Article

Bias Within: Examining the Role of Cultural Competence Perceptions in Mammography Adherence

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Abstract

Breast cancer mortality has affected African American women at a disproportionate rate. The purpose of this research was to assess how health professionals' cultural competence contributes to African American women's barriers to and receipt of mammograms. Sixty-one African American women residing in Harris County, Texas, shared their views within a series of focus groups. Theoretical propositions from the PEN-3 model were used to understand mammography adherence at the interpersonal level. Participants noted various perceived factors associated with mammography incompliance. Lack of professionalism of clinicians and clerical staff contributed to a decrease in health care services utilization. In addition, cultural insensitivity and discriminatory behavior enabled an attitude of medical mistrust. Improving patient–provider communication, through culturally appropriate centered educational efforts, is a beneficial strategy for breast health programs among underserved populations.

Keywords

African Americans, breast health, screening, cultural competence, patient–provider communication

Introduction

According to the Cancer Prevention & Research Institute of Texas (CPRIT; 2010), breast cancer is the most commonly diagnosed cancer and the second leading cause of cancer mortality among women in Texas. In addition, more than half of the breast cancer deaths in the state occur in for Dallas–Fort Worth area, San Antonio, and Houston (Harris County). This highlights the disparities in urban locations, rather than rural, within the state (CPRIT, 2010). As noted by the Texas Cancer Registry (2014), from 2007 to 2011, the age-adjusted incidence rate of breast cancer was 1.16 times higher among non-Hispanic White women in Harris County, compared with African Americans. However, the age-adjusted mortality rate was nearly 1.7 times higher among African American women in the county, compared to their White counterparts.

The Behavioral Risk Factor Surveillance System (BRFSS) data in 2010 noted among those completing the questionnaire across the state, approximately 74% of African American women aged 40 and above stated they had a mammogram within the past 2 years (Center for Health Statistics [CHS], 2010). This is compared with 71% of White women. However, taking into account the level of income only, all women making less than US$15,000 a year had an adherence percentage of 58, and 63 for those within the US$15,000 to US$24,999 income range (CHS, 2010). Based on these statistics and the historical marginalization of African American women in society and health (Barbee & Little, 1993; Collins, 2000; Hooks, 2005), there is a need to address the cultural nuances (i.e., traditions, history, language) of African American women.

African American Women and Cultural Competence

In the context of race and ethnicity stratification, it is important to address the cultural nuances for not only African Americans, but for all people of color through the employment

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of cultural competence (Harvard Catalyst, 2010). Accordingly, cultural competence refers to awareness of unique characteristics of the populations for which health professionals provide care (Harvard Catalyst, 2010). In health care settings, cultural competence is defined as the ability of systems to provide care to patients with diverse values, beliefs, and behaviors (Betancourt et al., 2005). This includes tailoring delivery to meet patients' social, cultural, and linguistic needs. Cultural competence is both a vehicle to increase access to quality care for all patients and as a business strategy to attract new patients through effective communication (Betancourt et al., 2005). Culture influences the community's views toward health, poverty, welfare, crime, and other social and human services areas, in addition to outcomes of public agency services and interventions (Rice, 2007). Understanding these concepts enables public service delivery providers to avoid stereotypes and biases, as well as promote positive characteristics of particular groups (Rice, 2007).

In addition, the notion of trust is also a factor in the delivery of health services. Researchers conducted telephone surveys to explore the correlation between preventive health service engagement and trust in the competence of physicians' care (Musa, Schulz, Harris, Silverman, & Thomas, 2009). African Americans reported being less trustful of their physician compared with Whites. Subsequently, this lack of trust was associated with decreased adherence to routine examinations, including mammograms (Musa et al., 2009). It was also determined that an individual's level of distrust of the health care system can be used to predict her breast cancer screening schedule adherence (Katapodi, Pierce, & Facione, 2010).

Research suggests cultural competence training directly affects the attitudes of health care providers (Beach et al., 2005). Organizations and institutions have addressed this by providing academic course instruction to students and employer-sponsored training for practitioners (Hall, Guidry, McKyer, Outley, & Ballard, 2014). Improving patient–provider communication may eliminate the disconnect between the two, thus improving health outcomes. Although there has been extensive review and subsequent recommendations offered for the development of a universal, interdisciplinary curriculum to build the capacity of providers, there is not a consensus on the approach (Smith et al., 2007). The purpose of this research study was to understand African American women's perceptions of health care providers' delivery of culturally competent services, and how delivery contributes to barriers to and receipt of mammograms. The information obtained can be used to develop a comprehensive curriculum for those working in the health care field and providing care to African American women in this region.

