This material is protected by U.S. copyright law. Unauthorized reproduction is prohibited. To purchase reprints or request permission to reproduce, e-mail reprints@ons.org.

Focus Groups in the Design of Prostate Cancer Screening Information for Hispanic Farmworkers and African American Men

Cathy D. Meade, PhD, RN, FAAN, Arlene Calvo, MPH, CHES, Marlene A. Rivera, RN, MA, and Roberta D. Baer, PhD

Purpose/Objectives: To gain a better understanding of men's every-day concerns as part of formative research for creating relevant prostate cancer screening education; to describe methods and processes used to conduct community-based focus groups.

Setting: Community-based settings in catchment areas surrounding Tampa, FL.

Sample: 8 community-based focus groups: a total of 71 Hispanic farmworkers and African American men.

Methods: Focus group discussions were tape-recorded, transcribed, and analyzed for identification of emergent themes.

Main Research Variables: General life and health priorities, prostate cancer knowledge, screening attitudes, cancer beliefs, and learning preferences.

Findings: Major themes among African American men were importance of work, family, and faith. Major themes among Hispanic farmworkers were importance of family, employment, education of children, and faith. A common issue that surfaced among most men was that a cancer diagnosis was considered to be a death sentence. Preferred learning methods included use of cancer survivors as spokespeople, interactive group education, and the provision of easy-to-understand information. Issues of trust, respect, and community involvement were key to the successful conduct of focus groups among ethnically diverse groups.

Conclusions: Study findings have important implications for the content of information developed for prostate cancer education materials and media.

Implications for Nursing: Insights gained from focus group methodology can help nurses and other healthcare professionals design and develop appropriate prostate cancer education tools for use in community-based prostate cancer screening programs.

Prostate cancer is the most common type of cancer and the second leading cause of cancer death among men. African American men tend to present with more advanced tumors than their Anglo American counterparts, and African Americans and Hispanics have the lowest five-year survival rates among patients with distant-stage disease (Abdalla, Ray, Vaida, & Vijayakumar, 1999; American Cancer Society [ACS], 2003; Cookson, 2001; Hoffman et al., 2001; Powell, 1997; Tarman et al., 2000; Wingo, Ries, Rosenberg, Miller, & Edwards, 1998). Efforts to reduce the ethnic disparity in mortality from prostate cancer should be directed toward lessening the high incidence of later-stage disease at diagnosis through screening (Demark-Wahnefried et al., 1998; Farkas, Schneider, Perrotti, Cummings, & Ward,

Key Points...

- ➤ Focus groups can be effective in obtaining information for the development of culturally, linguistically, and literacy-sensitive communications about cancer.
- ➤ Conducting community-based focus groups requires an interdisciplinary research team, extensive planning, and input from community members and a sustained network of community partners.
- Successful prostate cancer screening education should be based on linking cancer screening to issues that are high in the community members' own schema of priorities.

1998; Gilliland, Hunt, & Key, 1996; Miller & Kolonel, 1996). Educational materials and media delivered in relevant ways in community-based settings can be used to reach priority populations with important prostate cancer screening messages (Guidry, Fagan, & Walker, 1998; Meade, Calvo, & Cuthbertson, 2002; Weinrich, Boyd, Bradford, Mossa, & Weinrich, 1998; Zimmerman, 1997).

A national blueprint for action published by ACS documented the high incidence and mortality of prostate cancer among African American men (ACS, 1998). Recommendations included involving men in research studies, developing effective educational programs about prostate cancer for the

Cathy D. Meade, PhD, RN, FAAN, is a professor in the Department of Interdisciplinary Oncology at the University of South Florida in Tampa and director of the Education Program at the H. Lee Moffitt Cancer Center and Research Institute in Tampa; Arlene Calvo, MPH, CHES, is a doctoral candidate in the College of Public Health at the University of South Florida in Tampa and president of the Foundation for the Advance of Clinical and Translational Research in Panama, FL; Marlene A. Rivera, RN, MA, is a coordinator in the Education/Outreach, Cancer Control/Education Program at the H. Lee Moffitt Cancer Center and Research Institute; and Roberta D. Baer, PhD, is a professor of Anthropology at the University of South Florida. This article was funded by the State of Florida Department of Health. (Submitted September 2002. Accepted for publication January 25, 2003.)

Digital Object Identifier: 10.1188/03.ONF.967-975

community and healthcare professionals, strengthening the capacity of grassroots organizations, and developing more community-based educational support and guidance programs (ACS, 1998; Marwick, 1998). Phillips and Weekes (2002) further wrote that a strong imperative exists for nurses and other healthcare professionals to include racial and ethnic minority populations in oncology nursing research for improving cancer outcomes. Therefore, the overall purpose of this study was to gain through qualitative methods a better understanding of Hispanic farmworkers' and African American men's everyday priorities and concerns, prostate cancer knowledge, screening attitudes and beliefs, and learning preferences to provide direction for the development of relevant prostate cancer screening education.

Project Toolbox

Project Toolbox is an initiative funded by the State of Florida Department of Health and led by the H. Lee Moffitt Cancer Center and Research Institute Education Program at the University of South Florida in Tampa. The project consists of formative research for the development of culturally, linguistically, and literacy-relevant prostate cancer educational toolboxes for two distinct populations of men: Hispanic farmworkers, predominantly of Mexican descent, and African Americans. The authors describe in this article the prostate cancer formative research that was used to develop the information contained in the prostate cancer toolboxes. Each 10" x 13" self-contained educational toolbox accommodates several educational components, including a videotape, flipchart, brochure, and teaching guides packaged for easy use by community outreach workers, healthcare professionals, and others based in urban and rural community settings (see Figure 1).

