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Perspectives of African American Women about Barriers to Breast Cancer Prevention and Screening Practices: A Qualitative Study

Abosede F. Obikunle

Jochebed Bosede Ade-Oshifogun
Andrews University, jochebed@andrews.edu

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Abosede F. Obikunle[1], Bosede Ade-Oshifogun[2]*

My Tees Healthcare Services, OH, USA[1]; Andrews University, Berrien Springs, MI, USA[2]

*__For Correspondence:__ Email: *jochebed@andrews.edu*; Phone: +1-269-471-3363

Abstract

Breast cancer is a severe illness that often has fatal consequences. Adherence to the recommendations for breast cancer surveillance is poorly practiced among African American women. The study aimed to identify barriers to preventative screening for breast cancer among African American women (AAW) using a qualitative research design. We explored the influence of personal barriers, stereotypes, socioeconomic status, culture, attitudes, and beliefs on African American women's behavior regarding breast cancer screening. Fourteen African American women were interviewed. Data analysis was completed with Interpretative Phenomenology Approach (IPA). This study's findings demonstrated that African American women perceived the barriers to breast cancer screening include lack of information about available resources, belief that screening cannot change genetic predisposition, embarrassment from exposing the breast for a mammogram, fear of mammograms, and fear of a positive result. These findings may be used to develop interventions to increase AAW's participation in breast cancer screening. *(Afr J Reprod Health 2022; 26[7]: 22-28).*

Keywords: Breast cancer, African, African American women, barriers, screening, mammography

Résumé

Le cancer du sein est une maladie grave qui a souvent des conséquences fatales. Le respect des recommandations pour la surveillance du cancer du sein est peu pratiqué chez les femmes afro-américaines. L'étude visait à identifier les obstacles au dépistage préventif du cancer du sein chez les femmes afro-américaines (AAW) en utilisant une conception de recherche qualitative. Nous avons exploré l'influence des barrières personnelles, des stéréotypes, du statut socio-économique, de la culture, des attitudes et des croyances sur le comportement des femmes afro-américaines concernant le dépistage du cancer du sein. Quatorze femmes afro-américaines ont été interrogées. L'analyse des données a été complétée par l'approche phénoménologique interprétative (IPA). Les résultats de cette étude ont démontré que les femmes afro-américaines percevaient les obstacles au dépistage du cancer du sein, notamment le manque d'informations sur les ressources disponibles, la conviction que le dépistage ne peut pas modifier la prédisposition génétique, l'embarras d'exposer le sein pour une mammographie, la peur des mammographies et la peur d'un résultat positif. . Ces résultats peuvent être utilisés pour développer des interventions visant à accroître la participation d'AAW au dépistage du cancer du sein. *(Afr J Reprod Health 2022; 26[7]: 22-28).*

Mots-clés: Cancer du sein, Africains, Afro-Américaines, barrières, dépistage, mammographie

Introduction

Cancer data from 2014 to 2018 continued to show a 0.5% annual increase in breast cancer[1]. With every new cancer diagnosis in women, about 30% are breast cancers[2,3]. Policymakers and stakeholders in the health sector have made significant progress in improving screening procedures and mammography practices for the general United States population. Non-Hispanic black women in the USA are more likely to die from breast cancer at any age than other races[1]. Barriers to breast cancer screening have generally been identified as logistical and psychological/knowledge-related[4]. One of the logistical barriers with AAW is difficulties accessing health care facilities and the cost and affordability of breast screening[4]. The cost particularly has psychological implications that hinder the choice to obtain mammography[5,6]. Other identified barriers include lack of education[7,8], lack of awareness, and inappropriate health insurance due to poverty[9]. Barriers to cancer prevention screening are not exclusive to AAW in the USA but apply to African women from Sub-Saharan Africa[10] and African migrant women[11]. Fear of the unknown related to cancer screening findings, fear of pain, and knowledge deficit about breast screening were barriers to screening practices of African migrants

to Australia[11]. Despite efforts to reduce breast cancer surveillance disparities, only a few qualitative studies have targeted AAW. Only a few studies have explored breast cancer prevention and screening with the behavioral model of health services use (BMHSU[12,13]). The studies utilizing the module focused on the predisposing, enabling, and need-related factors of AAW and other groups. Other studies also explored how personal barriers, stereotypes, socioeconomic status, culture, attitudes, and beliefs influence the preventive behaviors of AAW to breast cancer. However, no specific studies have investigated the individual perspectives of AAW regarding personal barriers, attitudes, and beliefs influencing their decisions for early breast cancer detection using BMHSU.

