AN EVALUATION OF THE KNOWLEDGE, ATTITUDES, AND BELIEFS OF AFRICAN-AMERICAN MEN AND THEIR FEMALE SIGNIFICANT OTHERS REGARDING PROSTATE CANCER SCREENING

This study examines the knowledge, attitudes, and beliefs of African-American men and their female significant others regarding prostate cancer screening. Study flyers and a television interview were used to recruit participants into the study that took place in Harrisburg, Pennsylvania. Six focus groups were conducted: four with African-American men and two with female significant others. A total of 32 people participated in the study. The groups expressed multiple apprehensions toward prostate cancer screening, including feelings of vulnerability, compromised manhood, and discomfort. They also shared motivators for screening, including female significant others, physician recommendation, early education, and church influence. (Ethn Dis. 2006;16:234–238)

Key Words: African-American Men, Digital Rectal Exam, Focus Groups, Health Beliefs, Prostate Cancer Screening, PSA

INTRODUCTION

Prostate cancer is the most frequently diagnosed cancer and the second leading cause of cancer death among African-American men. The age-adjusted incidence rate for prostate cancer among African-American men (284.6 per 100,000 population) is more than 60% greater than among Caucasian men (175.6 per 100,000 population). In addition, the death rate among African-American men is more than twice that of Caucasian men. Digital rectal exam (DRE) and prostate specific antigen (PSA) testing are useful tools in screening for prostate abnormalities among men who are at increased risk. Although routine screening for prostate cancer among all men is controversial, the US Preventive Services Task Force review of recent evidence reported that African-American men >45 years were among those most likely to benefit from prostate cancer screening. For most cancers, including prostate cancer, patients diagnosed at an earlier stage tend to have survival rates significantly better than those diagnosed at a later stage. In fact, 94% of men whose tumors are diagnosed at the localized stages are alive five years after diagnosis, compared to 30% of men diagnosed with advanced stages. Approximately 27% of prostate cancer cases among African-American men are diagnosed at an advanced stage, compared to 18% among Caucasian men.

Recent data suggests that only 53.4% of men age ≥50 years reported receiving a PSA test, and 52% reported having a DRE within the past year. As expected, screening rates are significantly lower among those who report they do not have a regular healthcare provider (25.5% and 23.1%) or are without health insurance (28.2% and 26.4% for the PSA and DRE, respectively). The American Cancer Society currently recommends that men at high risk, including African-American men, begin annual screening at age 45. Although the reasons for higher rates of prostate cancer mortality among African-American men are unknown, lower screening rates among this population may be a contributing factor to the observed racial health disparity. Etzioni and colleagues reviewed data from Medicare claim forms and noted that the annual rate of prostate cancer screening among African-American men was 31% in 1998 compared to 38% among Caucasian men.

Several research studies have examined the knowledge, attitudes, and beliefs of African-American men relative to prostate cancer screening. Much of this research has been done in focus groups and surveys with eligible men. The present study includes data on the knowledge, attitudes, and beliefs about prostate cancer screening both from African-American men and from female significant others of African-American
men, all in the same community. Obtaining input from women is important because of the significant influence women have in their partners’ health.9,15,16 This influence may include initiating appointments for routine medical check-ups and any health-related screenings. We conducted focus groups examining prostate cancer screening perceptions with both genders to confirm previously reported information obtained in men and to make comparisons across genders within a sample obtained from the same community.

**METHODS**

Qualitative Method Theory/Design

We conducted four focus groups composed of African-American men to assess their knowledge, attitudes, and beliefs about prostate cancer screening. We also conducted two focus groups with female significant others of African-American men to assess their knowledge, attitudes, and beliefs about prostate cancer screening. A total of 18 men and 14 women participated in the focus group discussions.

Five groups were held at Hamilton Health Center, a federally qualified community health center that provides medical care to under-served individuals in Harrisburg. One group was conducted at Harambee United Church of Christ, a predominantly African-American church in Harrisburg. The group at Harambee was a convenience sample of its eligible male congregation members because a men’s breakfast was scheduled at the church to discuss prostate cancer and prostate cancer screening. This focus group was conducted before the informative session on prostate cancer so that the men were providing their baseline knowledge, and informed consent was obtained from all participants.