Methods

Design

This study used eight focus groups to generate data for creating the content of the prostate cancer educational toolboxes. Formative research strives to obtain input from potential users of educational products to ensure acceptability, relevancy, usefulness, and understandability. This approach, termed participant-focused research, aims to con-

sider participants as partners in the research process, whereby their contributions are integral to the outcomes of the study (Cohen, Phillips, & Palos, 2001). Specifically, focus groups are useful in elucidating cultural context and a wide range of perceptions and attitudes related to a defined topic (Cassells, 2001; Cohen et al.; Coreil, 1995; Rawl, Menon, Champion, Foster, & Skinner, 2000; Steckler, McLeroy, Goodman, Bird, & McCormick, 1992; Strickland, 1999; Williams, 1999). They provide a safe milieu for community members to share their feelings and can give voice to those who need to be heard. They are especially helpful among populations that are disempowered. They do not discriminate against those who do not read or write well, making the approach useful among groups with limited literacy skills (Cohen et al.; Gray-Vickrey, 1993; Kitzinger, 1994; Williams). Focus groups have been successful in the assessment of multicultural cancer-related behaviors that are influenced by attitudes, knowledge, and past experiences regarding areas such as prostate cancer clinical trials and African American men (Robinson, Ashley, & Haynes, 1996), motivating factors related to cervical cancer screening among Korean American women (Lee, 2000), prostate cancer treatment decision making (O'Rourke & Germino, 1998), and understanding smoking cessation among African American women (Manfredi, Lacey, Warnecke, & Balch, 1997).

Gaining the trust of participants and honoring their communication and cultural patterns are beneficial for enhancing validity when conducting focus groups. Therefore, the use of natural settings and adherence to usual communication patterns hold greater potential for valid responses within focus groups (Strickland, 1999). Focus group interviews are formal and structured, in that they are arranged for a fixed time and place, participant recruitment procedures are followed, a formal interview guide is used by a trained moderator, and discussions are audiotaped and transcribed for analysis (Cassells, 2001; Coreil, 1995; Morgan, 1998a, 1998b). Four basic steps to conducting focus groups are (a) planning (attention to detail), (b) recruiting (relevant participants), (c) moderating (effective questions and trained moderator), and (d) analyzing and reporting (emergent themes). A key issue in using focus groups, as well as other qualitative methods, is that they are best used to probe or discover matters about which the intended population is actively concerned. In con-

> trast, some healthcare professionals tend to use focus groups to measure or ascertain what respondents think about issues that professionals believe are impor-

> A focus group interview guide must be structured so that the views of the intended audience about the messages are revealed, rather than how the intended audience views the topics presented by the professionals. The authors used focus group questions to try to elicit the most important



Figure 1. Project Toolbox

issues in the daily lives of those they interviewed (see Figure 2), rather than ask them directly what they understood about cancer and cancer prevention. The former approach makes learning what their concerns are possible; the latter tests to see whether they know what the researchers think they should know. For example, a focus group guide that uses the latter approach is illustrated in Figure 3.

One reason that health programs often fail to achieve their intended effects is that they are based on professionals' views of what is important, as opposed to those of the intended audience (Cassidy, 1987). Although knowing what a population thinks or knows about cancer and cancer screening is important, researchers must be aware, for example, that cancer screening may be at the bottom of a long list of other concerns. Successful changes are based on linking cancer

screening to issues that are high in the intended population's own schema of priorities. For more specific information about conducting focus groups and appropriate use of qualitative research, refer to Coreil (1995) and Morgan (1998a, 1998b).

Sample and Setting

The focus groups used in this study were comprised of men aged 18 and older who expressed interest in sharing their opinions about their health. A total of four focus groups were conducted among Hispanic farmworkers (N = 37) and a total of four focus groups consisted of African American men (N = 34), for a total sample of 71 men. The authors did not limit the sample to men who were eligible for age-appropriate prostate cancer screening (i.e., 40 years

Ice Breaker

Introduce yourself to the group and tell us one thing you did over the holidays. *Presentense al grupo y díganos algo que usted hizo durante las Navidades.*

General and Family

What are the three most important things in your life? ¿Cuáles son las tres cosas más importantes en su vida? What are your hopes for your family? ¿Cuáles son sus deseos para el futuro de su familia?

Issues, Problems, and Concerns

There are many problems that we face every day. Tell us what are your biggest problems facing you.

Existen muchos problems hoy en día. ¿Cuáles son sus mayores problemas ahora mismo?

Health/General

What should be done to stay healthy? ¿Qué se debe hacer para estar (mantenerse) saludable? When you are sick, to whom or where do you go? Cuando ustedes se sienten enfermos, ¿A quién o dónde va usted? Do you go to that person or place even when you feel healthy? ¿Usted va esa persona o lugar aun cuando se siente bien?

Cancer/General

When you think about cancer, what are the first three things that come to your mind?

¿Cúando piensan en cáncer cuales son las tres primeras cosas que le vienen a su mente?

Do you know anyone who has ever had cancer? Who? What comes to mind?

¿Conocen a alguien que padece o ha padecido de cancér? ¿Quién? ¿Qué le viene a la mente?

Causes

What do you think can cause cancer? ¿Usted qué piensa puede causar cáncer?

Screening

Where can people go to find out if they have cancer? ¿Dónde pueden ir las personas a saber si tienen cáncer? How can somebody tell if he or she has cancer? ¿Cómo una persona puede saber si tiene cáncer?

<u>Cure</u>

Do you think cancer can be cured or treated? ¿Usted piensa que el cáncer se puede curar?

Types of Cancer

There are different types of cancer. What do you know about prostate cancer? Probe: What have you heard? Show picture.