Theoretical/Conceptual Framework

For this study, researchers used the PEN-3 model. Introduced as an alternative to the traditional medical model, it is based on various components, including reasoned action, PRECEDE, and health belief models (Airhihenbuwa, 1995). Its premise is to identify and address individual, family, community, and systemic influential factors of health behavior modification (Ka'Opua, 2008). Regarding intervention development, the framework identifies and organizes the cultural components of the target population within the planning phase to ensure effectiveness (Cowdery, Parker, & Thompson, 2012).

The model is composed of three dimensions: cultural identity, cultural empowerment, and relationships and expectations. Cultural identity focuses on the person, the extended family, and the neighborhood. Cultural empowerment explores beliefs about health that are positive, existential, or negative in nature (Iwelunmor, Newsome, & Airhihenbuwa, 2014). The final dimension of relationships and expectations involves three variables, which are perceptions, enablers, and nurturers (Airhihenbuwa, 1995).

PEN-3 model is highly applicable to specific populations, particularly to subgroups within the African American community (Airhihenbuwa, 1995). Research indicates that the PEN-3 model has been used to explore the cultural and community-related impact on African Americans' food choices, dietary intake, and nutritional attitudes (James, 2004). Successful outcomes of this effort included the development of effective components of nutrition education programs and health communication strategies (James, 2004). The PEN-3 model was also used to address cultural issues related to psychosocial barriers and factors of prostate cancer screening (Abernethy et al., 2005). The findings from these studies suggested building partnerships with the community in health promotion efforts is a key factor of recruitment and subsequent behavior adoption (Abernethy et al., 2005).

Researchers also have incorporated dimensions of PEN-3 model to adapt breast cancer education materials to achieve the inclusion of culturally sensitive messages focusing on medical mistrust, self-reliance, spirituality, and community influences (Kline, 2007). However, a systematic review of the application of the PEN-3 model revealed there are very few studies aimed at breast cancer in minority women that incorporate all dimensions of the PEN-3 model (Iwelunmor et al., 2014). Within the current study, the relationships and expectations dimension was utilized to assess the lack of culturally relevant/appropriate services and improve health communication, as well as messaging. In turn, this will facilitate the efforts of developing a supportive health care environment conducive to increasing healthy outcomes for minority populations.

Similarly, Sheppard et al. (2010) explored the relationships and expectations dimension of the PEN-3 model in developing a decision–support intervention for African American breast cancer survivors. The findings assisted in the development of strategies to promote improved patient–provider communication. In addition, the dimension has guided studies conducted through focus groups and in-depth interviews among Latinas to create culturally competent breast and cervical cancer screening programs, and treatment

decision making (Erwin, Johnson, Feliciano-Libid, Zamora, & Jandorf, 2005; Garcés, Scarinci, & Harrison, 2006; Sheppard et al., 2008).

The current study sought to expand on the utilization of this culturally appropriate research model to assist with program development, designed specifically for African American women in Harris County, Texas. As indicative of true community-based participatory research strategies, researchers must actively seek information to gain insights regarding the cultural, demographic, and geographic nuances of those targeted for health interventions/programs. By doing this, the likelihood of an increase in healthful outcomes and lifestyle change is strengthened (Horowitz, Robinson, & Seifer, 2009).

Materials and Method

Participants

Study inclusion criteria included: (a) female, (b) between 35 and 65 years of age, (c) current resident of Harris County, (d) self-identified African American, (e) English speaker, and (f) no previous history of cancer. There were a total of six focus groups conducted with 61 African American women across the Houston/Harris County, Texas area.

Recruitment

To recruit participants, researchers first identified regions of large proportions of African American persons that were within a 10-mile radius of each service center. This included 145 grocery stores, local community centers, multiservice, churches, centers, shopping centers, hair salons, and restaurants. At each location, significant efforts were made to personally interact with potential participants, or with any person willing to speak with the designated staffer. Personal interaction included, as often as possible, matching the racial/ethnic identity of the staffer with the potential participant. The staffer then would greet the person, introduce him or herself, and proceed to hand the person a flyer which included focus group information and begin to inform them of the study purpose. Questions were answered immediately if the person had any, and if they were interested in participating, the person's name and phone number were collected for follow-up.