Andersen's BMHSU is among the most used frameworks for evaluating issues linked with patients' use of wellness services. Characteristics of the model include the population at risk, health care resources, and utilization. Utilizing this model helps relate the identified barriers qualitatively to breast screening services[14]. The decision of an individual to use health care services is determined, at least in part, by predisposing, enabling, and need-related factors[14]. Research shows that early detection of breast cancer increases the chances of survival[15,16]. This study's objective was to investigate the perspective of the AAW about prevailing barriers to breast cancer screening using the BMHSU. Specific questions addressed by this study were (a) What are the perceived barriers to breast cancer screening among African American Women?; (b) How can awareness of breast cancer screening and prevention be promoted among African American women?; and (c) How do stereotype and culture influence African American women's beliefs and behavior regarding breast cancer screening and prevention?

Methods

Recruitment and sample

Walden University Institutional Review Board approved this study following the USA Federal Policy for the Protection of Human Subjects. Upon IRB approval, the principal investigator approached members of a local church in an urban east coast region of the USA for recruitment. Fourteen AAW were recruited by purposive sampling. Inclusion criteria were being an AAW, age 40 years and older, with no previous or present diagnosis of breast cancer, ability to communicate fluently in the English language, and willingness to participate and be audio recorded. We included AAWs aged 40 years and older because the American Cancer Society (ACS) recommends all three protocols (Breast Self-Examination (BSE), Clinical Breast Examination (CBE), and mammography as guidelines for this age group[17].

Procedure

The study employed a qualitative approach to investigate the perceived barriers of AAW to breast cancer screening and prevention. We initially conducted a pilot interview with two volunteers to ensure the dependability of the interview questions. Afterward, we contacted 50 potential participants, and 14 interested participants consented to the study. The individual interviews were scheduled according to the participants' convenience. The semi-structured interviews focused on a priori themes from the literature review. The themes included knowledge about breast cancer screening and available resources; genetic stereotypes regarding the utilization of resources; cancer screening and cultural beliefs; and fear of breast cancer screening.

The individual structured interviews took place in private rooms to enhance confidentiality and privacy. The maximum time allocated for a single interview session was one hour. All interview discussions using an interview guide were audio-recorded. The principal investigator took observation notes that provided a secondary data source to augment the recorded data. Saturation occurred when we thoroughly explored all 21 questions prepared for the interviews, and no new themes emerged during the participants' interviews[18]. Privacy and confidentially were enhanced by coding the participants as P1, P2, P3…, and using computer passwords. We avoided bias by using open-ended questions, reflective summaries, and asking for clarifications.

To address data trustworthiness, we considered the elements of credibility, dependability, transferability, and confirmability. Credibility was enhanced by avoiding bias in the questions and recorded data. We exercised the utmost care when collecting, documenting, and examining the data to ensure dependability. We maintained transferability by ensuring that the study participants' perspectives and statements were

accurately described and central to the research. Lastly, we enhanced confirmability by ensuring that the interpretations and conclusions were based solely on the collected data. We completed member checks by requesting each participant to review the interpretations and conclusions for confirmation.
Some specific areas and concepts explored in the interview guide included barriers to breast cancer screening, attitudes, and beliefs towards breast cancer screening. Moreover, the interview questions provided information about the participant's views on other factors influencing breast cancer prevention services utilization.

Data analyses

The data analysis was completed by the NVivo 10 using the Interpretative Phenomenology Analysis (IPA) method. The interview recordings were transcribed, and transcripts were examined one at a time. We utilized the six-step data analysis process, according to Smith and Osborn[19]. These steps included looking for themes, finding connections, producing a table of themes, continuing the analysis with other cases, creating a master list of themes, and writing up the findings. Coding was conducted and compared among the two researchers for inter-coder reliability and confirmability. Two research team members joined the lead researcher to review the data and thematic analysis to heighten reflexivity.

Results

The pilot interviews gave a green light for the research because the interview questionnaire's interpretation and results confirmed the planned research concepts. The pilot interview provided insight into the time duration for answering the questions (30-60 minutes). We did not make any changes to the protocol after the pilot interview. The participants' ages were 40 to 62 years, with a mean of 50.07 years. Eleven participants were either working or had worked in the health care sector. The occupations of the other three participants were teaching, security, and a nanny. The study results were grouped into subthemes derived from analyzing the qualitative data using the a priori significant themes (see Table 1).

Knowledge about breast cancer screening

All participants understood the recommendations for mammograms and self-breast examinations. The participants identified and correctly described the mammogram and self-breast examination procedures. Despite the knowledge of breast cancer screening, five participants (P1, P4, P6, P7, and P11) stated that they did not utilize the available resources. P1 said, "*AAW should be proactive and take available screening resources*", although she preferred not to be screened. All participants emphasized the need for more education among AAW. Participant 4 advised, "*African American women should go for screening and by all means have a mammogram and do a self-examination*." The participants were knowledgeable about the need for breast cancer screening, but they didn't seem to want to utilize these preventative services.