Existen distintos tipos de cáncer. ¿Que sabe usted sobre el cáncer de la próstata? Probe: ¿Qué ha escuchado? Enseña dibujo.

Prostate Cancer

As men get older, different tests can be done to find prostate cancer. Two of these tests are a blood test and a digital rectal examination (finger examination by doctor). How do you think people you know would feel about having these tests done?

A medida que los hombres envejecen, existen distintos tipos de exámenes que se pueden hacer para chequear para el cáncer de la próstata. Dos de estos examenes son el exámen de la sangre y rectal (examen con el dedo por el doctor). ¿Cómo creen ustede que personas que ustedes conocen se sienten con respecto a estos examenes?

Sources of Information

We have been talking a lot about cancer. How have you learned about cancer? Hemos hablado mucho sobre cáncer, ¿Cómo ha usted aprendido sobre cancer?

Videotape and Materials

We are hoping to develop a videotape and educational materials about health and cancer. We want your ideas to help us make these materials. Pick one of the things I will read to you or a combination of several and explain the reason why you would like it this way.

Queremos hacer un video y materiales educativos sobre la salud y el cáncer.

Queremos sus ideas para ayudarnos a hacer estos mateirales. Escoja una o
más de las cosas que les voy a leer y explique porqué le gustaría de esta
forma.

- How would you like the information to be said? ¿Cómo le gustaría que se dijera la información?
 - Factual (facts)/hechos (científico)
 - Inspirational/inspiración (espiritual)
 - Alarming/alarmante (que de miedo)
 - In a storyline/historia (como una telenovela)
- What type of person would you like to deliver the information in the video?
 ¿Qué tipo de persona le gustaría que de la información en el video?
 - Expert (such as a doctor)/experto (como un médico)
 - Community member/persona de la comunidad
- Cancer survivor or patient/sobreviviente o paciente de cáncer
- Famous person (leader or role model)/persona famosa (líder o modelo)

<u>Closure</u>

If you were going to do this project yourself, how would you do it? Si ustedes fueran a hacer este proyecto ustedes mismos, ¿Cómo la harían?

Figure 2. Focus Group Guide That Aims to Understand the Views of Community Members

Ice Breaker

Introduce yourself to the group and tell us one thing you did over the holidays.

In your own words, explain what is cancer.

Moderator explains prevention and early detection, then asks

- · What can be done to prevent cancer?
- · How can prostate and cervical cancer be screened and detected early?
- For what reasons would you seek screening services (checkups)?
- How would you like to learn about health?
- · Who would you like to see as a spokesperson for health messages?
- · In what tone do you like to hear about health information?
- · What things keep you from going to get checkups?
- At what time should education and services be delivered?
- In what place should education and services be delivered?
- Would you rather learn in a group or individual sessions? For what reasons?
- What specific information about cancer (and specific cancers) would you like to learn about?

Note. This earlier version was not used in the study.

Figure 3. Focus Group Guide That Aims to Understand Topics Important to the Healthcare Provider

of age and older for African American men; 50 years of age and older for Hispanic men). In this manner, they hoped to obtain information across generations to create health messages that would be useful within the larger context of the social structure. The men in the study were recruited from a two-county catchment area surrounding Tampa, FL. Men were recruited from church missions, meal sites, churches, health clinics, and community-based grassroots organizations that were known to provide services such as food assistance, clothing, health screenings, adult education, religious services, and legal aid to low-income community members.

Recruitment

Focus group locations and promotions were facilitated through an established and extensive network of community partners (Meade & Calvo, 2001). Locations were sites familiar to the participants. The focus group participants were recruited through word of mouth, flyers, community outreach workers, health educators, and community nurses. The authors recruited 10–12 possible participants per focus group, expecting a slightly lower number of male participants based on previous experience in conducting focus groups within the community (Meade et al., 2002). Focus group moderators had previous experience conducting focus groups and community-based qualitative and quantitative research among both racial/ethnic groups and were matched according to gender and ethnicity of the community participants. Participants were given a stipend of \$20 for their time and participation.

Procedures

The Human Subjects Review Committee Institutional Review Board of the University of South Florida approved the study prior to identification of eligible subjects. Investigators explained the purpose of the study to each subject in their preferred language (English or Spanish), and written consent was obtained from all subjects. Men who stated that they did not know how to read well or did not understand

how to complete the forms received assistance from bilingual and bicultural members of the research team on an individual basis.

Before beginning focus group sessions, researchers interacted informally with subjects to build rapport; snacks were provided. Demographic information was obtained from each subject. Men were asked to sit around a table and to speak clearly and one at a time. Moderators closely followed a focus group guide developed with feedback from community members, key community leaders, community healthcare providers, and the interdisciplinary research team. Moderators followed sequential steps to conduct focus group sessions according to established and standardized methods (Morgan, 1996). The discussion guide was comprised of a series of questions that moved from general day-to-day topics to health and specifically cancer and then to prostate cancer. As such, the authors sought to learn the respondents' general concerns and priorities, as well as more specific needs with regard to cancer information and education. The questions were meant to elicit natural conversations among the men; if necessary, prompts were offered to further narrow the discussion. A question-and-answer period followed the focus group sessions, and educational materials were distributed. Debriefing meetings with the moderator and observer occurred after each focus group.