When personal interaction was not appropriate, allowed, or available, a flyer was left on cars, in windows, on tables, or wherever the establishment would allow us to leave them. At the end of each recruitment activity, all interested parties' names and contact information were placed in an Excel file on an institution-provided, encrypted, password-protected computer. Follow-up calls to potential participants would begin at least 48 hrs before the scheduled date of the focus group. In the event contact was not made, follow-up would continue until 3 hrs prior to the starting time.

Procedure

Of the 11 available multiservice centers, all were contacted, but due to scheduling conflicts, closings due to construction, and available space constraints, 5 city service centers were available to host the focus groups. An additional sixth location was included to better accommodate potential participants in the far northwest locations of the county. One focus group was conducted at each location. These locations were selected because they are representative of the geographic districts within the city/county. Due to the high population, researchers sought to maximize the variety of representation among the target population by offering the assessments in easily accessible settings within close residential proximity.

There were a total of six facilitators, with one being assigned to each focus group. The background of the facilitators included graduate training in public health, health administration, health care management, and social work. All facilitators participated in a single training session to familiarize them with the focus group facilitator guide and appropriate facilitation techniques.

At the beginning of every focus group, all attendees were reminded that participation in the focus group was strictly voluntary and they could choose not to continue participating at any time. Participants were then walked through the informed consent process, which included a few designated minutes for the focus group facilitator to read aloud the consent documentation and to answer any questions. Afterward, additional time was allotted to allow participants to reread the documentation for themselves and to ask the facilitator any additional questions privately. Once participants were adequately informed and felt comfortable consenting to participate in the focus group, they were then asked to complete a basic demographic questionnaire. Participants were also informed they would receive a US$25 gift card to a national department store chain for participating in the focus group. Each focus group was recorded with a digital recorder. Participants were instructed to not use their names at any time during the focus group to further ensure anonymity. The research was approved by the Institutional Review Board of the University of Texas MD Anderson Cancer Center.

Interview Guide

To guide the focus group and to ensure consistency and accuracy between the different groups, each facilitator utilized a designated interview guide. Each focus group ranged between 60 and 90 mins, in which the African American women were asked about their understanding and beliefs of breast cancer health and perceptions toward breast cancer services. More specifically, the women were asked to address their (a) knowledge of breast health (e.g., need for routine breast cancer examinations through the combination of self-examinations and doctor examinations), (b) availability and accessibility of breast health services (e.g., ideal locations to receive

a mammogram; health services info dissemination), and (c) utilization of breast health services (e.g., understanding how breast health services could be utilized more effectively; barriers to service). These areas included specific questions such as the following: (a) "What would be the most effective way to let African American women know about breast cancer and available breast health services?", (b) "What are some ways that we may be able to reduce some of the barriers/challenges that African American women face to getting a mammogram?" and (c) "Why do you think some African American women go for mammograms and why some do not?". The information provided was indicative of research-based, culture-based, and individual experiential knowledge that incorporates the components of the PEN-3 framework.

Data Analysis

Each of the focus groups were transcribed verbatim. Following this, and to avoid researcher biases, a team of three researchers independently analyzed, categorized, and coded participants' responses into themes utilizing inductive–deductive content analysis method (Strauss & Corbin, 1990). Inductive analysis allowed the researchers to immerse themselves in the transcripts and determine relevant themes, whereas deductive analysis allowed the researchers to explore the categories based on the theoretical components of the PEN-3 model. NVivo qualitative analysis computer software enabled this process. Specifically, key participant responses were selected and given a color code using the software (McIlfatrick, Taggart, & Truesdale-Kennedy, 2011). Codes were then gathered into specific themes and analyzed individually. On completion, researchers came together to compare and contrast analyses and determine final categories and themes.

Results

From the demographic questionnaire, it was determined the average age of the women in the focus groups was approximately 52 years, and 36% of the women ($n = 22$) were divorcees with an average number of 2 children. Thirteen percent of the participants ($n = 8$) had a high school diploma or general educational development (GED) certificate, and 15% ($n = 9$) reported having vocational training after high school completion. Forty-one percent ($n = 25$) had some college or an associate's degree, 13% ($n = 8$) had a baccalaureate degree, and 2% ($n = 1$) reported completing a master's program. Fifty-one percent of the women ($n = 31$) were unemployed, yet 38% ($n = 23$) reported having private insurance, and 43% ($n = 26$) reported an annual income of less than US$20,000. Seventy-seven percent of women ($n = 47$) reported not having a family history of breast cancer, with 79% ($n = 48$) having ever received a mammogram.