Each group was asked to talk about their feelings and attitudes regarding prostate cancer screening, including the PSA blood test and the DRE. Two sets of scripted questions were used to lead the groups: one set for the male groups and one for the female groups (questions are available from the corresponding author). The male focus groups were led by an African-American man, and the female focus groups were led by an African-American woman. Both of the group facilitators were co-investigators and appropriately trained to conduct focus groups. Focus group sessions were approximately one hour long. Participants were reimbursed $20 for their participation to cover any transportation or other personal expenses related to participation. Each focus group session was tape-recorded and transcribed without personal identifiers.

**Eligibility Criteria**

Criteria for participation in the male group were: African-American men ages ≥40 years with a female significant other age ≥30 years. Criteria for participation in the female group were: females age ≥30 years of any race that had an African-American male significant other who fit the above criteria. We did not define “significant other” because the definition may be subjective (ie, sibling, spouse, live-in, etc). Also, a person who met the criteria could participate without having their significant other participate.

**Recruitment of Participants**

All of the study materials and procedures were reviewed and approved by the institutional review board of the Hershey Medical Center, Hershey, Pennsylvania. We recruited male and female focus group participants in the Harrisburg, Pennsylvania, area via two gender-specific study flyers posted at sites in the community and a television interview. Both recruitment methods provided details about the study and a phone number to call if an individual was interested in participating. Individuals who verbalized interest in study participation were screened for eligibility over the telephone and if eligible were given a pre-set date to participate in a focus group. Additional confirmation for the appointment was made on the day before the participants’ scheduled study dates.

**Data Analysis**

The focus group transcripts were used to derive themes concerning the knowledge, attitudes, and beliefs of the groups about prostate cancer screening. Two of the investigators analyzed the men’s and women’s transcripts separately for recurring themes. The Atlas.ti software program (version 4.1) for qualitative data analysis was also used to develop major code categories from the data. These findings were reviewed and confirmed by the other investigators.

**RESULTS**

Demographics

Our goal was to have 10 individuals per focus group. Despite our recruitment efforts, the average number of participants in the men’s groups was approximately four people and the average for the women’s groups was seven people. Table 1 displays the overall demographics of those who participated. Most participants were between 40 and 70 years of age and married. Approximately half of the men reported that they had not completed high school. In contrast, more than half of the women reported a high school education or greater. All participants were African-American except for one female Hispanic participant.

**Themes**

Using the aforementioned data analysis software, the following themes were identified from the focus groups: general knowledge about prostate cancer screening, barriers to screening, and motivating factors for screening.
General Knowledge about Prostate Cancer Screening

A number of men in the groups were misinformed regarding prostate cancer screening procedures. In particular, pronounced confusion existed between screening for prostate cancer and screening for colon cancer. For example, when asked if familiar with the PSA blood test, one of the men said, “No, I didn’t have the blood test. I just had that colonoscopy and I think that was where they used their hand.” In a separate focus group when the facilitator asked who should have a PSA test done, a man responded, “If colon cancer runs in your family then you should have it.”

One focus group served as an example as to how misinformation gets spread and results in confusion. After hearing varying explanations in the group of what the PSA test is, one gentleman finally said in despair, “What is PSA? I hear different ones discussing it. Now I don’t have no idea what that is.” Regarding misinformation, some of the men made reference to what they’ve heard from other men on the topic of prostate cancer screening. Other men said that they’d never heard about it.

Several questions arose from the men inquiring when or under what circumstances it is appropriate to be screened. When the women were questioned as to what they know or have heard about prostate cancer screening their responses included:

“Mostly that you will see prostate cancer in men maybe 65 and older, but now I don’t know if because of diet it’s just getting earlier.”

“Because they say the first one you should have is at 40.”

“And they should definitely realize that just because it’s a blood work they still have to have the physical exam, and that’s the part they don’t want.”

Discomfort of Digital Rectal Exam. A shared observation in the men’s groups was the discomfort experienced during the digital rectal exam (DRE).

“...he’s had the prescription about three weeks now. It’s still sitting there with some other blood work he’s supposed to have done, so laziness.”

“No, my husband, he had the test done and it wasn’t a problem.”

“...men have a tendency to have that fear of going and finding out that there’s something wrong where women will just go in and do it...”

“I know some people are out on disability and things like that and they don’t want people to know so they don’t want to go to the clinics.”

