African-American men are disproportionately affected by prostate cancer incidence and mortality. For the years 1997-2001, age-adjusted incidence for prostate cancer was 271.3/100,000 for African-American men compared to 172.3/100,000 for all races combined (Ries et al., 2004). Age-adjusted mortality rate was 70.4/100,000 for African-American men compared to 31.5/100,000 for all races (Ries et al., 2004). The lifetime risk of being diagnosed with prostate cancer for 1999-2001 was 20.58% for African-American men compared to 17.81% for all races (Ries et al., 2004). The risk of dying from prostate cancer was 4.73% for African-American men compared to 3.01% for all races combined between 1999-2001 (Ries et al., 2004). African-American men are more likely to develop prostate cancer at an earlier age and present with advanced (invasive) disease (Optenberg et al., 1995; Powell, Schwartz, & Hussain, 1995).

Prostate cancer is usually detected through screening. The recommendation for screening remains controversial. In addition, many prostate cancers are slow-growing tumors that may not harm clients. Many men may experience unnecessary and sometimes serious psychological and physical side effects associ-
ated with screening and treatment. This controversy has prompted many organizations to develop screening guidelines. For example, the American Cancer Society and American Urological Association recommend early detection through annual digital rectal examination and prostate-specific antigen for screening beginning at age 50 for all men and age 45 for African-American men and men with a family history. Randomized clinical trials have not yet demonstrated the impact of screening on mortality (National Comprehensive Cancer Network [NCCN], 2004). Others believe that the decline in disease progression and associated deaths might be related to early detection through screening and should be encouraged in high-risk men (Greenlee, Hill-Harmon, Murray, & Thun, 2001; NCCN, 2004). Organizations such as the U.S. Preventive Services Task Force have taken a neutral stand and recommend counseling men and allowing them to make an informed decision about participating in screening. Therefore, the purpose of this study was to explore social factors associated with the decision to participate in prostate cancer screening among urban African-American men.

Theoretical Framework
This study was conceptualized and guided by Leininger’s Culture Care Diversity and Universality theory (Leininger, 1991a, 1991b, 1991c). Following this theory, the decision to participate in prostate cancer screening is influenced by cultural beliefs. For this study, the theory (Leininger, 1988, 1991a, 1991c) was used as a cognitive map to examine, explain, and interpret dimensions that influence the decision to participate in prostate screening among urban African-American men. Additionally, the theory was used to develop codes and themes during data analysis.

Methodology/Design
Qualitative methodology, using an ethnographic approach, was used for this study. This method was chosen because it provided a systematic process for observing, documenting, and analyzing decision making of African-American men from their perspective (Leininger, 1985, 1991b, 1991c). This method also allowed the researcher to compare the finding to current data, add to a body of knowledge where little information exists, and generate new research questions for future exploration (Leininger, 1985, 1991b, 1995; Robinson & Thorne, 1988; Van Manen, 1990).

Sample
Theoretical sampling technique was used as outlined in Leininger’s theory. The theory suggests recruiting key informants and general informants from the community (Leininger, 1991a). Key informants can provide firsthand experience and current involvement in the culture being studied (Leininger, 1985, 1990, 1995; Spradley, 1979). For this study, inclusion criteria for key informants were African-American men over age 40. For this study, general informants were those with some knowledge of the domain of inquiry and were willing to share some of their ideas. General informants included significant others, health care providers, and other community individuals (Leininger, 1991a). Inclusion criteria for general informants were any adults who understood issues related to screening and other health behaviors of African-American men. General informants were interviewed because of earlier research suggesting that they significantly influence beliefs and health behavior of African-American men (Blanchard et al., 2005; Plowden, 2000, 2001a, 2001b; Plowden & Young, 2003).

Purposeful sampling technique, using snowballing, was used for this study (Sandelowski, 1995). At the end of each interview, informants were asked to identify men who met the inclusion criteria. These informants were contacted by the research team and invited to participate in the study. Informants were recruited until informational redundancy was reached (the point when no new data are gathered from the interviews) (Lincoln & Guba, 1985). For this study, 12 key informants and 24 general informants were recruited before reaching informational redundancy. All informants spoke English. Informants were recruited from community organizations (churches, health clinics, and community groups) and word of mouth. Informants were compensated $20 for participating in this study.

Procedure for Data Collection
Permission to conduct the study was obtained from the institutional review board and Department of Defense Human Subjects Protection office. All informants completed a data profile sheet, which included name and contact information. Each informant was given a code that was used as an identifier on the transcribed interviews. This increased anonymity of all informants. Each informant signed an approved consent form before starting the interview. All data and contact information were kept in separate locked file cabinets.

Semi-structured interviews were conducted with all informants using a set of general probes developed by the research team. However, other probes were added based on the data collected. In addition, using constant comparative analysis technique, probes were added or modified based on previous interviews. Each interview started with the same probe, “What would motivate you to seek prostate cancer screening?” Probes were modified for general informants. Additional probes included:

- What does cancer mean to you?
- What do you know about screening?
- When you think of screening, what comes to mind?
- What would determine
whether you participated in a screening program?

