

Reducing Prostate Cancer Rates Among African American Men in Cumberland County, North Carolina: An Exploratory Study

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Abstract

Prostate cancer rates among African American men in the United States continues to perplex providers of health-care services. These disproportionate rates necessitate the development of culturally-competent and context-specific strategies specifically designed to eliminate these disparities. This study explores several community based approaches found to have an appreciable impact.

Key words: prostate cancer, masculinity, community-based interventions.

Significance of the Research

An analysis of recent patterns of prostate cancer consistently reveals that the incidence of, and mortality from prostate cancer differs markedly by racial ethnicity. Rates in African American men persistently remain more than twice as high as rates for white men. According to data reported by the American Cancer Society, African American men are at least 50% more likely to develop prostate cancer and they are significantly more likely to die of from complications associated with prostate cancer than men from any other racial or ethnic group in the world.

Recognizing the racial and health disparity in the rates of prostate cancer incidence and mortality, the American Cancer Society, the National Cancer Institute, the Centers for Disease Control, (CDC), in collaboration with the Intercultural Cancer Council and the National Cancer Coalition conducted a Leadership Conference on Prostate Cancer in the African American community in 1997. A National Blueprint for Action was formulated to identify critical needs in ongoing context-specific patient education and support, health care policy, health care promotion, and education. Prostate cancer screening and detection recommendations tailored specifically to African American men were articulated as follows:

1. African American men, beginning at age 40, should have a digital rectal exam (DRE) as a part of their annual check up.
2. African American men ages 50 years and above should have an annual prostate examination comprising of a DRE and a PSA test.
3. African American men ages 40 years and above with a family history of prostate cancer should have an annual prostate examination comprising a DRE and a PSA test.

In spite of the presence of readily available evidence supporting the effectiveness of early screening and detection protocols, African American men who match at-risk profiles tend to underuse these services. Cultural barriers to health care, coupled with lingering levels of distrust for the medical care community contributes to this unfortunate phenomenon. These trends are attributed principally to the following six barriers:

- ✓ Inadequate (or zero) health care coverage.
- ✓ Difficulties with the process of receiving appropriate and altogether expeditious levels of health care.
- ✓ Less than satisfactory experiences with health care delivery episodes.
- ✓ Lingering levels of distrust for the medical establishment.

- ✓ Comparative lack of knowledge regarding one's potential vulnerability to prostate cancer.
- ✓ Defeatist and fatalistic attitudes regarding the purpose, efficiency, and benefits of full and complete participation in the treatment process.

Our research objectives were twofold:

1. To identify chief characteristics of health promotion campaigns that serve to heighten the probability of accessing mainstream prostate cancer and detection protocols among these men.
2. To explore theoretical issues regarding dynamics that motivates these same men to get tested.

Review of Relevant Literature

African American men have the highest prostate cancer rates in the world and more of these men continue to die prematurely from this disease than men from any other racial or ethnic group (Parker, Johnston Davis, Wingo, Ries, & Heath, 1998).

Data from the National Cancer Institute's Surveillance, Epidemiology, and End Results Project reveals that African American male cancer patients have the highest age-adjusted incidence of mortality rates than white, latino, and asian/pacific islander patients with this disease. Despite significant improvements over the course of the previous decade in diagnosis and treatment, available data persistently reveals that African American men have not acquired the benefits of increased prostate cancer survival rates.

Documented racial and ethnic disparities, coupled with the prevalence of psychosocial concerns and issues among African American male prostate cancer patients, (including those at particular risk for this disease) have been adequately addressed in literature regarding screening, prevention, knowledge, risk factors, health care beliefs and barriers to cancer screening (Abbot, Tatlor, & Barber, 1998; Chodak, 1996; Demark-Wahnefried, et.al., 1995; Myers, Wolf, Balshem, Ross, & Chodak, 1994; Myers, et.al., 1996; Ndubuisi, Kofi, Andoh, & Schwartz, 1995; Weinrich, 1998). For example, Weinrich and her colleagues sought to determine data on differential screening rates for prostate cancer among African American men from those in the general population. They explained:

“This study computed rates of previous digital rectal examination (DRE) and prostate-specific antigen (PSA) screening for prostate cancer in cancer-free (unaffected) relatives age 40-69 years from African American families that had four or more men with prostate cancer. The rates for these 134 high-risk African American men from the Heredity Prostate Cancer Study (AAHPC) were compared with nationwide estimates obtained from participants in the 1998 and 2000 National Health Interview Survey (NHIS), for which the numbers of demographically comparable subjects were 5583 (4900 Caucasians, plus 683 African Americans) and 3359 (2948 Caucasians, 411 African Americans), respectively. Men in the AAHPC cohort (with a strong positive history) had significantly less screening than both African Americans and Caucasians in the NHIS cohorts. Only about one-third (35%) of the men in the AAHPC unaffected cohort had ever had a DRE, and only about 45% of them had ever received a PSA test. These rates were much lower than those obtained for African American men in the NHIS: 45% for DRE and 65% for PSA. These discrepancies increased with age. Older African American men with positive family histories report surprisingly low rates of DRE and PSA screening compared with their counterparts in the NHIS surveys.”

