; therefore, it is important for men to learn more about prostate cancer in order to have an informed discussion with their physician. The education intervention increased knowledge as the men will be able to discuss their risk factors for prostate cancer with their physicians. The intervention motivated the men to learn more about prostate cancer with 54.6%

(n=12) who 'strongly agree' and 27.3% (n=6) who 'agree' with the statement (Table 2, question 2). In addition, the men who perceived the benefits of learning about prostate cancer were 85.7% (n=18) (Table 2, question 6). This is important as one of the factors that men participate in, community outreach, is the perceived benefit of participating (Plowden, John, Vasquez, Kimani (2006). The perceived control is also noted in the follow-up survey with 100% (n=16) feeling motivated to continue learning about prostate cancer (Table 4). In addition, the small group discussion prevention activities highlighted the importance of diet.

Implications

The evaluation adds to the body of knowledge for prostate cancer education for at-risk populations. According to Plowden, John, Vasquez, Kimani (2006), factors that influence participating in community outreach were a perceived safe and caring environment and perceived benefit in participating in the outreach. The church is seen as a safe environment and using the church for an education seminar for prostate cancer enabled the men to speak up and be transparent. From the focus group, it was observed that African-American men have a hard time communicating with other men regarding prostate cancer, but at the intervention the men felt comfortable in sharing personal information about prostate cancer. The information from the focus group regarding the communication of cancer information enabled the message of the intervention to be tailored to the men to aid understanding. The research findings suggest that interpersonal communications for prostate cancer education was the impetus that enriched informed decision making for the faith-based intervention. Research by Holt et al (2009) suggested

prostate cancer education should include cancer survivors as educators, interactive group discussions, and information that is easy to understand. The small discussion groups and personal testimonies from prostate cancer survivors enriched the education, which stimulated a deeper understanding and desire to learn more about prostate cancer information.

Limitations

The limitation of the study was the small sample size, which cannot be generalized to a larger population. In addition, the sample is a convenience sample of highly educated men that attend the church, which further limits the study. 50.0% (n=13) of the men have a graduate degree, 30.8% (n=8) have a college degree, 3.9% (n=1) has a post-graduate degree, and 15.3% (n=4) are high school graduates (Appendix A). The intervention did not have a control group, which further limits the generalizability of the findings as the results cannot be compared to a group that did not receive the education.

Recommendations

Summary

The study focused on education through a 'bottom-up' approach using interpersonal communication for prostate cancer education in a church. The approach leverages a focus group to direct the approach to take in facilitating the education for the larger sample of African-American men. Churches can be an appropriate vehicle to reach at-risk populations, and the bottom-up approach to educate the public is achievable using community outreach. The education of prostate cancer involves a psychosocial

component (e.g. worry, fear, etc) that the study observed was able to address by alleviating some of the fears of treatment. While the study was able to observe a negative emotional response by African-American men (i.e. side effects of surgery), a positive emotional response was also observed in that the men reacted positively to the education that made them feel empowered. While not conclusive, interpersonal communication through learning from each other in a church setting, helped the men make informed decision making on prostate cancer. Further study would benefit from promoting prostate cancer education in a 'safe environment' of the church. Therefore, the recommendation is to continue using the church as a vehicle for prostate cancer education. However, research that has a longer follow-up period of six to seven months will be required to evaluate how effective interpersonal communication as the education vehicle can influence African-American men in making prostate cancer decisions and recommended behavior changes.

 ${\bf Appendix} \; {\bf A-Demographics} \; {\bf of} \; {\bf Participants}$

	Number	Percent
Age		
40-45	4	15.38
46-49	4	15.38
50-54	11	42.31
55-59	2	7.70
60-65	4	15.38
66-69	1	3.85
Education		
High School Graduate	4	15.38
College Graduate (Undergraduate Degree)	8	30.77
College Graduate (Graduate Degree)	13	50.00
Post Graduate (Doctorate)	1	3.85
Status		
Married	20	76.92
Single	3	11.54
Separated	0	0.00
Divorced	2	7.69
Widowed	1	3.85