Data Analyses

Descriptive statistics were used to report demographic characteristics of the sample. Focus groups were taperecorded, transcribed verbatim, manually coded, and then reviewed by each member of the research team following the approaches used by Morgan (1996). Responses were checked against notes taken during the focus groups. Spanish content in the summaries was translated into English and added to the transcriptions for ease of reference and to ensure that correct translations and interpretations were maintained throughout the process. The researchers first read the transcripts in their entirety to glean a sense of the entire group experience and then examined them more carefully to explore emergent themes. Each member of the research team independently identified major categorical themes and subthemes; then, as a group, they created a roadmap of key themes. Differences in interpretation were addressed and resolved satisfactorily. Specific quotations were extracted to give further meaning to abstracted themes and deeper meaning to identified themes. Also, input from community leaders was obtained to provide further interpretations of the data.

Results

Demographic Profile of Each Sample

Hispanic farmworkers: The Hispanic farmworkers (N = 37) primarily were of Mexican origin (92%). Spanish was identified as the preferred language among all men. Most of the men were married (65%). None of the farmworkers had a history of cancer. Their mean age was 38 years, with ages ranging from 18–67 years (based on data from 35 men). Of the farmworkers, 20% (n = 7) were 50 or older. Years of schooling ranged from no schooling to high school graduate and above, with a mean of 6.4 years of schooling. Twelve members of the sample (32%) had three years or fewer of schooling.

African American men: Thirty-four African American men participated in the focus groups. Based on responses from 31 men, English was the preferred language among all of the participants; 16 men (52%) were married; 4 men (13%) were cancer survivors (3 had prostate cancer and 1 had had colorectal cancer); their mean age was 50 years with a range of 22–85 years; and 78% (N = 24) were 40 or older. Years of schooling (N = 30) ranged from grade one to high school graduate or beyond, with a mean of 11.5 years of schooling. Three participants (10%) had three years or fewer of education.

Contextual Data: Emergent Themes Among Hispanic Farmworkers

General life priorities: When asked about the important things in their lives, most farmworkers mentioned their families, health, work, education, and faith ("Me tengo que proteger por mi familia" means "I have to take care of myself, for my family"). Their children's education was very important to the participants so that the children could move ahead in life and out of farm labor. Additional concerns expressed by the farmworkers included language and access to healthcare services. Exposure to pesticides also was a source of concern among the men ("Si trabajas en la labor, uno tal vez inhiere los pesticidas y uno ni siquiera sabe" means "If you work in the field/labor, you may ingest pesticides and you don't even know").

Factors promoting health: Most men agreed that good health, nutrition, and fitness were important factors to staying healthy. However, they also said that they did not practice healthy nutritional habits or physical activity in addition to their jobs because of lack of time and being tired from the nature of their work. Regarding general health, the men said that they would go to a clinic or physician only if very sick.

Lack of knowledge about general anatomy and the human body was noted in the focus groups. Men were unable to identify the location of the prostate gland or its function (e.g., some men thought that the prostate was found in the neck area). The moderator and health educator explained the location and function of the prostate and explained screening examinations (digital rectal exam [DRE] and prostate-specific antigen [PSA]) through discussion and use of diagrams. Men then were asked about their attitudes about these screening tests. Some men stated that they would have a DRE only if no other option existed ("Si uno lo tiene que hacer pues hay que hacerlo" and "Si creo que estoy en riesgo si" mean "If one has to do it, well you have to do it" and "If I think I am at risk"). A few men identified a sexual connotation with the DRE. Other men expressed feeling uncomfortable with the thought of having a DRE but explained that if a respectful doctor performed the test then they would not mind so much ("Uno se lo haría con un doctor que sea bien respetuoso, que sea serio" means "One would do it with a doctor that is very respectful, who is very dignified"). Embarrassment of talking about the DRE was expressed ("Me da pena" means "I feel embarrassed"). The issue that cancer signifies death surfaced within the focus groups, as well as fear of cancer. Men said that by not talking about something bad or negative, it goes away or does not happen ("Yo trato de no pensar, aunque a veces uno lo siente o piensa que se va a morir uno siempre trata de rechasarlo" means "I try not to think, although sometimes one feels or thinks that one is going to die, you always try to refuse it").

Causes of cancer: Some men seemed to confuse cancer with diabetes (azúcar means sugar). The men mentioned knowing other community members who had had an infection (infección) and had their feet and legs amputated. The participants suggested a wide range of causes of cancer: poor nutrition, lack of exercise, promiscuity and excessive sex, bumps and bruises (golpes), rusty nails (clavos oxidados), and contagious infections. Other causes of cancer mentioned included tobacco, drugs, dust, lead, asbestos (some men had worked with asbestos), and gases or fumes. Some participants shared a distrust of the healthcare system, mostly of doctors ("Tambien hay doctores que mienten, desgracia damente hay personas corruptas" means "There are doctors that lie, there are corrupt people" and "A los doctores yo no les creo mucho" means "I don't believe a lot of what doctors say").

Preferred methods of learning: Men were very interested to learn about their health, specifically about cancer ("Necesitamos información porque no sabemos mucho de cáncer" means "We need information because we do not know a lot about cancer"). Many men said that they liked to learn from videotapes and through group discussions. An interactive educational session, similar to the focus group discussion, was suggested as a preferred mode of learning. Some of the men did not know how to read well. The use of printed materials was acceptable as long as they were simple, were easy to read, and used pictures. The use of visuals was especially helpful in understanding difficult concepts. The preferred spokespeople to deliver the messages were cancer survivors and patients with cancer, followed by physicians and community members. The use of a story line such as a novella (telenovela) style interlaced with scientific facts was favored for message delivery.

Preferred sources of health information expressed by most men in the groups were television (Spanish television stations), radio (local Spanish stations), newspapers (local Spanish community newspapers), school (learning from their children), and friends. The men mentioned a lack of information available to them regarding general health and cancer ("La informacion entre nosostros es un problema" means "Information among us is a problem"). The men suggested involving their employers and their children's schools in providing health education information.