The purpose of this research study was to understand African American women's perceptions of health care providers' delivery of culturally competent services, and how

delivery contributes to barriers to and receipt of mammograms. Through the focus groups, the 61 African American women articulated their perceptions and experiences with health care workers. The findings revealed perceptions of the (a) interactions with clinicians, (b) attitudes of insensitivity by the physicians and nurse practitioners, and (c) inequitable treatment for sickness and diseases.

Therefore, the women revealed that prior to an interaction with a clinician, African American women are intimidated by clerical workers' perceived indignant attitudes and lack of respect toward them. This initial interaction sets the tone for the entire visit, often times hindering communication efforts and return for services (Kaplan et al., 2006).

> They are intimidated by the people who initiated the services. They don't necessarily get into the doctor's office being intimidated; it is the people before you get in the door. It is the attitude of the service care providers that turn away a lot of the people that come that use a lot of energy. They take the time to either car-ride with someone, and pay that person and then to find a way back and then they get there and they get this person with an attitude, you know? As if you are nobody.

> It is when they are trying to get the application, trying to get the information, trying to say why you are there. The person is telling you what they want to tell you and it is kind of indignant . . .

> When I first started coming over here to the Health Center, I needed a mammogram, I just almost fought with the lady over there, from that day on I promised myself: "I'm never going to a city health clinic again." And I've never been back in there, because they act around like they have authority over there; they act like it is their building, as a matter of fact, the whole system has got a problem with the attitude. It does not matter how poor you are or what you got 'cuz we don't know what the people that work there have either. But they still need to respect the people that come here.

Based on the responses, the participants' initial interactions consisted of negative attitudes in the form of intimidation, confrontation, and indignant/offensive treatment by clerical staff at the clinics and personnel who work with patients (e.g., facilitating transportation, completion of patient applications). The negative attitudes affected the participants and situated their perception of future interactions with the clinic and its personnel (e.g., nurse practitioner, physician).

Although the initial interactions set the tone for future visits to the clinician, some of the women experienced similar interactions with the primary physician/clinician and the nurse practitioner. As such, the issue of physician and nurse insensitivity was also raised during the discussion. The participants noted their discontent with the clinicians' and nurse practitioners' insensitivity that consisted of a perceived lack of warmth and care.

> Well you asked me if the doctors were not paying attention, they need to be more professional. Not only the doctors and the staff,

the nurses, you know some people are very insensitive and make us feel, you know, less than what we are, you know. Because I'm coming here to you, I am putting my life in your hands, if I can't communicate with you and you just throw me off.

. . . he started not listening but like he didn't really want to touch me. And the worst thing that he did was do a, I let him do a well woman's Pap one time. Then I said to myself I won't ever, ever come back to another man doctor first of all and especially a white doctor because he was not sensitive at all.

The participants conveyed that the clinicians' (e.g., doctors, physicians) and nurses' perceived lack of warmth and care was based on their inability to communicate in a "professional" manner. One participant conveyed the significance of her interaction as it pertained to her "putting my life in your hands," and thus, felt a certain level of sensitivity was necessary for diagnosis and effective communication between her, the clinician, and nurse practitioner. Although another participant conveyed poor verbal communication was received, the non-verbal communication was perceived as more insensitive. This participant's physical interaction with the physician was negatively perceived when she felt that "he didn't really want to touch me" during her intimate and invasive examination. Therefore, verbal and non-verbal communications are both deemed important to these participants during the doctor–patient interactions.

The interactions and perceived attitudes contributed to the final area of concern for these participants. Through the focus groups, the participants conveyed their beliefs that the clinicians were not providing equitable treatment for all groups of patients due to a lack of treating sickness and diseases within the African American community.

I don't trust them because I believe that they are not treating African Americans aggressively with sickness and disease as they do with the white people and there are a lot of the seniors who distrust them. I can name a group of people that are right in this area, y'all would know who they are, and they said they let them cut them or experiment on them, because I believe that is happening, these woman with fibroids and they are allowing those things to grow in these women.

They let it get out of whack. They are letting things grow on women. But I find that a lot of minorities are going through . . . because it is not aggressively addressed while that person is going to the doctor, it is not. And people have just stopped going.