N=26

Note: Participants are African-American Males

Appendix B – The God Locus of Health Control Scale for Focus Group

Statement	1.If my health worsens, it is up to God to determine whether I feel better again		2. Most this affect my he happen bed God	ealth			to my health is God's				6. God is in control of my health	
	Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent
Strongly disagree	2	50.0	3	75.0	1	25.0	2	50.0	1	25.0	2	50.0
Moderately disagree	1	25.0	1	25.0	1	25.0	-	-	1	25.0	-	-
Disagree	-	-	-	-	-		-	-	-	-	-	-
Agree	1	25.0	-	-	1	25.0	-	-	-	-	1	25.0
Moderately agree	-	-	-	-	1	25.0	1	25.0	1	25.0	1	25.0
Strongly agree	-	-	-	-	-			25.0	1	25.0	-	-
		100.0		100.0		100.0		100.0		100.0		100.0

N=4

Appendix C – Quantitative Data Analysis

Table 1 – Pre and Post Test Questions

		Pre	e-Test				Post-T	est		
Question	TR	TRUE		FALSE			UE	FALSE		
	Number	Percent	Number	Percent	П	Number	Percent	Number	Percent	
1. The prostate gland is situated in										
front of the rectum and under the	20	90.9	2	9.1		22	100.0	0	0.0	
bladder?										
2. A man with prostate cancer may	16	72.7	6	7.3	lΓ	21	95.5	1	4.5	
not have any symptoms.	10	12.1	O	1.3		21	93.3	1	4.3	
3. Men who have a father or										
brother with prostate cancer have a	19	86.4	3	13.6		22	100.0	0	0.0	
greater chance of developing	19	80.4	3	15.0		22	100.0	U	0.0	
prostate cancer.										
4. Is prostate more common										
amongst Latino men than African-	5	22.7	17	77.3		3	13.6	19	86.4	
American men?										
5. A PSA test detects all prostate	5	22.7	17	77.3	lΓ	2	9.1	20	90.9	
cancers.	3	22.1	17	11.3		2	9.1	20	90.9	

Note: N=22

			Pı		Post	-7	Γest			
Question	Response	Yes		No		Yes			N	o
Quesuon	response	Number	Percent	Number	Percent	Number	Percent		Number	Percent
6. Which is the best method for detecting prostate	Combination of the PSA and DRE	22	100	0	0	22	100		0	0
cancer?	Only the DRE	0	0	22	100	0	0		22	100
	Only the PSA	0	0	22	100	0	0		22	100

Note: N=22

Table 2 – End of Session Questions

		Y	es		N	o	N	/A		
Question	Response	Number	Percent]	Number	Percent	Number	Percent	,	Total (N)
	Make an apt with my physician to discuss prostate cancer	17	85.0		1	5.0	2	10.0		20
What did you plan on doing as a result of this	Discuss prostate cancer with my spouse or partner	17	85.0		0	0.0	3	15.0		20
health seminar?	Discuss prostate cancer with my physician	19	95.0		0	0.0	1	5.0		20
	Make a list of questions to bring with me to see my physician	21	95.5		0	0.0	1	4.5		22

Has the prostate cancer education stimulated new interest in learning more about prostate cancer? Circle one.	Frequency	Percent
Strongly Disagree	3	13.6
Disagree	1	4.5
Agree	6	27.3
Strongly Agree	12	54.6
N=	22	100.0

3. How confident that you can discuss prostate cancer with your physician?	Frequency	Percent
Very confident	21	95.5
Somewhat confident	1	4.5
Slightly confident	0	0.0
Not at all confident	0	0.0
N=	22	100.0

Table 2 – End of Session Questions Continued

4. How has the health education benefited you today?	Frequency	Percent
Motivated me to learn more about prostate cancer	13	59.1
Increased support from sharing with others about prostate cancer	6	27.3
Increased my confidence in talking about prostate cancer	3	13.6
N=	22	100.0

		A Lot		Somewhat		Some		None		
Question	Response	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Total (N)
5. To what extent did the	The benefits of learning about prostate cancerr	18	85.7	3	14.3	0	0.0	0	0.0	21
education seminar increase informed decision making?	The risks factors for prostate cancer	18	94.7	1	5.3	0	0.0	0	0.0	19
	Treatment options	15	93.8	1	6.2	0	0.0	0	0.0	16

Has your attitude changed about prostate cancer as a result of this education seminar? Please circle one.	Frequency	Percent
A great deal	18	85.7
A little	2	9.5
Not at all	1	4.8
N=	22	100.0