Contextual Data: Emergent Themes Among African American Men

General life priorities: When asked about the important things in their lives, most African American men mentioned their families, health, work, and faith. Similar to the farmworkers, the African American men said that they hoped that their children would have better lives than their own. Thus, an emphasis on their children's education became evident throughout all of the focus groups ("Just grow up and have a better life than what I experienced"). Many men commented about the stresses in their lives ("I think a lot of blacks have a lot of pressure, a lot of them are sick"). Common causes of concern and worries in their daily lives were noted as violence, crime, drugs in the neighborhood, health, being a family man, job, and finances.

Factors promoting health: Regarding health in general, the African American men, similar to the Hispanic men, mentioned physical activity and nutrition as ways to maintain health. They also identified sleep and decreasing or avoiding stress as ways to be healthy. "Exercise, eat right, and stay away from stress." The African American men said that when they were sick they turned to healthcare practitioners (e.g., physicians) at clinics or local health centers, hospital emergency rooms, prayer and faith, or to important female figures in their lives, such as wives or mothers. The men also discussed extensively the lack of access to health care, mostly because of "cost of care."

When asked about the first thing that came to their minds when they heard the word cancer, the men responded with words such as death, desperation, and fear ("Cancer equals death" and "It's going to eat your whole body up"). A lack of knowledge about prostate cancer also was expressed among the men. During the focus group sessions, men were informed of the prostate cancer screening tests (i.e., PSA and DRE) and were asked what they thought of screening tests. Some of the men said that they and other men they knew did not want to undergo DRE ("People tell me it hurts, it wreaks havoc on us. . . . You don't really care to have that examination done"). Many men knew that women were able to perform self-examination of their breasts and inquired about the existence of self-tests for men. "Women have a way to feel their bodies. . . . Women have something in the shower." Several men expressed feelings that with prostate cancer, "You are on your way out" or "You can become impotent because of it, that scares them, too, especially black men."

Causes of cancer: The causes of cancer mentioned by the African American men in the focus groups included smoking, certain foods (e.g., red meat, pork), environment (e.g., air and water pollutants), stress, heredity, infection, and being born with cancer. "It's just something planted in us," one participant said. Another belief stated by some men in the focus groups was that cancer surgery causes a quicker death because air enters the body and causes the cancer to spread ("They opened him up and he died" and "How they treat it, it can be worse than the actual condition"). Another theme that emerged throughout the focus groups of African American men was that of faith. Most of the men said that prayer and God were important parts of their lives ("Prayer changes things" and "When faced with lack of access to care, take faith and that's in Jesus Christ to keep you going and keep you healing, which is good").

Men said that they go to a doctor only when very sick and that, if tested, they would be afraid of a screening test's results. Although concepts about prevention were difficult for the men to understand, they could relate to the mechanics of a car, such that prevention and early detection were like getting a tune-up. Another issue revealed by some of the men included a lack of trust in the healthcare system, mostly in physicians ("A lot of people don't trust the doctors, you never know what you are getting" and "I don't like going to white doctors. I think a lot of other people feel the same way. We do it because we don't have a choice"). Some men also discussed issues related to racism and racial inequalities. They said, "Racism exists" and "I feel that the black community has not had access to this type of information."

Preferred methods of learning: The men suggested health information dissemination channels, including

churches, central locations (e.g., drug stores), sports events and commercials, word of mouth from peers, billboards, television, barbershops, other family members, bars, dances, and barbecues. Their preferred spokespeople included cancer survivors, doctors as experts who were credible and compassionate, and community people with whom they could identify. The men mentioned their wives, television, radio, newspapers, pamphlets, and magazines as their sources of health information. When asked how they prefer to learn about health, most men said that they enjoyed learning through group discussions ("I think we should have groups more often like we are having now, concerning blacks and black diseases . . . having more meetings and not just on prostate" and "Put up posters or something, it will help somebody. It is not going to help everybody, but it will help somebody"). Men also mentioned low literacy levels in the community and the importance of education ("A lot of them cannot read" and "If someone asks him to sign his name, he takes the paper and says, 'I'll bring this back tomorrow'").

Development of Educational Toolboxes

Emergent themes from the focus groups were used to develop the content of the prostate cancer toolboxes. Although many of the themes and issues were similar between the two groups, the authors emphasize the importance of developing different materials for each group. Issues of importance to consider included language, ethnic-specific views and perspectives, and appropriate role models in educational materials. Pretesting iterations then were conducted among community members to ensure that the authors were working with models and priorities shared by the intended audiences. The resultant products were disseminated to more than 2,000 community-based and cancer-related agencies and organizations for use in community outreach programs.

Discussion

Focus group methodology is an acceptable and useful method to obtain information from racially and ethnically diverse populations about appropriate approaches to prostate cancer screening educational materials. The interdisciplinary nature of the research team (nursing, health education, and anthropology) combined with ongoing community input helped keep at the forefront the project goal: to create appropriate prostate cancer messages that fit the everyday reality of community members. Involving community members throughout the process of the formative research and later in the development of the educational products proved to be a valuable practice. Key emergent themes provided important direction for the development of the prostate cancer educational toolboxes. This approach, termed "participant-focused research" (Cohen et al., 2001), aims to consider participants as equal partners throughout the research process.

The results of this study support those of Arrieta, Walker, & Mason (1998), who depicted the farmworker population as a relatively young population with low literacy skills and priority issues that often relate to family and employment. The importance of work and finances was very evident in the current study and reinforces that employment is a driving force in the lives of farmworkers. Their livelihood and subsistence depend on working. Time away from labor means not being able to provide for their families. Thus, incorporating laborers'

employers in the process might enhance participation in cancer control programs.

