

FACTORS INFLUENCING PROSTATE CANCER SCREENING DECISIONS AMONG AFRICAN AMERICAN MEN

Purpose: Due to controversy regarding prostate cancer screening, it is imperative that African American men make informed decisions. Little is known about the role of cultural factors in decision-making for prostate cancer screening among African American men. The purposes of this study were: 1) to investigate components involved with decision-making for prostate cancer screening among African American men; and 2) to identify cultural factors that may influence screening decisions.

Methods: Six focus group sessions were conducted consisting of African American men between the ages of 40 and 70.

Results: Eight themes emerged from the discussions about prostate cancer screening. These themes were: 1) men's knowledge of prostate cancer and clinical services; 2) prostate cancer as a threat to manhood; 3) screening as a threat to manhood; 4) self-awareness of health and well-being; 5) value of screening; 6) convenience of prostate specific antigen (PSA) screening; 7) misunderstanding of screening controversy; 8) distrust of the medical community; and 9) shared decision-making.

Conclusion: This study identifies cultural factors involved with decision-making for prostate cancer screening among African American men. (*Ethn Dis.* 2007;17:374-380)

Key Words: African American Men, Health Education, Prostate Cancer Screening

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INTRODUCTION

The disproportionate number of cancer deaths among racial and ethnic minorities has demonstrated the burden of cancer-related health disparities, particularly among African Americans.^{1,2} Prostate cancer screening is complicated and controversial. The prostate-specific antigen (PSA) test and the digital rectum exam (DRE) have limitations, including false-positive and false-negative test results, poorly understood treatments, and treatment side effects.^{3,4} Professional guidelines for prostate cancer screening vary among medical and scientific communities, as it is not clear if the benefit of early detection outweighs the harm.⁵⁻¹⁰ While no consensus about prostate cancer screening recommendations has been reached, agreement exists that at-risk men should be informed of the risks, benefits, limitations, uncertainties, and the clinical services involved; these factors should be discussed in light of personal preferences and values, all as part of informed decision-making.¹¹⁻¹³

Our understanding of the decision-making process is limited, especially for ethnic minorities. Cultural factors may be directly or indirectly related to health behaviors.¹⁴⁻¹⁶ Among African American men, little is known about the role of cultural factors in decision-making for prostate cancer screening. One qualitative study summarized reactions to numerical information about events and outcomes related to prostate cancer screening among White, Hispanic, and African American male and female participants.¹⁷ However, the study summarized the group as a whole, without stratification by ethnicity or sex. Such an analysis makes it difficult to identify cultural qualities, attitudes, and beliefs

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that are specific to each ethnic group and sex.

The purposes of this study were: 1) to investigate components involved with decision-making for prostate cancer screening among African American men; and 2) to identify cultural factors that may influence screening decisions. Qualitative research methods, such as focus groups, can provide participants with the opportunity to critique, explain, and share their in-depth thoughts on specific topics.^{18,19-21}

METHODS

Participants

Eligibility criteria for the study participants included English-speaking African American men between the ages of 40-70 years who reside in Seattle/King County. This age range was chosen because some health organizations recommend initiation of prostate cancer screening at age 40 for men at high risk,⁵ and no guidelines support testing men over the age of 70. Persons with a prior history of prostate cancer were excluded.

Participant recruitment efforts were held in community settings. We partnered with worksites, community cen-

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ters, fraternity chapters, and religious organizations to inform groups of African American men about the study. Our recruitment strategy consisted of approaching men who expressed interest in participating, asking simple eligibility questions, and offering the opportunity to participate. Recruitment flyers were provided to our consenting community partners to notify men who might have been interested in the study but were unable to attend our recruitment visits.

Data Collection

Six focus group sessions were conducted between December 2004 and April 2005. A trained moderator facilitated each session with a semistructured interview guide developed with the intent to discuss several aspects of prostate cancer screening. The guide addressed a sequential set of topics that included general queries about 1) men’s health; 2) prostate cancer knowledge, including risks, screening, and treatment; and 3) shared decision-making. The moderators were African American men.