Table 2 – End of Session Questions Continued

7. Please indicate what new prostate cancer information was learned today?	Frequency	Percent
Treatment	2	11.80
Treatment options, risk factors, first hand information.	1	5.88
Treatment options	1	5.88
The different treatments.	1	5.88
200,000 die from the disease yearly.	1	5.88
Different types of surgery.	1	5.88
That I should I have had the old fashioned surgery.	1	5.88
Early detection.	1	5.88
Importance of regular check ups.	1	5.88
The various types of prostate cancer treatment.	1	5.88
Exam and processes	1	5.88
I already knew.	1	5.88
That there were other treatment options to treat prostate cancer.	1	5.88
The different options were very helpful.	1	5.88
The importance of knowing your numbers.	1	5.88
The method for detecting prostate cancer.	1	5.88
N=	17	100.0

Table 2 – End of Session Questions Continued

8. What did you like best about the prostate health education	Frequency	Percent
today?		
A group interaction.	1	5.60
DVD	1	5.60
Everyone needs to be tested.	1	5.60
Group session.	1	5.60
I like the response the prostate cancer survivor gave. It was a first hand account.	1	5.60
Individual open testimony.	1	5.60
Information I didn't know.	1	5.60
Information sharing.	1	5.60
Options	1	5.60
Options of surgery/treatment.	1	5.60
Real life testimony.	1	5.60
Speakers.	1	5.60
The complete prostate discussion.	1	5.60
The survivor's stories.	1	5.60
The testimonies of the cancer survivors.	1	5.60
Very informative and transparent.	1	5.60
Very informative. People talked freely and without fear. Wonderful.	1	5.60
Video.	1	5.60
N=	18	100.00

Do you plan to contact your physician to learn more about prostate cancer? Please check one.	Frequency	Percent
Yes	16	88.9
No	2	11.1
N=	18	100.0

Table 2 – End of Session Questions Continued

Question10 and 11: What did you	Liked About The Session		Disliked About The Session	
like/dislike about the session?	Number	Percent	Number	Percent
DVD	12	54.5	0	0.0
Group Discussion	15	68.2	0	0.0
Other group members interaction	13	59.1	0	0.0
What I leaned	7	31.8	0	0.0

N=22

10. What did you like/dislike about the session - Specify?	Frequency	Percent
N/A	7	63.60
Everything was great	2	18.20
I liked everything	1	9.10
It was all good	1	9.10
N=	11	100.00

Table 3 – Attitude Change and Plan to Contact Doctor Crosstabulation

			Plan to Contact		Total
			Yes	No	
ATTITUDE CHANGE	NOT A LOT	Count % within ATTITUDE CHANGE	1 100.0	0.0	1 100.0
		% within PLAN TO CONTACT	6.3	0.0	5.6
	A LITTLE	Count % within ATTITUDE CHANGE	50.0	50.0	100.0
		% within PLAN TO CONTACT	6.3	50.0	11.1
	A GREAT DEAL	Count % within ATTITUDE CHANGE	93.3	6.7	15 100.0
		% within PLAN TO CONTACT	87.5	50.0	83.3
Total		Count % within ATTITUDE CHANGE	16 88.9	2 11.1	18 100.0
		% within PLAN TO CONTACT	100.0	100.0	100.0

Descriptive Statistics

Plan to Contact Doctor	N	Mean	Variance	Std Dev
Yes	16	7.8125	0.2958	0.5439
No	2	7.5000	0.5000	0.7071

P-value = 0.4641

Table 4 – Follow Up Survey

As a result of the intervention did you make an appointment with your physician?	Frequency	Percent
No	9	56.20
Yes	7	43.80
N=	16	100.00

2. As a result of the prostate cancer intervention do you intend to speak with your doctor at your next appointment about prostate cancer screening?	Frequency	Percent
Yes	16	100.00
No	0	0.00
N=	16	100.00

3. As a result of the prostate cancer intervention have you increased your desire for learning by accessing more porstate cancer resources?	Frequency	Percent
Yes	16	100.00
No	0	0.00
N=	16	100.00

Appendix D – IRB Approval Letter



Institutional Review Board

September 21, 2012

Maxine Simms Principal Investigator Public Health

RE: Exemption of Human Subjects Research

IRB00060297

How effective is a faith-based intervention in motivating African-American men to obtain the prostate specific antigen (PSA) prostate cancer screening test?