Knowledge of available resources

Thirteen participants did not show substantive knowledge of free breast cancer screening resources. When asked about the availability of free breast cancer screening resources in their community, eight out of fourteen participants admitted being ignorant of available free breast cancer screening. For example, P11 claimed little knowledge of available breast cancer screening resources, though she claimed her daughter talked about these resources consistently. She said, *"My daughter has told me about mammogram resources, and she keeps on insisting that I should do it. But for me, I do not want it."* Another participant (P4) said, "*I did not know about the mammogram resources for cancer screening,*" though she had previously heard about mammograms as a breast cancer screening procedure. Participant 7 claimed, "*working in the healthcare field, I have a good knowledge about mammograms; however, I don't follow the recommendations."* The AAW interviewed were less aware of mammogram resources and less inclined to use them; therefore, they did not follow the ACS recommendations. In summary, the participants were not following recommended screening guidelines. They also showed limited knowledge of free breast cancer screening resources.

Table 1: Themes and subthemes derived from data analysis (N = 14)

Themes	Subthemes	N (%)
Knowledge of breast cancer screening	Knowledge of mammogram and self-breast examination procedures	14(100)
	Decreased utilization of available resources despite the knowledge	5(36)
Knowledge of available resources	Limited knowledge of free breast cancer screening resources	13(93)
	Limited knowledge of accessing available breast cancer screening resources in their community	8(57)
	Decreased utilization of available resources despite knowledge	5(36)
The stereotype that genetics affect the utilization of breast cancer screening resources	Family history of breast cancer predisposes to breast cancer and death	5(36)
	No family history of breast cancer will protect from breast cancer.	3(21)
Conflict with Cultural Beliefs	Some aspects of screening are against the cultural beliefs of African Americans, like touching the breasts.	6(43)
The Norm	It is normal for people not to go for a regular checkup if healthy.	5(36)
Fear of the Screening Procedure and Result	Fear of a positive breast cancer result.	4(29)
	Mammogram procedure is painful with physical discomfort during screening	10(71)
	Cancer screening machines are cold.	3(21)

Genetic stereotypes regarding the utilization of resources

Two participants with a family history of breast cancer think they can do nothing to prevent it. Five participants believe breast cancer in AAW is hereditary and deadly (P1, P2, P8, P9, P14). This stereotype that you can do nothing about genetic inheritance affects screening behaviors in AAW. For example, P1 and P2 described the action of AAW to ignore screening because of the belief that a family history of breast cancer predisposes that person to breast cancer and death. One participant commented on the effect of the environment on hereditary breast cancer predisposition. P1 said, "*Breast cancer might be genetic, but lifestyle pulls the gun*," thereby introducing the effect of lifestyle on breast cancer genes. "*I believe drinking alcohol can lead to breast cancer*," she continued. The above stereotype creates a barrier that discourages African American women from utilizing breast cancer screening resources. Participants with no family history of breast cancer think they are immune to the disease. For example, P8, P9, and P14 believe that their genetic history protects against breast cancer if there is no history of breast cancer in their families. P8 said, "*If you are a healthy person, eat well, and have no other disease and no family history of breast cancer, you will be fine*." Stereotypes may discourage AAW from utilizing breast cancer screening resources and following breast cancer screening recommendations.

Cancer screening and cultural beliefs

Some aspects of screening are against African Americans' cultural beliefs, thus hindering breast screening resources (P1, P2, P3, P5, P11, P12). Participant 12 noted, "*The pressing is so hard, touching and playing with your breasts, it's okay, but I would prefer somebody not touching or playing with my breasts*." Five participants expressed touching and handling breasts as concerning, which many referred to as "*playing with the breasts*." Touching one's breasts, an aspect associated with the self-breast examination conflicts with African Americans' culture. P2 said, "*Initially, to be fiddling with myself and massaging my breasts did not make sense to me*." In summary, AAW are hesitant to have anyone touch their breast for mammography.

'The Norm'

Generally, screening procedures that conflict with African American cultural beliefs may be barriers to breast cancer screening among AAW. Five participants claimed it is normal for African Americans not to go for any checkups (P1, P2, P10, P11, and P12). P1 said, "*Women don't feel like going to the hospital because they feel it is unnecessary unless they become very ill. Preventive measures are not part of the culture*." Participants feel they are healthy, believe that God is in control, or think they will look weak if they go for checkups. P12 said, "*Africans don't believe in health care much. They believe they are okay as long as they are well; they think they do not need it*." The cultural stereotype of breast cancer screening procedures and the belief that you only go for checkups when sick are barriers to breast cancer screening among AAW.