African American men at risk for prostate cancer need to be informed of the primary benefits of prostate cancer screening. Concurrently, these same men must become actively engaged in an effective and proactive decision making process regarding the efficacy of mainstream prostate cancer screening protocols. Well documented nuances that may serve as impediments to this process include palpable degrees of apprehension regarding the medical establishment, the comparative lack of knowledge about being vulnerable to prostate cancer, and defeatist and fatalistic attitudes about the purpose, efficacy and benefits of full participation in the treatment process (Robinson, et.al., 1996; Smith, et.al., 1997).

Therefore, our mission is rooted fundamentally in our quest to provide culturally relevant information regarding the specific benefits of accessing mainstream prostate cancer screening protocols. The principle purpose of this study is to increase our understanding of factors that may contribute to the process by which African American men at-risk for prostate cancer access readily available screening and detection protocols. In a study which sought to compare and examine prostate-specific antigen (PSA) screening among African American and white men, (Chan, et.al., 2003) it was reported that African American men appeared to be less knowledgeable than white men.

African American men expressed a greater willingness to participate in prostate cancer clinical trials if they were encouraged to do so by a physician or researcher who was viewed as competent and compassionate, (Robinson, et.al., 1996), or, in other words, when matters of cultural competency were readily embraced and consistently demonstrated. It is also important to note that several individual and group psychosocial and educational interventions and decision aids have been developed and tested for efficacy in increasing screening behavior (Cantor, et.al., 2002). However, it is evident that prostate cancer screening presently misses the very men (African Americans) who may benefit from it the most. Again, despite the availability of screening protocols, utilization by African American men remains low. Additionally, Plowden, (1999) believed that higher mortality and morbidity rates among at-risk African American men, in comparison to men from other ethnic groups, may be related in large part to increasingly well-known health seeking behaviors typically evidenced within and among this group. Using the Health Beliefs Model as his theoretical and conceptual framework, Plowden conducted a qualitative study designed specifically to delineate prime motivators for substantive engagement in health seeking behavior.

The Health Beliefs Model deliberately endeavors to define, describe, predict, and comprehend how persons engage in preventive health practices. This paradigm seeks to analyze both internal and external motivational characteristics. Four main barriers to care were identified:

1. Feelings of powerlessness and fatalism.
2. Resource unavailability, i.e., cost of the exam, inconvenient office hours, lack of transportation, and inadequate health insurance coverage.
3. Severe knowledge deficits regarding health care issues uniquely specific to the welfare of African American men, as well as the comparative lack of community-based resources established to treat these issues.
4. Persistent and seemingly intractable levels of distrust for health care providers.

Embedded within the context of our quest to design and deliver culturally competent and context-specific surveys to at-risk African American men residing in Lee and Counties is our commitment to the development of an empirically-based plan to evaluate the efficacy of our intervention strategies. Our goal lies squarely upon our desire to heighten the potential for these men to access prostate cancer screening and detection protocols.

Theoretical Framework and Hypotheses

African American men between the ages of 40-70 who reside in Lee and Cumberland County are known to have a higher risk of developing prostate cancer. Historically, African American men have presented at a higher stage, and have had worse outcomes from this disease than non African American men. There is an ongoing debate in the professional literature, university research centers, and community-based hospitals and medical clinics whether this disparity is due principally to biologic, environmental, or behavioral factors, or a combination of these factors. Furthermore, access to health care is clearly implicated. Despite this debate, there is emerging data that African American men are receptive to education and early detection campaigns that are culturally competent, i.e., efforts are deliberately designed to account for specific cultural traditions, customs, mores, and behavioral patterns considered to be unique to African American male culture.

Hypothesis 1. Conventional public health and promotion campaigns have largely proven to be ineffective at best in producing appreciable and measurable behavioral change, particularly when these campaigns are designed ostensibly to reach African American men at-risk for prostate cancer.

Hypothesis 2. Significant increases in health promotion campaign effectiveness will come from reconceptualizing campaign design away from simply information transmission to multi-stage communication intervention, or, in other words, a culturally competent focus. Previous campaigns have failed to account for the importance of messages tailored uniquely to the life experiences of at-risk African American men.