Regarding general health, farmworkers said that they visit doctors only when very sick. This finding is similar to that of Larkey, Hecht, Miller, and Alatorre (2001), who found that only serious symptoms among Hispanic men prompted visits to trusted doctors. Another finding that surfaced in the focus groups was that the participants believed that cancer signifies death. This finding is similar to results found in other studies (Mathews, Lannin, & Mitchell, 1994; Meade et al., 2002).

The authors' findings among African Americans revealed that believed causes of cancer included smoking, certain foods, environment, stress, heredity, infection, and being born with cancer. As one participant said, "It's just something planted in us." As shown by this explanatory model, the man believes that everyone is born with cancer and will develop the disease, dependent on how well they take care of their bodies or based on experiencing a traumatic event (Balshem, 1993). Another idea held by the men was that surgery for cancer causes a quicker death: "They opened him up and he died." These data corroborate with findings among African American women reported by Mathews et al. (1994).

Another theme observed in both groups was the reluctance to have a DRE out of embarrassment and fear of it hurting, a barrier also observed by Weinrich, Reynolds, Tingen, and Starr (2000). Having respectful healthcare providers to address these concerns was important to the participants. Also, several men commented about their general distrust of the healthcare system and physicians. These findings reinforce the need for the development of sustained and culturally sensitive relationships based on trust, compassion, and caring attitudes (Meade, 2001).

Preferred spokespeople identified by all focus group participants included cancer survivors, doctors as experts (who must be credible and compassionate), and community members with whom they could identify. These findings are similar to those of other researchers (Dunn, Steginga, Occhipinti, McCaffrey, & Collins, 1999; Schapira, Meade, McAuliffe, Lawrence, & Nattinger, 1999), who also found that physicians were viewed as preferred sources of information about cancer along with patient education materials. The usefulness of role models, such as cancer survivors, has been documented in the literature (Gagliano, 1988; Krouse, 2001; Meade, 1996); they are viewed as a powerful method to communicate messages when developing cancer educational media.

A lack of general knowledge about prostate cancer surfaced in many of the focus groups. Because lack of knowledge has been documented as a barrier to prostate cancer screening (McCoy et al., 1995; Robinson et al., 1996), this finding reinforces the need to create useable and acceptable information. The authors were not surprised that the farmworkers generally demonstrated less awareness about prostate cancer because the Hispanic farmworkers represented a younger audience than the African American men and may not have been exposed to prostate cancer screening information. The authors observed that the African American men had previous knowledge and shared their experiences readily with others. The combined interest in learning more about health within a group setting and wanting to share information with others may illustrate the value of peer education as an effective model of learning.

As described by Robinson (1999), group settings allow for the facilitation and discussion of sensitive or taboo topics, such as DRE in the current study, because less-inhibited members may break the ice or provide additional comments and support. However, focus groups have limitations. Skills and attributes of the moderator can exert strong influences on the type and nature of data collected. Overcoming this challenge requires skilled moderators who can generate controlled interest and provide a balance between active and passive roles. Having a second observer present during the focus groups to assess the nature of interactions is key (Sim, 1998). Another major challenge in focus groups is to capture group norms versus individual responses because focus groups describe collective versus individual phenomena and reveal a range rather than strengths of perspectives and viewpoints (Wilkinson, 1998). Morgan (1996) suggested that this issue can be addressed by having a facilitator ask group members for comparisons rather than aggregating individual data. This was particularly cogent for the investigators in the current study when one respondent commented about how he viewed prevention: "kind of like getting your car tuned up." This simple analogy was well understood by others and subsequently was applied as a key visual in the toolbox components to describe prevention or regular screening. Although generalization often is problematic, Sim wrote that it is more likely to be useful if considered within a theoretical rather than empirical framework. Simply put, focus groups should be viewed as providing theoretical insights to questions and not be extrapolated with statistical accuracy to other situations. Transferability of findings to similar populations in similar situations is possible (Byrne, 2001; Grbich, 1999). Critical to the appropriate use and interpretation of focus groups is their relative value to addressing the research questions under study and maintaining focus on the desired outcomes.

Implications for Nursing

Recruitment of ethnically diverse populations is important for research into cancer interventions in light of a demographically changing population. A strong need exists to address research questions to reduce health disparities among racial and ethnic minority populations, and an imperative exists to incorporate cultural competence into nursing research (Phillips & Weekes, 2002; Stroup, 2002). Careful planning to successfully recruit and retain priority populations in community-based studies requires the development of community partnerships, reciprocity, and cultural sensitivity (Meade & Calvo, 2001; Meade et al., 2002). The focus groups conducted in this project were successful, in part, because of the cultivation of ongoing trusting relationships and the recognition that community member involvement significantly adds to overall programmatic success.

Although data revealed a mean level of 6.4 years of schooling for Hispanic farmworkers and 11.5 years for African American men, previous research has suggested that literacy levels may be as many as three or four grades lower than stated years of schooling (Meade & Byrd, 1989; Meade, McKinney, & Barnas, 1994). Thus, cancer education materials and media must be developed in a variety of printed and electronic formats with special attention to communicating concepts in clear and understandable ways using visual cues

to enhance understanding (Doak, Doak, Friedell, & Meade, 1998). Although this is especially critical when developing any type of patient education material, it is very important for the farmworkers in this study who were found to have very low literacy skills.

The results of this study indicate that qualitative methods can be used by nurses to add richness, depth, and clarity to the understanding of everyday priorities among ethnic minority community members. The data emphasize the importance of understanding men's issues within the context of their lives. Although assessing what men think and know about cancer and cancer screening is valuable, focus groups are most effective when looking at a broader framework that assesses the everyday realities of the men. In this manner,

educational interventions designed to encourage health-promoting behaviors for prostate cancer screening can be linked to their own general priorities. The strength of focus group methodology can help nurses more effectively reach racial and ethnic minority populations with important prostate cancer information and ultimately contribute to reducing racial and ethnic disparities in health care.

