

Improving Adherence to Cervical and Breast Cancer Prevention among African American Women: A Photovoice Study

Wells A^{1*}, Allen-Brown V² and Alam N³

¹College of Allied Health Sciences, School of Social Work, University of Cincinnati, USA

²College of Education, University of Cincinnati, USA

³College of Medicine, University of Cincinnati, USA

Abstract

Cervical and breast cancer disparities persist in the U.S., with incidence being higher among white women, but mortality being higher among minority women, especially African American women. This study examined barriers and enablers of prevention among African American women. We used a Photovoice approach to collect qualitative data from 18 participants. Participants photographed cancer prevention-related experiences in mammography and Pap screening and discussed them in focus groups. In 2022, snowball sampling recruited women through churches in a Midwestern city. Participants were 22 – 75 years old. Most women were single (n=8 never married and n=2 divorced). Younger women with younger children averaged two children. Twenty-eight percent (28%) (n=5) of women cared for older family members. Many women were students or worked in the education profession (n=10). Results reveal that younger women reported limited proactive screening outreach from providers. Both age groups stressed family history and personal health in decisions. Barriers included transportation, time constraints, and childcare costs. Fear and stigma also delayed preventative care. Older women noted structural and access barriers; younger women cited poor cultural understanding in care. Family influence was a key enabler, motivating preventative behaviors. COVID-19 effects differed: younger women faced childcare burdens; older women increased preventative focus. Overall, the study highlights multifaceted barriers to screening among African American women. Systemic changes are needed and include better clinic access, extended hours, and stronger cultural competency. Findings advocate equitable care that addresses women of color's challenges and leverages family and community support.

Keywords: Breast cancer; Cervical cancer; African American women; Preventive behaviors; Qualitative; Photovoice Methodology

Introduction

African American women face disproportionately higher breast cancer mortality rates compared to White women, even with similar or lower incidence rates, with younger African American women experiencing higher incidence and mortality for breast cancer compared to their White counterparts [1-2]. For example, African American women have a 40% higher mortality rate from breast cancer than White women, despite overall incidence rates being similar or even lower [1-2]. This disparity is even more pronounced in younger women. Young African American women have higher breast cancer incidence rates than young White women and are more frequently diagnosed with aggressive breast cancer [3-4]. And for cervical cancer, Black women also show higher incidence and mortality rates than White women, with a substantial portion of cases occurring in younger to middle-aged women [5-6]. Even though national data show that a high proportion of Black women do get screened (in 2023, 86% of Black women ages 50–74 had a mammogram in the past 2 years, a higher rate than among White women, and historically Black women have had Pap test rates comparable to or higher than whites), the women who are missed by screening are at risk [7-8].

African American women face a range of obstacles and support when it comes to breast and cervical cancer screening. Many barriers are common across age groups, and include

the initial wave of the COVID-19 pandemic (March-May 2020), when there was a substantial decline in both breast and cervical cancer screenings due to healthcare facilities prioritizing COVID-19 care and postponing non-essential procedures [13]. So, the pandemic significantly impacted cancer screening rates for both breast and cervical cancer, particularly for African American women [14].

There are some factors, however, that uniquely affect younger women (18–40) or older women (41–80). For example, younger African American women (late teens through forties) generally have *higher cervical screening rates* than older women, as they face particular challenges and some may underutilize services. Many younger women do not consider themselves at risk for serious diseases like breast or cervical cancer, leading to a false sense of security [11,15]. Because routine mammograms are not typically recommended until age 40+, women in their 20s and 30s may ignore breast health altogether [16]. This lack of urgency can delay early detection and is a concern since Black women can experience breast cancer at younger ages and with more aggressive tumors. On the other hand, older African American women (mid-forties through seniors) are in the primary age range for routine mammography and, up to age 65, for routine Pap testing. This group, however, includes those *least likely* to be up-to-date with screenings. For many older women, especially post-menopausal, routine gynecologic care tapers off. They may not

see an OB/GYN regularly once past childbearing years, and primary care providers sometimes fail to recommend screening in this age group [10]. In addition, some older women reduce their clinic visits overall due to retirement, caregiving responsibilities, or assuming they've "outlived" the need for certain exams. Fewer medical touchpoints mean fewer prompts to get mammograms or Pap smears [17]. By midlife and older ages, many African American women are managing chronic conditions (e.g. diabetes, hypertension). These immediate health concerns can overshadow preventive screenings – both in the patient's mind and during doctor visits. Studies note that older women often cite other health problems as barriers that divert attention from cancer screening [10].

Despite the challenges, there are several enablers and motivators that support breast and cervical cancer screening among African American women. Many of these enablers mirror the barriers — essentially, removing obstacles and providing culturally-tailored encouragement greatly increases screening rates. A provider's endorsement is one of the most powerful enablers for screening. In focus groups, African American women have identified healthcare providers as important influencers encouraging them to get screened [9]. This is true across all ages – younger women often need information on why screening is important now, and older women may need reassurance that it's not too late or pointless. The expansion of Medicaid eligibility has been a way to increase screening in low-income populations [18].

Younger women, who may be uninsured or between jobs, especially benefit from advertised free clinics, while older women on Medicare benefit from knowing Medicare covers these tests at no cost [19]. Also, encouragement from family, friends, and community members is a strong motivator. A survey in an urban minority population found that the single greatest enabler for women showing up to cervical cancer screening was encouragement from a family member or friend [20].