Each focus group discussion was audiotaped and transcribed verbatim. These sessions were held in conference room settings and lasted approximately two hours. Focus group members received meals before each session to create a comfortable and trusting atmosphere. Participants were given a 10-minute break approximately halfway through each session to prevent fatigue. After each session, participants were asked to complete a self-administered questionnaire for demographic information. Participants received \$20 for their time. All study procedures were reviewed and approved by the institutional review board of the Fred Hutchinson Cancer Research Center in Seattle, Washington.

Data Analysis

We based our analytical method on descriptive analysis, a systematic process used to categorize, analyze, and synthesize data. The data were analyzed by

Table 1. Focus group participant characteristics

Demographics	N (31)*	Percent
<i>Age</i>		
40–50 years	13	41%
51–60 years	14	41%
Over 60 years	3	10%
<i>Marital status</i>		
Single	10	32%
Legally married	7	23%
Living with a partner	0	0%
Divorced	3	10%
Separated	1	3%
Widowed	0	0%
<i>Education</i>		
K–8th grade	0	0%
9th–11th grade	1	3%
High school grad. or GED	4	13%
Post high school/some college	9	27%
Graduated from college	4	13%
Graduate of professional college	3	10%
<i>Household income</i>		
Less than \$15,000	2	6%
\$15,000–\$30,000	5	16%
\$31,000–\$50,000	3	10%
\$51,000–\$70,000	3	10%
\$70,000 or over	6	19%

* Totals vary due to missing data.

using procedures outlined by Strauss and Corbin.²² Each focus group transcript was carefully read and re-read to create categories or domains. The moderator applied codes to these domains to create an initial code book that indicated participants’ reports. Both the moderator and the assistant used this code book to independently assign codes to text passages in three identical transcripts. Inter-rater reliability was established by comparing codes and resolving coding disagreements; agreement was initially found in ≈80% of findings. All disagreements were discussed and resolved by the two coders. After a final coding structure was agreed on, all transcripts were re-coded to match the final coding system and entered into a database by using ATLAS.ti software.²³ Salient patterns that emerged from the coded text were grouped into themes. These themes were reviewed and discussed to ensure the independence of these themes. Each

phase of the analyses was reviewed and discussed by all investigators involved with the study.

RESULTS

Participant Characteristics

Six focus group discussions were conducted with a total of 31 participants. The size of our focus groups was 3–7 participants. All participants self-identified as African American, reported no prior history of prostate cancer, and were within the age range of 40–70 years. Approximately one third were single, with a range of household incomes from <\$15,000 (6%) to >\$70,000 (19%). Participant characteristics are shown in Table 1.

Influential Factors for Prostate Cancer Screening

Several themes emerged from the focus group discussions that suggest

Table 2. Emerging focus group themes on prostate cancer

Men's knowledge of prostate cancer and clinical services

- "... the finger check. Now, I use the old time. I don't know nothin' either – when you said digital, I was thinking about a camera."

Prostate cancer as a threat to manhood

- "...you know, a personal issue not comfortable with themselves or openly not to talk about something so private you know because still, it feels like....you feel as though you're giving away your manhood or your virility or – I mean, you're not feeling like you're a man."

Screening as a threat to manhood

- "the Black males that I have talked to and they say it's like you know for some reason they have this idea that you know I know I ain't gay, so I ain't gonna let the doctor be stickin' nothin' up my rectum."

Self-awareness of health and well-being

- "Isn't there something that plays a very important role with your health and that's your psychological outlook on life that power of your mind that drives you. 'Cause you know it makes a difference when you find out what you have, what you gonna do when you find out what you have and whether or not you feel that you can conquer it."

Value of screening

- "I want my doctor to be able to screen for it; okay? If he's not screening for it, then he's not a good doctor 'cause I need to know what's wrong with me."