• If you had to develop a prostate cancer outreach program to provide information to men to help them make a decision about getting screened, how would you design it?

All interviews were conducted at a site convenient to the informants (Krueger, 1994; Weinrich, Weinrich, Boyd, & Atkinson, 1998).

Data Analysis

Constant comparative analysis, using Leininger’s analysis model (Leininger, 1991b), was done beginning with the first interview. As the raw data were transcribed, initial coding was done by the principle investigator. Codes were developed from Leininger’s model. Open coding was also done if the data did not fit the model. Field notes were taken and incorporated into the transcript. Data were analyzed for patterns and meanings in context; that is, data were scrutinized to discover saturation of ideas and recurrent patterns of similar and different meanings, expressions, and practices. Major themes, research findings, and recommendations were abstracted from the data. At all times, findings were traced back to raw data to ensure credibility, recurrent patterning, and confirmability of data and analysis. This also guided the research process in further collection of data and checking among informants on the credibility of the findings.

Results

Sample demographics. Key informants in the study ranged 40 to 79 years in age (mean 53, SD 13.5). All key informants were African-American. The majority of the informants was married (50%), employed full time (50%) with health insurance, and had a household income at or above $20,000. Fifty-percent of the men participated in prostate screening in the past and were satisfied with the procedure. Two key informants had a history of treated prostate cancer. General informants in the study ranged in age from 30 to 72 years (mean 45, SD 11.7). General informants were significant others, wives, health care providers, and children of at-risk men. Thirty-three percent of the general informants knew someone with prostate cancer, but 58% had received some information about prostate cancer.

After analyzing the data, several social factors were identified as significant motivators of prostate cancer screening for men in this study: (a) learning for others, (b) increasing knowledge, and (c) getting the message out. Each factor will be discussed.

Learning from Others

Significant others were identified as a strong influence on whether an informant participated in prostate cancer screening. Significant others included blood relatives, peers, and others who the informant could identify with. For this study, most key informants were motivated to participate in screening after knowing someone diagnosed with cancer. A 52-year-old key informant stated: “My father had it [prostate cancer] and all of his brothers. He had three brothers. So I ask for it with my yearly exam and most times they tell me your prostate is swollen because I take antihistamines for allergies. Knowing this data, and it [prostate cancer] is preventable if it’s caught in time helps me to get screened. My father and uncles caught it in time. I am convinced that I am going to get it at some point, so I stay motivated to get the test. The family history plays a factor and my age.”

Another key informant stated: “After my friend died of cancer, I started reading and making myself aware of what was going on. I started going to cancer seminars. I want to find out what the prevalence of certain things was. I’m managing my care better.” This key informant was a 50-year-old male who was a health educator. Although this informant knew about prostate cancer screening recommendations, he became more aware and actively sought screening after his close friend died of cancer.

A prostate cancer survivor said: “I had a sister die of cancer, but she got it from smoking. She had cancer all through her body; she was 30 years old when she died. If I know about it now, I don’t get afraid or upset behind the word cancer like I did before because if they diagnose it in time, there’s something that can be done, and all you have to do is follow suit.”

Although his sister died of lung cancer, he understood the importance of seeking screening for early diagnosis. This experience motivated him to seek early screening for prostate cancer and other illnesses. This informant was diagnosed with early-stage prostate cancer and treated successfully.

Informants were asked to design an “ideal” prostate cancer outreach program to include recruitment strategies for other African-American men. When asked about designing an outreach project, all informants stressed the importance of including peers in the program, specifically a prostate cancer survivor. A key informant noted: “Other men should be used for the outreach. Men who may have been treated with the disease, not a doctor, but someone who is real and could say this happened to me, and let me share my experience with you and tell you what you should do.”

Increasing Knowledge

Another major factor identified by informants was lack of information regarding options. Knowledge of screening options was identified as both a motivator and barrier. A key informant stated: “A lot of men don’t want to talk about cancer. I think lack of knowledge is a barrier for most men. If I didn’t have a background in health or public health, I would still be wedded to that idea that cancer is death. There is lack of knowledge. They still think it’s deadly.” This infor-
mamt received a yearly screening because of his knowledge of the benefit of early detection. However, he knew that men were not participating in screening because of lack of knowledge about the benefits of screening. Another key informant said: “If young people learned about cancer now, they will look forward to it [screening] when they turn 40. The only thing we heard about cancer in school was smoking cigarettes.” Finally, another key informant explained: “People start to recognize symptoms of going to the bathroom regularly, and they get all fearful. That’s why education is very important. You might have prostatitis, not cancer, and there’s treatment for that. We need to educate people about the test, where to go. Convenience promotes compliance.” According to this informant, more men would participate in screening activities if more education regarding the benefits of screening was provided and men knew where to receive screening. A general informant commented: “I think education would certainly be key to getting them [men] screened. Men see themselves as the provider and would do something if it meant being able to provide for their family.”