Dear Principal Investigator:

Thank you for submitting an application to the Emory IRB for the above-referenced project. Based on the information you have provided, we have determined on September 21, 2012 that although it is human subjects research, it is exempt from further IRB review and approval.

This determination is good indefinitely unless substantive revisions to the study design (e.g., population or type of data to be obtained) occur which alter our analysis. Please consult the Emory IRB for clarification in case of such a change. Exempt projects do not require continuing renewal applications.

This project meets the criteria for exemption under 45 CFR 46.101(b) (2). Specifically, you will be obtaining anonimized knowledge using attitude questionnaires, an activity to increase knowledge (which is not experimental and is not being compared to other approaches to increase knowledge), and a follow-up interview.

- Protocol version 7.25.2012
- Demographic sheet
- Pre and Post Test Questionnaire

- Follow up survey
- Prostate Cancer Education Sign In Sheet
- Main consent form version 7.25.2012

Please note that the Belmont Report principles apply to this research: respect for persons, beneficence, and justice. You should use the informed consent materials reviewed by the IRB unless a waiver of consent was granted. Similarly, if HIPAA applies to this project, you should use the HIPAA patient authorization and revocation materials reviewed by the IRB unless a waiver was granted. CITI certification is required of all personnel conducting this research.

Unanticipated problems involving risk to subjects or others or violations of the HIPAA Privacy Rule must be reported promptly to the Emory IRB and the sponsoring agency (if any).

In future correspondence about this matter, please refer to the study ID shown above. Thank you.

Sincerely,

Aryeh Stein, PhD Co - chair

This letter has been digitally signed

CC:

Smith Iris Behavioral Science

Emory University
1599 Clifton Road, 5th Floor - Atlanta, Georgia 30322
Tel: 404.712.0720 - Fax: 404.727.1358 - Email: irb@emory.edu - Web: http://www.irb.emory.edu/
An equal opportunity, affirmative action university

Note: IRB Approval Letter Page 2

Appendix E – Consent

Study No.: IRB00060297 Emory University IRB IRB use only

Document Approved On: 9/21/2012

Emory University Consent to be a Research Subject

Title: How effective is a faith-based intervention in motivating African-American men to obtain the PSA prostate cancer screening test?

Principal Investigator: Maxine Simms, RN, BSc

<u>Introduction:</u> You are being asked to be in a research study. This form is designed to tell you everything you need to think about before you decide to consent (agree) to be in the study or not to be in the study. It is entirely your choice. If you decide to take part, you can change your mind later on and withdraw from the research study.

Before making your decision:

- Please carefully read this form or have it read to you
- Please ask questions about anything that is not clear

You can take a copy of this consent form, to keep. Feel free to take your time thinking about whether you would like to participate. By signing this form you will not give up any legal rights.

Study Overview: The purpose of the evaluation is to appraise the effectiveness of the faith-based intervention in promoting prostate cancer information.

Procedures: If you agree to participate you will attend a prostate cancer health education seminar that will last 90 minutes. Information from the seminar will include education regarding prostate cancer screening and awareness. You will be asked pre/post-tests questions about prostate cancer and complete end-of-session questions. You will receive a follow-up call that will last about 5-10 minutes to ascertain how much you have benefitted from the seminar.

You may have an opportunity before the seminar to participate in a focus group to voice your opinion and attitude towards prostate cancer. The focus group will last 45-60 minutes.

Risks: There is minimal risk in this study. However, answering questions may be frustrating for some people and you have the right not to answer any question that makes you feel uncomfortable.

<u>Benefits:</u> Participants will benefit by gaining more knowledge about prostate cancer and be more informed about prostate cancer screening.

Version Date: 07/25/2012

<u>Confidentiality:</u> If you agree to participate we will keep all facts about you private. The questionnaires will be collected by me and stored in a secured locked file cabinet. We will not disclose your information to anyone that can identify you. To remain anonymous, a random study number will be created to identify you rather than your name and will be used on all questionnaires. Emory will keep any research records we create private to the extent that we are required by law. Your name will not appear when the results of the study are presented.

<u>Voluntary Participation and Withdrawal from the Study:</u> You have the right to leave a study at any time without penalty. You may refuse to do any procedures you do not feel comfortable with, or answer any questions that you do not wish to answer. You have the right to request that your information not be used if you refuse to participate in the study.