Convenience of PSA screening

- "Tell you whether you got it, what your level is, I believe. I mean, it's easy. It's a lot better than getting shocked."

Misunderstanding of screening controversy

- "... back and forth, no matter what it is and it's always some kind of advancement. It's just your luck, your luck of the draw when you go in there, if you gonna come out alive. I mean, medicine is good, but still you're luck of the draw."

Distrust of the medical community

- "And then so you go to the round White doctor and sometimes you just kind of feel that well you don't always get the truth from White people anyway."

Shared decision making

- "I'll go get the information and then I'll talk to a doctor but I don't let doctors tell me nothin'."

influential determinants to prostate cancer screening. They are summarized in Table 2 with direct quotes that are typical of the groups. We used these quotations to describe the themes and capture the context in which they emerged.

Theme 1: Men's Knowledge of Prostate Cancer and Clinical Services

Many of the participants reported limited knowledge of the prostate gland. Most participants believed that it was associated with sexual function, urinary problems, old age, and prostate cancer screening. Few were able to explain what the prostate gland is or its purpose. Some reasons given why they did not know specifics about the prostate gland were that "men don't think about it [prostate gland]" and "they're not directly involved with it [prostate gland]." However, a few other participants described specific cases in which they were not aware of their engagement in prostate cancer screening. Several participants believed the word "prostate" is a medical

term that some men in the African American community do not recognize.

Screening. While many participants were not knowledgeable about the prostate gland, most were well aware of screening methods for prostate cancer. Most men identified the PSA test and DRE as screening exams. A few other men mentioned other procedures, such as CAT scan and catheter, as possible screening options that were perceived as more accurate and expensive. More specifically, several participants had either mistaken DRE for colonoscopy or reported not knowing the difference between the two exams.

Various participants believed that screening was the only way to detect prostate cancer. False-negative results emerged in only one focus group and were discussed with direct reference to DRE. These men felt that the DRE is not a "thorough exam." A few other participants believed that the PSA exam determined whether or not a DRE was

needed. Several men reported that physicians recommended the DRE prior to the PSA test.

Treatment. While the screening discussion engaged almost all participants, some were reluctant to discuss prostate cancer treatment. The disengaged men felt uninformed about treatment and, therefore, based their knowledge on what they had heard. Participants listed pills, laser surgery, radiation seeds, stem cell, masturbation, and chemotherapy as treatment options, but many reported not knowing the procedures involved with these treatments. No participant discussed watchful waiting as a treatment option. When discussing health consequences of treatment, most participants mentioned impotence and urinary incontinence. A number of participants reported not knowing any consequences of treatment. Most stated that if diagnosed with prostate cancer, they would prefer a treatment option that would allow them to

keep an erection. However, several others stated that if their cancer was life-threatening, they would choose a treatment that would give them better chances of survival. While most participants felt they needed more information about treatment options, a few reported not wanting to know details until they were diagnosed with prostate cancer.

Theme 2: Prostate Cancer as a Threat to Manhood

Perceived threats to manhood associated with prostate cancer and prostate cancer screening was a common theme that emerged from the discussions. Numerous participants' first thoughts when hearing the term prostate cancer were "death" or "loss of sexual function." Most perceived prostate cancer as "facing your own mortality." They also believed that some men denied their "chance" of being diagnosed with prostate cancer. These participants felt this "chance" was a threat to one's manhood because it signified "losing your virility." They also felt this "chance" threatened men's sexual life and believed that some men were not "ready to give up" or lose their ability to have an erection. Therefore, these participants believed some men would "rather not know" that their death might involve a loss in sexual function. Some believed sexual prowess affected how men self-identified and felt that such perception would be a barrier to getting screened.