Hypothesis 3. Culturally competent education and early detection campaigns targeted to at-risk African American men residing in Lee and Cumberland County will contribute to an appreciable increase in the percentages of these men who actually access mainstream screening protocols.

Methodology

One hundred at-risk African American men (i.e., between the ages of 40 through 70) were recruited to participate in this research project. Respondents resided in Lee and Cumberland County, and they were offered a modest stipend of twenty dollars (\$20.00) as an incentive. Recruitment sites were comprised of African American churches and barbershops in Lee and Cumberland County, North Carolina. African American churches were recruited from published directories in Lee and Cumberland County. With regard to African American barbershops, a similar approach was employed. Both entities, (churches and barbershops) were solicited in the following manner: the principle investigator and the graduate student research assistant requested a meeting with the pastor in order to describe and define the purpose, scope, and extent of the study. The principle investigator also requested from the pastor a convenient date and time for the principle investigator, and graduate student research assistant to visit the church to speak with men who fit the profile for this study. Once a date and time was firmly established, an initial visit was made. Consent forms for the self-administered questionnaire, and the actual questionnaire were brought to the initial meeting. These meetings consisted of a detailed explanation regarding the importance of the study. These men were also invited to participate in a focus group - a strategy that encompassed the second phase of this study. As an incentive, men choosing to participate in the focus group were offered a modest monetary incentive of twenty (\$20.00) dollars. During these focus groups, the principle investigator and the graduate student research assistant asked study participants a series of questions gleaned primarily from responses tabulated from the self-administered questionnaires (see appendix). Each focus group lasted for approximately one hour. The principle investigator and graduate student research assistant assumed the responsibility for coordinating and implementing logistics typically associated with focus group planning and execution. The principle investigator and the graduate student research assistant were required to take and pass the FSU sanctioned Human Subjects examination and sign related confidentiality agreements prior to their involvement with this study. The principle investigator was responsible for training the graduate student research assistant.

Dissemination Strategy for the Results

Probable themes and impressions emerging from the focus groups (utilizing qualitative analysis software) will be used by the principle investigator to formulate culturally competent strategies designed to promote the use of prostate cancer screening and early detection protocols. This data should also provide health promotion specialists with descriptive information about the demographic, behavioral, and attitudinal characteristics of these men, thereby enabling them to engage in culturally competent practices.

Description of the Data Collectors

Oliver J. Johnson, Ph.D., Assistant Professor in the Department of Social Work at Fayetteville State University served as the principle investigator and primary data collector. Ms. Sheena Blake, a second year graduate student in the MSW program at Fayetteville State University, assisted me throughout this process.

Summary of Data Analysis Protocols

Results obtained from the research study surveys were tabulated according to the total number of responses elicited by each participant per item. These findings were as follows:

Survey Results

	TRUE	FALSE
African American men and white men have the same risk of dying from prostate cancer.	21	79
African American men have 13% more of the male sex hormone testosterone than white men.	41	59
Cooked tomatoes, grapefruit, and watermelon can improve the health of the prostate gland.	51	49
The most effective way to reduce prostate cancer risk for African American men over age 50 is to eat	86	14
African American men have the highest death rate from prostate cancer in the world.	89	11
African American men who view their bodies as “God’s temple” are more likely to get tested for	61	39
African American men who attend church on a regular basis will tend to respond favorably to	65	35
A church with an active health ministry may be helpful in convincing African American men to get	95	5
The community of men who frequent African American barbershops can persuade one another to	83	17
The community of men who frequent African American barbershops are more in tune with key	31	69

Focus Group Questions

Each focus group consisted of four key questions:

As an African American male at the age of 40 years and/or beyond, you are considered to be at special risk for prostate cancer. In light of this reality, what do you feel are your biggest needs?

What do you wish you knew more about on assuming a proactive stance against prostate cancer?

How care the local public and private health care delivery communities of Cumberland and Lee Counties be more responsive to your needs?

What would help you provide the best preventive care for yourself?

Theme Analysis from The Focus Groups

We decided to utilize a theme-analysis paradigm in our quest to identify common themes or patterns that appeared to be particularly prevalent in more than several groups. Significantly enough, three central themes emerged from these groups:

“I want a provider who doesn’t seem to be afraid of me,” “I want a health care provider who can honestly relate to me as a Black man,” “Maybe the real issue revolves around my willingness and/or ability to truly love myself.” “In other words, although the larger society constantly denigrates me in every conceivable way, I can still take steps to value myself and my health.”