Contact Information: If you have any questions about this study or your part in it, or if you have questions, concerns or complaints about the research you can contact Maxine Simms at (704) 542-1253. In addition, if you have questions about your rights as a research participant, or if you have questions, concerns or complaints about the research, please contact the Emory Institutional Review Board at 404-712-0720 or 877-503-9797 or irb@emory.edu:

You may also let the IRB know about your experience as a research participant through our Research Participant Survey at http://www.surveymonkey.com/s/6ZDMW75.

Consent

Please, print your name and sign below if you agree to be in this study. By signing this consent form, you will not give up any of your legal rights. We will give you a copy of the signed consent, to keep.

Name of Subject		
Signature of Subject	Date	Time
Signature of Person Conducting Informed Consent Discussion	Date	Time

Appendix F – Intervention Sign In Sheet

Prostate Cancer Education Sign-In Shee	et
--	----

Date: __September 24, 2012 Site: Church_

Name	UID	Name	UID
1.		21.	
2.		22.	
3.		23.	
4.		24.	
5.		25.	
6.		26.	
7.		27.	
8.		28.	
9.		29.	
10.		30.	
11.		31.	
12.		32.	
13.		33.	
14.		34.	
15.		35.	
16.		36.	
17.		37.	
18.		38.	
19.		39.	
20.		40.	

Appendix G - Random Unique Identifier Allocation

Prostate Cancer Education
Random Unique Identifier Allocation (UID)

Date: __ September 24, 2012 Site: Church___

UID allocated to Participant Names (Allocation Not Seen By Participants)

Name #	UID	Name #	UID
1	165	21	939
2	241	22	339
3	368	23	388
4	979	24	659
5	590	25	747
6	174	26	499
7	358	27	543
8	432	28	261
9	383	29	659
10	706	30	652
11	204	31	479
12	143	32	986
13	10	33	444
14	976	34	243
15	474	35	527
16	180	36	84
17	662	37	505
18	893	38	98
19	149	39	475
20	164	40	48

${\bf Appendix} \; {\bf H-Prostate} \; {\bf Cancer} \; {\bf Intervention} \; {\bf Demographic} \; {\bf Sheet}$

Completed	by Participant:			
Name:			_ Today's date:	
Telephone:	home or mobile (_) Date of bi	rth (mm/dd/yyyy):	
Please circle	e the <i>highest</i> year of	school completed:		
1 2 3 4 5 6 (primary)	7 8 9 10 11 12 (high school)	13 14 15 16 (college/university)	17 18 19 20 21 22 (graduate school)	23+
☐ Mar ☐ Sing ☐ Sepa	gle arated	ne):		
□ Whi□ Blac□ Hisp□ Asia□ Filip□ Amo□ Otho	erican Indian/Alaskaı er:	n Native		
		//		
Completed	by Principal Invest	igator		
UID#:				

${\bf Appendix}\; {\bf I-Pre}\; {\bf and}\; {\bf Post}\; {\bf Test}\; {\bf Questions}$

1.	The prosta	te grand is situated in front	of the rectum and under the bladder
	5	Ггие	False
2.	A man with	h prostate cancer may not h	nave any symptoms
	-	Гruе	False
3.	Men who l		h prostate cancer have a greater chance of developing
		Гruе	False
4.	Is prostate	more common amongst La	tino men than African-American men
	F	Ггие	False
5.	A PSA test	t detects all prostate cancer	rs
	ŗ	Ггие	False
6.	Which is the	ne best method for detecting	g prostate cancer? Please check one.
	O	only the PSA	
	O	only the DRE	
	□ C	combination of the PSA and	DRE

Appendix J – Focus Group Questions

The God Locus of Health Control (GLHC) Scale for Focus Group

Please circle one answer for each question

- 1. If my health worsens, it is up to God to determine whether I will feel better again.
 - "Strongly disagree;" "moderately disagree;" "disagree;" "agree;" "moderately agree;" and "strongly agree."
- 2. Most things that affect my health happen because of God
 - "Strongly disagree;" "moderately disagree;" "disagree;" "agree;" "moderately agree;" and "strongly agree."
- 3. God is directly responsible for my health getting better or worse
 - "Strongly disagree;" "moderately disagree;" "disagree;" "agree;" "moderately agree;" and "strongly agree."
- 4. Whatever happens to my health is God's will
 - "Strongly disagree;" "moderately disagree;" "disagree;" "agree;" "moderately agree;" and "strongly agree."
- 5. Whether or not my health condition improves is up to God
 - "Strongly disagree;" "moderately disagree;" "disagree;" "agree;" "moderately agree;" and "strongly agree."
- 6. God is in control of my health
 - "Strongly disagree;" "moderately disagree;" "disagree;" "agree;" "moderately agree;" and "strongly agree."