Theme 3: Screening as a Threat to Manhood

Many participants tended to believe that the DRE is often associated with homosexuality and perceived as a threat to manhood. The screening procedure was described as "not macho." Several participants believed that getting a DRE implies homosexuality, and African American men in general did not want to be identified as "that type of guy." Some participants felt that these traditional sexual values originate from

the cultural upbringing of African American men within the moral context of their faith community.

Several participants did not know what to expect from a screening experience and listed barriers such as the fear of pain and discomfort. These participants felt that lack of communication about screening among the African American community exacerbated men's concerns about the screening experience. They also believed African American men do not speak about prostate cancer screening for reasons such as feeling "less than a man," losing confidentiality, and having insecurities regarding physiological changes affecting their sexual functioning. Other participants felt that men create communication barriers to avoid vulnerability issues, thereby "personalizing" and "internalizing" health problems by choosing not to discuss them with others. Many thought this response affected men's health-seeking behavior because some men would not feel comfortable speaking to their physicians about prostate health concerns.

Theme 4: Self-Awareness of Health and Well-Being

Quite a few participants believed that their psychological outlook on life had a direct affect on their physical health. Therefore, some felt that concentrating on health problems might create disease or worsen symptoms. One participant described this belief:

"...it's not creating a problem, why should I go to the doctor to check on something that's not bothering me to find out if a problem is there? A lot of people believe in the power of will that if my mind is not focused on that area of my body, and I'm not having an issue with it, leave it alone."

Many participants also felt that African American men had "too much to deal with" such as other health problems or financial issues. Therefore, these participants believed that being

aware of diagnosis status for prostate cancer was either not a priority or an additional burden that African American men "just don't want to deal with." Participants from other groups echoed similar beliefs in which prostate health was not a priority for some African American men.

Theme 5: Value of Screening

Nearly all participants valued screening for two main reasons: 1) as a means of reassurance for good prostate health status; and 2) as a means to treat prostate cancer at an early stage. Many participants strongly believed that early detection led to better chances of survival. Quite a few participants referred to perceived susceptibility of prostate cancer as a motivational factor to participate in screening. These men felt that knowing someone with prostate cancer, whether a family member or a friend of similar age, personalized their risks for prostate cancer. Although these men seemingly valued screening, several personal experiences described some level of conflict with gaining physician approval to screen for prostate cancer. Most of these conflicts were regarding appropriate age to initiate screening.

Several men described other factors such as peer pressure from friends, wives, and physicians as motivation to participate in prostate cancer screening. Another influential factor that was common among a few men was a re-evaluation period of personal values. Several participants identified their 40s as a "turning point" in their lives in which they had become more personally responsible for their health. Descriptions of this re-evaluation period often occurred within the context of personal experiences of chronic health problems, birth of their first child, or personal loss of friends that were of similar age.

Theme 6: Convenience of PSA Screening

Most participants preferred the PSA exam to the DRE because they per-

ceived it as simple, convenient, and less invasive. Some men felt that the PSA exam was more accurate than the DRE because of what seems to be a shared belief that blood exams can detect any health problem.

Theme 7: Misunderstanding of Screening Controversy

Nearly every focus group participant was unaware of the controversy about prostate cancer screening. Most felt they needed to know more about why such disagreements exist within the medical community. However, several men believed the main component of the screening controversy was the age that men should start screening for prostate cancer. Many others strongly stated that the controversy sent “mixed signals” to African American men and felt that such uncertainties would make it difficult for men to come to a conclusive opinion about screening. Despite the controversy, most participants felt that it would be in men’s best interest to participate in prostate cancer screening. One man stated:

“And this is how I’m looking at it. The odds are not in my favor if I don’t get an exam, all right? Because if they don’t know early detection saves you or not, they definitely know late detection kills you! So the odds are in my favor that I might survive with early detection.”