Association with Sexual Identity and Decreased Masculinity. Aside from the discomfort of the DRE involved in
prostate cancer screening, the men and women also expressed concerns related to sexual identity and manhood as a deterrent to having the rectal exam done. They worried that the exam would lead to being perceived or considered gay and about feeling like "less than a man" and having their "manhood taken away."

**History of Healthcare Patterns in African Americans.** Frequently mentioned was the historical attitude of Black men and Blacks in general regarding caring for their health. One man noted,

"You know, Black men traditionally there was no retirement. You died on your job, and if you did retire you didn’t live too many years after that. That’s not normally the case, but the quality of life is better and a lot people hang on a lot longer time."

**Motivating Factors for Screening**

**Female Significant Other Influence.** Both the male and female groups voiced the influence of female significant others in getting screened for prostate cancer.

**Men**

"Even though we feel macho we do listen to our wives and obey."

**Women**

"...I told him, 'Either I make the appointment for you again or you make it,' and then, of course, 'Give me the doctor’s number because I'm going to check to see if you made it.'"

Both genders also expressed the attitude that the screening was a "necessary evil." In spite of the cons, they felt that most men would be willing to endure the screening in light of the benefits.

**Early Education.** The subject of earlier education among African Americans in regards to prostate cancer screening was frequently mentioned in the groups. Participants supported the idea of involving children in health classes in schools and bringing health education into family discussions.

**Suggested Venues to Promote Screening.** The groups shared their beliefs on what forums could be used in the African-American community to encourage screening. They included programs at churches, personal testimony, media campaigns, programs at gyms and sporting events, and physician recommendation.

**DISCUSSION**

The focus groups served to personalize the all-too-familiar statistics regarding decreased prostate cancer screening rates among African-American men. It is apparent through the group discussions that these men have a multitude of legitimate apprehensions toward prostate cancer screening. Some of these fears may be easily remedied, such as replacing the traditional DRE with a side-lying one to help eliminate the feeling of vulnerability. Additionally, education of male youths about prostate cancer screening would prepare them for this sensitive encounter with their clinician in the future. In every group, the church was mentioned as key to disseminating information on prostate cancer screening as well as encouraging members to be screened.

Female significant others were seen as key motivators for the men. Both men and women in the groups touted the influence of the women both in getting men to be screened and to participate in our focus groups. Therefore, educating female significant others on prostate cancer screening appears to be equally as important as educating the men.

All of these venues, however, in no way eliminate the importance of patient-physician dialogue. As many of the men and their significant others noted, the men will often do as their doctors say.

As researchers and medical professionals, we can continue to do studies such as this one and direct these men toward better health. However, ultimately the responsibility of prostate cancer screening lies in the hands of the men themselves. A final quote from one male focus group participant best sums up this thought.

"I mean that’s why we’re here. If there were an answer to these questions we wouldn’t be having these meetings. It’s basically why all these seats are empty in here with us folks. We so up against everything in society we don’t even know how or want to take care of ourselves. I mean Black men...I cut hair for a long time. I mean we have conversations and talk about stuff like this here, but you know it’s going with that head of hair down the drain and that's the end of it, but to get them out to do something like this here or get them out to go take the necessary tests if they feel something oh it will go away tomorrow."

**ACKNOWLEDGMENTS**

We thank Lonnie E. Fuller, Jr, MD; Robin Perry-Smith, BS; Harambee United Church of Christ, Harrisburg, Pennsylvania; Capital Region Health System at Hamilton Health Center, Inc, Harrisburg, Pennsylvania.

This study was supported by Penn State College of Health and Human Development.
and grants C06 RR016499 (Construction Grant) M01 RR010732 (GCRC Grant).

A special thank you is extended to our focus group participants for their willingness to share with us on this important topic. This study would not have been possible without you all.

REFERENCES

AUTHOR CONTRIBUTIONS
Design and concept of study: Webb, Williams, Hartman
Acquisition of data: Webb, Kronheim, Williams, Hartman
Data analysis and interpretation: Webb, Kronheim, Williams, Hartman
Manuscript draft: Webb, Kronheim, Hartman
Statistical expertise: Hartman
Acquisition of funding: Webb, Hartman
Administrative, technical, or material assistance: Webb, Kronheim, Williams, Hartman
Supervision: Webb, Hartman