Reference: Ken Wallston, PhD: The God Locus of Health Control (GLHC) Scale retrieved from http://www.vanderbilt.edu/nursing/kwallston/mhlcscales.htm

Qualitative Questions Developed by the Principal Investigator for Focus Group

- 1. How does talking about prostate cancer make you feel?
- 2. How do you feel about prostate cancer education?
- 3. What do you think are the advantages of prostate cancer education?
- 4. What do you think are the disadvantages of prostate cancer education?
- 5. What should I have asked that I did not ask?

Appendix K – Small Group Discussion Questions

The questions will aid in men talking about prostate cancer. Discussion questions from "The Right Decision Is Yours" brochure for small group discussions (4-5 participants).

- 1. If close relatives have had prostate cancer am I likely to get it?
- 2. Do some of my daily habits affect my chances of getting prostate cancer?
- 3. Is it possible to have a problem and not have any symptoms?
- 4. If the PSA detects the presence of cancer, why do you have to do the rectal exam?
- 5. There are some disagreements amongst doctors about prostate cancer check-ups. Can you explain why doctors disagree? Consider what you will do with the test results?

Appendix L -End of Session Questions

1.	Wł	nat do you plan on doing as a result of this health seminar?			
		Make a list of questions to bring with me to see my physician	YES	NO	N/A
		Make an apt with my physician to discuss prostate cancer	YES	NO	N/A
		Discuss prostate cancer with my spouse or partner	YES	NO	N/A
		Discuss prostate cancer with my physician	YES	NO	N/A
2.	Has the prostate cancer education stimulated new interest in learning more about				ıt
	pro	ostate cancer? Circle one.			
	Str	ongly Disagree / Disagree / Neither Agree nor Disagree / Agree	/ Stron	gly Aş	gree
3.	Но	w confident that you can discuss prostate cancer with your physi	ician?	Check	one.
		Very confident			
		Somewhat confident			
		Slightly confident			
		Not at all confident			
4.	Но	w has the health education benefited you today? Check one.			
		Motivated me to learn more about prostate cancer			
		Increased my confidence in talking about prostate cancer			
		Increased support from sharing with others about prostate cancer	er		

End of Session Questions Continued

5.	To what extent did the education seminar increase informed decision making? Check				
	one.				
		None	Some	Somewhat	A Lot
	☐ The benefits of learning about prostate cancer	1	2	3	4
	☐ The risks factors for prostate cancer	1	2	3	4
	☐ Treatment options	1	2	3	4
6.	Has your attitude changed about prostate cancer at Please circle one.	s a result	of this ed	ducation sem	inar?
7.	Not at all A little A great de Please indicate what <u>new</u> prostate cancer informat		learned to	oday?	
8.	What did you like <u>best</u> about the prostate health ed	ducation	today?		
9.	Do you plan to contact your physician to learn moone.	re about	prostate	cancer? Pleas	se check
	□ No				
	☐ Yes				
	☐ If yes, please specify:				

End of Session Questions Continued

10.	Wł	nat did you like about the session? Please check all that apply
		DVD
		Group Discussion
		Other group members interaction
		What I learned
		Other
11.	Wł	nat did you not like about the session? Please check all that apply
		DVD
		Group Discussion
		Other group members interaction
		What I learned
		Other

Appendix M – Follow Up Survey

1.	As a re	esult of the prostate cancer intervention did you make an appointment with your
	physic	ian
	0	Yes
	0	No
	0	If yes please specify date
2.	As a re	esult of the prostate cancer intervention do you intend to speak with your doctor at
	your n	ext appointment about prostate cancer screening?
	0	Yes
	0	No
	0	Maybe
3.	As a re	esult of the prostate cancer intervention have you increased your desire for learning
	by acc	essing more prostate cancer resources?
	0	Yes
	0	No
	0	If yes, please specify source
4.	What	should I have asked that I did not ask?

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