The authors give special thanks to the participants in the focus groups and the community partners who continuously assist them in the development of culturally, linguistically, and literacy-relevant cancer education information.

Author Contact: Cathy D. Meade, PhD, RN, FAAN, can be reached at cdmeade@moffitt.usf.edu, with copy to editor at rose_mary@earthlink.net.

References

- Abdalla, I., Ray, P., Vaida, F., & Vijayakumar, S. (1999). Racial differences in prostate-specific antigen levels and prostate-specific antigen densities in patients with prostate cancer. *American Journal of Clinical Oncology*, 22, 537–541.
- American Cancer Society. (1998). ACS issues action proposal on prostate cancer in African-Americans. *Oncology*, 12, 228.
- American Cancer Society. (2003). Cancer facts and figures for African Americans, 2003–2004. Atlanta: Author.
- Arrieta, M., Walker, F.J., & Mason, T.J. (1998). A profile of demographic, occupational, and health-related characteristics of the migrant and settled (seasonal) farmworker population of Florida. Tampa, FL: University of South Florida Health Education and Training Centers and the Department of Epidemiology and Biostatistics, University of South Florida College of Public Health.
- Balshem, M. (1993). Cancer in the community: Class and medical authority. Washington, DC: Smithsonian Institution Press.
- Byrne, M. (2001). Sampling for qualitative research. AORN Journal, 73, 494, 497–498.
- Cassells, H. (2001). Community assessment. In M.A. Nies & M. McEwen (Eds.), *Community health nursing: Promoting the health of populations* (pp. 92–108). Philadelphia: Saunders.
- Cassidy, C. (1987). Worldview conflict and toddler malnutrition. In N. Scheper-Hughes (Ed.), Child survival: Anthropological perspectives on the treatment and maltreatment of children (pp. 293–324). Boston: D. Reidel Publishing.
- Cohen, M.Z., Phillips, J.M., & Palos, G. (2001). Qualitative research with diverse populations. Seminars in Oncology Nursing, 17, 190–196.
- Cookson, M.M. (2001). Prostate cancer: Screening and early detection. Cancer Control. 8, 133–140.
- Coreil, J. (1995). Group interview methods in community health research. Medical Anthropology, 16, 193–210.
- Demark-Wahnefried, W., Schildkraut, J.M., Iselin, C.E., Conlisk, E., Kavee, A., Aldrich, T.E., et al. (1998). Treatment options, selection, and satisfaction among African American and white men with prostate carcinoma in North Carolina. *Cancer*, 83, 320–330.
- Doak, C.C., Doak, L.G., Friedell, G.H., & Meade, C.D. (1998). Improving comprehension for cancer patients with low literacy skills: Strategies for clinicians. CA: A Cancer Journal for Clinicians, 48, 151–162.
- Dunn, J., Steginga, S.K., Occhipinti, S., McCaffrey, J., & Collins, D.M. (1999). Men's preferences for sources of information about and support for cancer. *Journal of Cancer Education*, 14, 238–242.
- Farkas, A., Schneider, D., Perrotti, M., Cummings, K.B., & Ward, W.S. (1998). National trends in the epidemiology of prostate cancer, 1973 to 1994: Evidence for the effectiveness of prostate-specific antigen screening. *Urology*, 52, 444–449.
- Gagliano, M.E. (1988). A literature review on the efficacy of video in patient education. *Journal of Medical Education*, 63, 785–792.
- Gilliland, F.D., Hunt, W.C., & Key, C.R. (1996). Ethnic variation in prostate

- cancer survival in New Mexico. Cancer Epidemiology, Biomarkers and Prevention, 5, 247-251.
- Gray-Vickrey, P. (1993). Gerontological research: Use and application of focus groups. *Journal of Gerontological Nursing*, 19(5), 21–27.
- Grbich, C. (1999). Qualitative research in health: An introduction. Thousand Oaks, CA: Sage.
- Guidry, J.J., Fagan, P., & Walker, V. (1998). Cultural sensitivity and readability of breast and prostate printed cancer education materials targeting African Americans. *Journal of the National Medical Association*, 90, 165–169.
- Hoffman, R.M., Gilliland, F.D., Eley, J.W., Harlan, L.C., Stephenson, R.A., Stanford, J.L., et al. (2001). Racial and ethnic differences in advancedstage prostate cancer: The Prostate Cancer Outcomes Study. *Journal of the National Cancer Institute*, 93, 388–395.
- Kitzinger, J. (1994). The methodology of focus groups: The importance of interactions between research participants. Sociology of Health and Illness, 16, 103–121.
- Krouse, H.J. (2001). Video modelling to educate patients. *Journal of Advanced Nursing*, 33, 748–757.
- Larkey, L.K., Hecht, M.L., Miller, K., & Alatorre, C. (2001). Hispanic cultural norms for health-seeking behaviors in the face of symptoms. *Health Education and Behavior*, 28, 65–80.
- Lee, M.C. (2000). Knowledge, barriers, and motivators related to cervical cancer screening among Korean-American women: A focus group approach. *Cancer Nursing*, 23, 168–175.
- Manfredi, C., Lacey, L., Warnecke, R., & Balch, G. (1997). Method effects in survey and focus group findings: Understanding smoking cessation in low-SES African American women. *Health Education and Behavior*, 24, 786–800.
- Marwick, C. (1998). ACS sets blueprint for action against prostate cancer in African Americans. *JAMA*, 279, 418–419.
- Mathews, H.F., Lannin, D.R., & Mitchell, J.P. (1994). Coming to terms with advanced breast cancer: Black women's narratives from eastern North Carolina. Social Science Medicine, 38, 789–800.
- McCoy, C.B., Anwyl, R.S., Metsch, L.R., Inciardi, J.A., Smith, S.A., & Correa, R. (1995). Prostate cancer in Florida: Knowledge, attitudes, practices, and beliefs. *Cancer Practice*, 3, 88–93.
- Meade, C.D. (1996). Producing videotapes for cancer education: Methods and examples. Oncology Nursing Forum, 23, 837–846.
- Meade, C.D. (2001). Community health education. In. M. Nies & M. McEwen (Eds.), Community health nursing: Promoting the health of aggregates (3rd ed., pp. 129–169). Philadelphia: Saunders.
- Meade, C.D., & Byrd, J.C. (1989). Patient literacy and the readability of smoking education literature. American Journal of Public Health, 79, 204–206.
- Meade, C.D., & Calvo, A. (2001). Developing community-academic partnerships to enhance breast health among rural and Hispanic migrant and seasonal farmworker women. *Oncology Nursing Forum*, 28, 1577–1584.