Implications for The Development of Culturally Specific Health Promotion Campaigns

Our findings indicate that these respondents felt that they would have received better care, or more access to mainstream prostate cancer screening and detection protocols had they been of a different race or ethnicity. Indeed, exposure to the local health care systems for these men created more risk for discriminatory acts. A record of unpleasant experiences with these entities in Lee and Cumberland Counties may represent the most pivotal and important indicator of a system in critical need of substantive change - with equally significant implications for the development of context and culturally specific health promotion campaigns. According to our focus group participants, dissatisfactions appear to emanate from a variety of sources, e.g., lack of a regular avenue of care, lack of access to specialty care, and inappropriate behavior by the doctor. Significantly enough, fear and distrust of the medical establishment was also cited as a factor. According to the Praeger Handbook of Black American Health, Volume One, Policies and Issues Behind Disparities in Health, (2004):

It has been well documented that men visit physicians less often than women and utilize significantly fewer health-care services. One reason Black men tend not to go to the doctor is self-perceptions of their role in society. Black men believe in work for the benefit of the family. Often in that process, personal health is sacrificed for the overall good of the family with premature death and disability as the outcomes. This happens far too often. It is imperative for Black men to understand that, if personal health and safety become a priority, life can be lengthened and improved. The [product of these efforts should be the opportunity to continue to provide for, and remain an important part of, a family’s future. Black men often have fear of knowing the truth about their own health status. Many will suffer pain without seeking advice or seek medical care very late, frequently in an emergency situation. As a consequence, many Black men further suffer from the penalties of late detection of a condition, as in the case of inoperative cancer of the lung, prostate, or colon.

Respondents were more satisfied with services if they received preventive services, including advice on life-style issues. This finding correlates with perceptions held by these men on health promotion campaign materials targeted ostensibly for them. Kravitz, (1998) found that by asking patients to provide details about their experiences, providers can learn how to improve their behaviors, reduce their discriminatory practices, and better adapt themselves to the needs of their patients. These observations are quite clearly applicable to efforts designed to formulate evidence-based health promotion campaigns that are genuinely culturally competent. Health promotion materials would need to convey a strong message to these men that their very presence is sought after, valued, and highly esteemed, **prior** to the administration of prostate cancer screening and detection protocols.

An analysis of findings obtained on the last five measures on the survey reveals quite palpably that the African American church continues to occupy a central role in the lives of these respondents. The African American church has historically occupied this position in the lives of African American people. Interestingly enough, results from the current study would seem to suggest that the “communities of men” who frequent African American barbershops have a favorable impact regarding how these men support one another’s quest to take health matters seriously. Consequently, health promotion specialists may effectively utilize both institutions, (African American churches and African American barbershops) not only as targets for health promotion related campaigns, but also as sources for substantive dialogue sessions with Black men about health issues. However, we agree with perspectives articulated by Geiger, (2006) and his delineation of a set of pivotal issues for subsequent researchers:

What is perhaps of most interest to those concerned with inter-sectoral issues, finally, is an ongoing research agenda. The very nexus of disparities in medical care is the clinical encounter. That is where most inequities in diagnosis and treatment are generated. We need intense observational studies of race- and gender-discordant and -concordant physician-patient clinical encounters, in combined or parallel efforts by medical anthropologists and sociologists, cognitive psychologists, clinical educators, and quality assurance evaluators. Similarly, we need a new round of studies of the culture of medicine, focused on the behaviors and expressed attitudes toward race, ethnicity, and gender in ward rounds, medical and surgical residents’ meetings, and both the overt and latent content of the instruction of medical and nursing students and other providers in training.

Specifically, we need studies of what has been termed the natural history of social categorization in health professional education and practice. An enormous volume of such studies already/ exists, but too little of it is focused specifically on these issues.

It is only through this combination of quantitative and qualitative studies that we are likely to advance our understanding of intersectoral effects on health care and ultimately design effective interventions. Such efforts will have only a modest effect on the disparities in health status of disadvantaged and socially marginalized population groups, but they can have a powerful effect on the health-related quality of life—the lived experiences—of individuals. And at the very best, they can serve as a model for what it will take to reduce disparity in other sectors of American society, one step in the unsteady march toward equity.

Limitations of The Study

Limitations may be defined as follows:

- ✓ A comparatively small sample size.
- ✓ Certain questions were not asked, e.g., the impact of spousal involvement regarding one's decision to protect and maintain prostate health.
- ✓ Survey results cannot be generalized comfortably because non-probability sampling procedures were used.
- ✓ Important extraneous variables were not controlled.

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