Theme 8: Distrust of the Medical Community

The conversations regarding the screening controversy revealed skepticism among many of the participants about the reasons behind the disagreement. These men voiced concerns about the information source and questioned if the information was “coming from White doctors.” A few men made stronger statements such as “White doctors don’t always have their [African American men’s] best interest.” Few statements referred specifically to White doctors but other statements, such as

“doctors are never in agreement,” generalized the medical community. Because various participants felt they did not know whose information to believe, they stressed the importance of being critical of the prostate cancer screening information they received.

Theme 9: Providers as Decisional Supports

Many participants referred to sources of support during the decision as people they had “close relationships with” and as people they could confide in. These sources varied among participants but included family members, friends, wives, doctors, God, support groups, co-workers, and people in the medical field whom the participants knew. Although most participants reported seeking others for decisional support, a few men relied on themselves and overtly stated they were reluctant to seek support specifically from doctors. One man stated:

“I don’t talk to anybody but then that’s a habit of me period. I just don’t – I mean, if I’m going to make a decision, I’ll go get the information and then I’ll talk to a doctor but I don’t let doctors tell me nothin’. I mean, I don’t.”

Although this is an extreme case, this finding was not unique as several men reported relying only on themselves for decisional support.

Responses to questions about shared decision making were consistent. Nearly everyone valued decisional involvement for prostate cancer screening because they felt it empowered men to have “ownership of their body” and to be “in control” of their screening decision. These men tended to perceive decisional involvement as a way for men to acquire necessary information to help them make a screening decision. Several men felt that dialogue would help them make an appropriate decision that would allow them to “feel better” even if the health outcomes were not in their favor.

DISCUSSION

Participants’ limited knowledge of prostate cancer and clinical services were common findings. Some misconception may suggest that some men believe they are participating in prostate cancer screening when in fact, they are being screened for colon cancer. Other consistent findings from our study were participants’ profound beliefs that early detection of prostate cancer led to improved chances of survival, a result which other studies have reported.^{18,21,24,25} Similar findings about screening efficacy and false negatives were found in a prior study in which participants had little awareness that screening tests had errors or negative consequences.¹⁴ These results may suggest a need to disclose screening efficacy information when presenting prostate screening options. Our results suggest that our participants were not well informed of treatment options and consequences specific to each treatment. These results suggest that preservation of sexual function might be important for African American men who are making decisions about prostate cancer treatment; this finding is supported by previous research.²⁶

In addition to screening barriers, several participants’ reaction to the screening controversy revealed overwhelming mistrust of the medical community and a necessity to be critical about prostate cancer information. One study has identified mistrust of the medical community as a barrier to seeking health information among African American cancer patients,²⁷ whereas another study has found that an accepting caring environment is an influential factor in health-seeking behaviors of African American men.²⁸ These findings identify factors that may influence health-seeking behaviors for prostate cancer screening among African American men.

Limitations

Focus groups, like other research methods, have limitations. First, the

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participants were a purposeful sample of men who met the eligibility criteria from a pool of men involved with partnered community or worksite organizations. Therefore, findings from our focus groups cannot be generalized to the broader population. Second, men who chose to participate in this study might have been more open to discuss prostate cancer screening as compared to men who did not agree to participate. Although we recruited from several community settings, many of the men who agreed to participate learned about our study through religious organizations. Therefore, our results may not represent thoughts from African American men not affiliated with religious organizations. Third, focus group settings may contribute to socially desirable responses from study participants, although we cannot say to what extent. In addition, we cannot attest to the significance of any single theme as they emerged from group discussions rather than from individual interviews.

CONCLUSION

Our findings have theoretical implications for the design of decision aids that may indicate a need to target several judgments that address the influence of psychosocial factors involved with prostate cancer screening decisions. Although no definitive theoretical model exists for prostate cancer screening decisions, constructing a theoretical framework that integrates several mod-

els may help to address the psychosocial and cultural factors that seem to be specific to African American men while covering all aspects of informed decision-making.²⁹ Future research should evaluate the effectiveness of decision aids that incorporate several models as a theoretical framework to assist African American men in making personally desirable screening decisions.

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