**Getting the Message Out**

Another major factor influencing a decision to screening was the messages received about options. Most informants received prostate cancer information via the media, such as television and radio. A key informant stated: “I was watching the Adam Clayton Powell story on TV the other night, and he died of prostate cancer and that really motivated me to get screened.” A key informant who had recently been treated for prostate cancer commented, “It worried me at first because you hear on the television so and so died of prostate cancer.” The informant went on to talk about the difficulty in making a decision to screen because of the negative information received via the media. When asked about a method for assisting men to make a decision, a general informant said: “You should use something to get their attention. It depends on the way they present it. State the facts. You should show men being treated by the doctor or something else to grab their attention.” Many men utilize some form of the media, mainly the radio. Most informants believed this was an effective way of providing needed information to African-American men.

**Discussion**

Understanding the meaning of illness from a cultural perspective is essential in the development and implementation of effective prevention interventions (Airhihenbuwa, 1995; Cohen, Scribner, & Farley, 2000; Morris, 1998). Research shows that health behavior of African-American men, such as screening, clinical trials, and treatment programs, is dependent on certain social factors (Gelfand, Parzuchowski, Cort, & Powell, 1995; Robinson, Ashley, & Haynes, 1996; Myers et al., 1996; Plowden & Miller, 2000). This study uncovered critical social factors affecting the decision to participate in prostate cancer screening among urban African-American men. The informants in this study were eager to discuss their views with the expectation of helping identify factors that will assist men to decide whether they want to get screened. The informants clearly identified motivators and strategies for educating this population. The findings from this study are consistent with other studies.

Significant others were also identified as a motivator for African-American men. Social support is described as any significant individuals associated with the group of interest (Leininger, 1995). For this study, significant others included family members and peers. Similar studies suggested that individuals from the community play a significant role in determining whether African-American men participate in health-related activities (Plowden & Miller, 2000; Plowden & Young, 2003). A number of studies have used peers (community workers) to motivate a change in behavior with at-risk individuals. LaVeist, Nuru-Jeter, and Jones (2003) found that physician-patient race concordance not only increased receipt of preventive health services but also improved satisfaction with healthcare. Woolf, Krist, Johnson, and Stenborg (2005) found that most men preferred a shared approach in deciding whether to participate in prostate cancer screening.

Knowledge is an essential motivator for African-American men. Many informants in this study referred to a King James Biblical passage that states, “My people are destroyed for lack of knowledge” (Hosea, 4:6). Knowledge of prostate cancer and other preventive measures were essential in making a decision to seek and participate in screening. Knowledge was identified in earlier studies as essential in motivating primary and secondary prevention behaviors. Plowden and Miller (2000) and Plowden and Young (2003) found a lack of community resources and the availability of neighborhood services, such as education and screening, were perceived as major barriers to seeking care for urban African-American men. Tingen, Weinrich, Heydt, Boyd, and Weinrich (1998) observed that men who were less educated about prostate cancer were less likely to participate in free screening. Additionally, Bennett et al. (1998) found low literacy as a barrier to early prostate cancer screening. Men who were diagnosed with advanced prostate cancer were more likely to have literacy levels below sixth grade (Bennett et al., 1998). Myers et al. (1999) found an increase in prostate cancer screening among African-American men when provided with a personalized (enhanced) educational material compared to men receiving standard information.
The media has been identified as a strong motivator for African Americans in earlier studies. Odedina et al. (2004) studied factors influencing African-American men’s prostate cancer screening behavior. They found that prostate cancer screening intervention message, message source, and message channel were essential motivating factors. Beeker, Kraft, Southwell, and Jorgensen (2000) conducted focus groups with older individuals to identify strategies for motivating colorectal screening. Their participants identified the media as a strong motivator to seeking screening. Nivens, Herman, Weinrich, and Weinrich (2001) identified electronic media as the most common means of hearing about prostate cancer among African-American men. Meade, Calvo, Rivera, and Baer (2003) identified media, such as television and radio, as the preferred methods of learning about prostate cancer for African-American men. The importance of media as a method for increasing knowledge, reducing barriers to screening, and influencing participation in screening programs was supported in earlier research.

Implications for Nursing Practice and Research

In considering the limitations of this study, generalizability is limited because of the sample size and recruitment method (nonprobability). Transferability of methods to similar populations is possible. The findings of this study are applicable only to men in the study, but can be used to generate other research questions with the same or similar populations.

A current myth about African-American men is that they are a hard to reach group. While this study examined prostate cancer screening behaviors, the findings can be applied to other cancers and used to motivate men to participate in screenings. The need to identify factors that will reduce disparity among racial and ethnic populations is the priority for most research agencies (National Institute on Aging, 2001; National Institute of Nursing Research, 2000). Building on the finding of this study, specific interventions should be developed, tested, and measured quantitatively. Nurses must take an active role in educating communities regarding motivating strategies for urban African-American men and incorporate them into any outreach activity.

The men in this study expressed an interest in participating in prostate cancer prevention strategies that were culturally appropriate. Outreach activities should strive to create a culturally appropriate environment that reduces barriers to participating in screening activities for African-American men. Findings from this study and other studies begin to provide insight into reaching African-American men and specific motivators can be used as a foundation upon which other interventions might be developed.

References


UROLOGIC NURSING / December 2006 / Volume 26 Number 6 481