Fear of the screening procedure and result

Ten out of twelve participants felt that the mammogram procedure was painful, and physical

discomfort during screening may affect the utilization of the screening method (P1, P4-P8, P10-P13). The mammogram's discomfort may create a barrier to breast cancer screening. P1 said, "*the most challenging aspect about the screening is that it is very painful because of the pressing*," and P4 said, "*I don't like screening because it is painful*." Participants indicated that pain, the mammogram machine's coldness, and the overall discomfort associated with the breast cancer screening procedures discourage AAW from going for breast cancer screening. P1 linked the fear of pain during mammograms to the fear of positive results. She said, *"As if the pain from the machine pressure on the breast is not enough, the possibility of a breast cancer diagnosis is equally frightening"* P10, P12, and P13 expressed the fear of positive results. P10 commented on the procedure, and results, stating, "*The most challenging thing was waiting when they said they found something was scary was very scary. The experience called booby smashing, the cold. It doesn't bother me, but I wish it were warmer*." In summary, the likelihood of experiencing pain during the mammogram and the fear of a positive result may discourage some AAW from breast cancer screening.

Discussion

Our study explored the perceived barriers to breast cancer prevention and screening among African American women. The research findings added more information to previous studies that focused on barriers to breast cancer screening[4,20,21]. Participants' responses supported AAW's cultural beliefs and attitudes affecting their breast cancer screening behavior. Similar findings were observed among minority women in America, including AAW and Latina. Patient attitudes, beliefs, and accessibility of services were barriers to cancer screening[22].

Although eleven participants worked in the healthcare sector and claimed to know about breast cancer screening procedures, they seemed reluctant to practice them. The hesitation may be explained by the cultural belief of 'not playing with the breast' and fear of screening procedures and positive results. In a meta-analysis examining breast cancer screening in AAW, the authors found that culturally tailored interventions effectively increased mammography screening rates in this population[23]. The cultural belief about not touching or 'playing' with one's breast was similar to the embarrassment expressed by female African immigrants about exposing their breasts for screening[24]. The screening procedure details are vital to women agreeing to undergo it. Studies of the barriers and facilitating factors among regularly compliant and underserved women, including AAW, found that pain and embarrassment were negatively associated with mammogram screening[25,26]. We found a similar result as the participants from our study also feared undergoing a mammogram because of pain and embarrassment, which may constitute a barrier to breast cancer screening in this population.

The stereotype that genetics dictate who gets breast cancer is also a significant factor affecting breast cancer screening behaviors. Participants with a family history of breast cancer believe they are predisposed to get breast cancer and will die from it. This fatalistic belief decreases their motivation for screening, and they see preventative measures as unnecessary if heredity dictates death from breast cancer. A quantitative study reported a strong correlation between having a relative with breast cancer and mammogram but not self-breast examination[27]. This may support our participants' cultural belief of not touching the breast.

In a study of breast cancer screenings of African immigrants in Australia, healthy participants perceived breast cancer screening measures as a foreign concept[11]. The AAW in our study expressed a similar perception by stating the belief that healthy people do not require 'checkups.' This perception is in line with the African women studied in the UK., where the participants viewed themselves as low risk of breast cancer[28]. The participants in our study identified the fear of the unknown or death from breast cancer as a barrier to breast cancer screening. They feared the screening results might be positive. Though this fear may not be considered a barrier in developed countries[11], our study participants in the USA identified it as a barrier to seeking breast cancer screening. The behavioral change to mitigate these barriers among the AAW would require perceived seriousness of the disease, perceived increase in the likelihood of developing the disease, and perceived benefits of following the recommendations to outweigh the cost of overcoming the perceived barriers[29].

This study explored African American women's perceptions and experiences, giving

valuable insight into the beliefs, attitudes, and perceived barriers to breast cancer screening among this population. Perceived barriers should be considered when developing intervention measures to heighten awareness about breast cancer screening among African Americans. Although this study is focused on African American women, the findings were similar for African women migrants and African women from Sub-Saharan Africa[10,30].

Further work is required to determine the best educational method for teaching AAW regarding breast cancer prevention practices. Our study points to a need for increased breast cancer prevention awareness. Awareness programs should educate AAW on the available resources in the community and how they can access them. Aligning with the church and other African American community groups can increase awareness and access to screening resources[27].

This study was limited to African American women from a church in an urban east coast region with a small convenient sampling, limiting its generalizability. However, the in-depth interview approach provided insight and themes applicable to similar groups in the United States and other world regions.

Conclusion

In conclusion, the perceived barriers to breast cancer screening are lack of information about available screening resources, belief that genetics dictates who gets breast cancer, embarrassment from touch, a perception that it is normal not to go for checkups, the fear of mammogram, and the fear of getting a positive breast cancer diagnosis. Though knowledge and recommendations are essential to utilizing breast cancer screening and resources, other factors highlighted above are equally valuable among AAW. Education against dominant and retrogressive cultural beliefs such as the role of genetics and destiny in breast cancer may increase awareness of the need for preventative breast cancer screening among this population.

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