The culminating affect of the perceived lack of treating African Americans who are sick or stricken with diseases fueled one participant's sense of mistrust and willingness to consult with a physician for future health concerns and/or to adhere to health screening recommendations, while another participant presented that African Americans, and other people of color, are experiencing similar levels of treatment or non-treatment. She concludes that the low levels of treatment or non-treatment cultivate an environment in which African Americans choose not to go to doctors.

Discussion

This article proposed to examine the influence of perceived health professionals' cultural competence on barriers to and receipt of mammograms among African American women. Using the relationships and expectations dimension of the PEN-3 model was highly applicable in examining the influential factors associated with the health care system in mammography adherence choices. Again, this dimension encompasses three variables to include perceptions, enablers, and nurturers. The findings revealed that (a) African American women's perceptions reaffirmed notions of historical mistrust, (b) lack of sensitivity and respect by personnel acted as a negative enabler of health care services utilization decision making, and (c) health care providers and staff can act as nurturers in this setting, enabling screening and follow-up adherence.

The perception variable asserts that culturally influenced attitudes and beliefs can either encourage or impede healthy behaviors (Abernethy et al., 2005). Hence, the noted perception among focus group participants included medical mistrust due to lack of respect from medical professionals. This could be contributed to sociodemographic factors such as socioeconomic status, educational attainment, and health literacy (Davis, Bynum, Katz, Buchanan, & Green, 2012). For example, the perception that medical practitioners do not want to touch the participants may be a derivative of personal and cultural preconceptions about how people of color with low social class status address personal hygiene or other health-related care. Concomitantly, other factors contributing to participant perceptions could consist of the experience and tenure of medical professionals. Medical professionals who are nervous working with the underserved populations (i.e., people of color, low income) and/or are new in their careers and lack experience interacting with these individuals may exhibit behaviors (i.e., verbal, non-verbal) that could be viewed as intentional. The verbal and non-verbal behavior communication cues act as negative enablers of health information and treatment seeking among underserved populations (Perloff, Bonder, Ray, Ray, & Siminoff, 2006).

The findings illuminated how medical professionals' behaviors could act as enablers. Enablers are positive or negative systematic, social, and/or cultural forces, which influence health behaviors (Abernethy et al., 2005). Thus, the voices of the participants conveyed that improvement, perhaps in the forms of education and training, could aid medical professionals with culturally competent knowledge, understanding, and interactions. Such improvements may modify the cultural perceptions of underserved populations and could diminish distrust for the medical system (Hall, Guidry, McKyer, Outley, & Ballard, 2013). This can be achieved through organization-led continuing education to improve effectiveness in working with diverse patients (Hall et al., 2013). Failure to address cultural incompetence of medical professionals can result in decreased utilization of medical and health care services, thereby contributing to

health inequities and disparities among minority populations (Hall et al., 2013).

Second, because of the strong spiritual foundation mentioned by the focus group participants, medical practitioners and researchers should partner with faith-based organizations, to act as nurturing settings to implement education and cultural awareness strategies to promote beneficial interactions (Abernethy et al., 2005). The variable of nurturing is defined as members of one's social network who assist in mediating health behaviors, beliefs, and attitudes (Abernethy et al., 2005). Thus, faith-based organizations, such as churches, are beneficial sites or safe spaces (Collins, 2000) for conducting interventions with underserved populations to build their capacity to effectively communicate with medical professionals for health information and treatment seeking (Matthews, Sellergren, Manfredi, & Williams, 2002). In addition, the findings suggested that health care providers can act as nurturers in health settings by being sensitive to the needs, questions, and concerns of patients.

Strengths and Limitations

There are notable strengths of the study, which include detailed recruitment and consent protocols, as well as findings analysis incorporating evidence-based transcription and coding methods. Although the research team proactively addressed potential barriers to data collection procedures, more extensive and precise strategies of moderator training will be implemented in future projects. These include evidence-based training materials addressing the avoidance of interjecting personal opinions by moderators, as well as approaches to keep participants focused on the questions stated in the moderator guide. The research team will also conduct a series of mock focus groups with moderators to provide them with application experience prior to data collection activities.

Conclusion

Consistent with published research, focus group participants conveyed various negative experiences with health care professionals. These included insensitivity, lack of professionalism, and poor communication. Possessing compassion and being personable are qualities conducive to increasing health services utilization and adherence to recommended guideline schedules within minority populations. As expressed within the PEN-3 framework, this study adds to the literature of cultural exploration of influential factors of individual and community-based behavior modification needing to be addressed to ensure effective minority-focused program/intervention planning and implementation activities.

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