- Meade, C.D., Calvo, A., & Cuthbertson, D. (2002). Impact of culturally, linguistically, and literacy relevant videotaped cancer information among Hispanic farmworker women. *Journal of Cancer Education*, 17, 50–54.
- Meade, C.D., McKinney, W.P., & Barnas, G. (1994). Educating patients with limited literacy skills: The effectiveness of printed and videotaped materials about colon cancer. *American Journal of Public Health*, 84, 119–121.
- Miller, B.A., & Kolonel, L.N. (1996). Racial/ethnic patterns of cancer in the United States, 1988–1992 [NIH Pub. No. 96-4104]. Bethesda, MD: National Cancer Institute.
- Morgan, D.L. (1996). Focus groups. *Annual Review of Sociology*, 22, 129–152.
- Morgan, D.L. (1998a). *The focus group guidebook*. In D.L. Morgan & R.A. Krueger (Eds.), *The focus group kit*. Thousand Oaks, CA: Sage.
- Morgan, D.L. (1998b). Planning focus groups. In D.L. Morgan & R.A. Krueger (Eds.), The focus group kit. Thousand Oaks, CA: Sage.
- O'Rourke, M.E., & Germino, B.B. (1998). Prostate cancer treatment decisions: A focus group exploration. Oncology Nursing Forum, 25, 97–104.
- Phillips, J., & Weekes, D. (2002). Incorporating multiculturalism into oncology nursing research: The last decade. *Oncology Nursing Forum*, 29, 807–816.
- Powell, I.J. (1997). Prostate cancer and African-American men. Oncology, 11, 599–605.
- Rawl, S.M., Menon, U., Champion, V.L., Foster, J.L., & Skinner, C.S. (2000).
 Colorectal cancer screening beliefs. Focus groups with first-degree relatives. *Cancer Practice*, 8, 32–37.
- Robinson, N. (1999). The use of focus group methodology—With selected examples from sexual health research. *Journal of Advanced Nursing*, 29, 905–913.
- Robinson, S.B., Ashley, M., & Haynes, M.A. (1996). Attitude of African-Americans regarding prostate cancer clinical trials. *Journal of Community Health*, 21, 77–87.

- Schapira, M., Meade, C.D., McAuliffe, T.L., Lawrence, W.F., & Nattinger, A.B. (1999). Information sources and professional consultations sought by men newly diagnosed as having prostate cancer. *Journal of Cancer Education*, 14, 243–247.
- Sim, J. (1998). Collecting and analysing qualitative data: Issues raised by the focus group. *Journal of Advanced Nursing*, 28, 345–352.
- Steckler, A., McLeroy, K.R., Goodman, R.M., Bird, S.T., & McCormick, L. (1992). Toward integrating qualitative and quantitative methods: An introduction. *Health Education Quarterly*, 19, 1–8.
- Strickland, C.J. (1999). Conducting focus groups cross-culturally: Experiences with Pacific Northwest Indian people. *Public Health Nursing*, 16, 190–197.
- Stroup, D.F. (2002). Science-based policies designed to address today's health problems. *Chronic Disease Notes and Reports*, 15, 2–3.
- Tarman, G.J., Kane, C.J., Moul, J.W., Thrasher, J.B., Foley, J.P., Wilhite, D., et al. (2000). Impact of socioeconomic status and race on clinical parameters of patients undergoing radical prostatectomy in an equal access health care system. *Urology*, 56, 1016–1020.
- Weinrich, S.P., Boyd, M.D., Bradford, D., Mossa, M.S., & Weinrich, M. (1998). Recruitment of African Americans into prostate cancer screening. *Cancer Practice*, 6, 23–30.
- Weinrich, S.P., Reynolds, W.A., Jr., Tingen, M.S., & Starr, C.R. (2000). Barriers to prostate cancer screening. Cancer Nursing, 23, 117–121.
- Wilkinson, S. (1998). Focus groups in health research. *Journal of Health Psychology*, 3, 329–348.
- Williams, R.D. (1999). Use of focus groups with rural women of lower socioeconomic status. Applied Nursing Research, 12, 45–50.
- Wingo, P.A., Ries, L.A., Rosenberg, H.M., Miller, D.S., & Edwards, B.K. (1998). Cancer incidence and mortality, 1973–1995: A report card for the U.S. Cancer, 82, 1197–1207.
- Zimmerman, S.M. (1997). Factors influencing Hispanic participation in prostate cancer screening. *Oncology Nursing Forum*, 24, 499–504.