Photovoice is a participatory visual qualitative research method where participants use cameras to document their environments, experiences, and perspectives on issues of importance to them, such as health, community concerns, or social inequities [21]. Combining photography with storytelling, the process empowers individuals, particularly from marginalized communities, by giving them a voice to express their realities, promote critical consciousness, and advocate for social change. Participants then discuss their photographs in group settings, using them as a basis for deeper reflection. Although few in the United States, photovoice research studies have been conducted concerning breast cancer/mammograms and cervical cancer screening (including Pap smears), primarily to understand barriers and enablers to screening among underserved and marginalized women [22-23]. These studies focus on survivors' experiences, community health workers' roles, and the impact of these diseases on quality of life and body image. For example, one photovoice study explored the context of cervical cancer screening among women in the United States, particularly focusing on their intentions to get screened. Participants used photos to document their daily lives and identify factors that influenced their decisions, such as cultural beliefs, social support from family and peers, and the economic burden of healthcare [22]. Another example of photovoice methodology was used to gain

insight into how African American women breast cancer survivors define their quality of life [24]. Despite photovoice methodology being used among African American women with breast and cervical cancer prevention, to our knowledge no studies have compared the unique experiences and perspectives of African American women in different developmental age categories. Identifying barriers and enablers is crucial for designing effective cancer control interventions which are not only scientifically sound but also tailored to diverse age groups and settings. As such, this study compares the barriers and enablers influencing cervical and breast cancer prevention among younger and older aged African American women.

Methods

Photovoice Method/ Design

This is a participatory descriptive qualitative study which used Photovoice, a research method aimed at uncovering barriers, concerns, or real-life experiences from those who have historically been marginalized or oppressed [21]. This study takes place within a diverse midwestern U.S. community.

This multi-step approach required that individuals in the community use cameras and charges them with taking photographs of their perceived realities [21]. A 60-minute group training session was provided to inform participants about the aim of the study, the Photovoice method, camera use, and Photovoice ethics. Participants were given two weeks to take photographs illustrating the Theory of Planned Behavior (TPB) influences discussed in the introduction section [25]. The framing question was: *What are some cervical and breast cancer prevention barriers and enablers?* The prompting questions given to participants included TPB probes about experiences related to cervical and breast cancer prevention, barriers and enablers to such prevention, and support influences. After two weeks, women attended a (virtual or face-to-face) focus group, along with their pictures (either taken on their telephone or a digital camera loaned to them). Participants were asked to share 10 exemplary photos, the meanings behind the photo within the context of the prompts, and how the photo related to their life and the people in her community. Based on the Photovoice "show-and-tell" methods, participants brainstormed during the focus group discussion [21].

Participants and eligibility criteria

A total of eighteen (n = 18) participants were enrolled in the study. We conducted three Photovoice focus groups, with 6 women in each group. Inclusion criteria: 1) identify as an African American woman, 2) 18 years or older, 3) working or retired, 3) living in Cincinnati, and 4) a member of St. Mark Christian Fellowship and/or neighboring Cincinnati church community networks.

Recruitment procedure

Snowball sampling was used to identify women from churches and church networks. Recruitment flyers included a brief study purpose, inclusion criteria, approximate time

commitment, incentive information, date/time of Photovoice focus groups, and researcher contact information. As an incentive for participation in a 1.5-hour Photovoice focus group, women received a \$25 Kroger grocery store gift card when they returned photos, and another \$25 Kroger grocery store gift card after the completion of the Photovoice focus group.

Ethical considerations

The study was approved by University of Cincinnati IRB (HRP-503 02-04-2020). Each participant was given a unique ID code as a form of de-identification. The participants had the option to borrow a camera or use their own phone camera.

Participants had two methods of submitting their photos. The first option was to use a de-identified camera and return the camera to the anonymous return basket where the research team would then be able to access the photos. The second option was to email photos, which would be uploaded to a secure password protected OneDrive folder that was only accessible to the research team. This OneDrive folder was password protected and required two-factor authentication before any research team was able to access it. From there, the photos were deleted from the cameras. None of the photos could be traced back to a single participant. The identity of each participant was protected through these measures.

Data was stored in a study database, created through the University of Cincinnati Microsoft OneDrive (a safe and reliable data management cloud source service). This database was password protected against non-project personnel and backed up weekly. It was only available to the study Principal Investigator (PI) and research assistants. The photos and audio recordings were uploaded to the OneDrive folder. There were no video recordings.

During the transcription process, the audio recordings de-identified the speaker's names and any other identifying information. This de-identification process detected identifiers (e.g., personal names) that directly or indirectly pointed to a person, omitted/deleted those identifiers from the data, then replaced identifiers with unique, artificial codes (i.e., ID#1, ID#2,...). The audio recordings were deleted after transcription.

There were minimal risks and discomfort to participants. All efforts were made to minimize physical or emotional risk to the study participants.

Data Analysis

During the first phase of data analysis, the PI hoped to find the extent to which perceptions about breast/cervical cancer and treatment and to identify individual and structural barriers and enablers that play a part in the patient's decisions to receive a Pap screening and/or mammogram. All trainings and focus groups were audio recorded for accuracy. Using a methodology of "Coding Consensus, Co-occurrence, and Comparison" [26] and rooted in grounded theory [27], all transcripts were initially analyzed and independently coded by research team members at a very general level in order to condense the data into analyzable units. Segments of text were assigned codes based on a priori TPB sensitizing concepts (i.e., prompting questions). Following the open coding, codes were assigned to describe connections between categories and between categories and subcategories (also known as axial coding) [28]. During this process, short descriptive memos were prepared to document all investigators' initial impressions of the topics and themes and their relationships and to define the boundaries of the specific codes [29]. Through the process of comparing these categories with each other, the different categories were further condensed into broad themes using a format that places perspectives about cervical and breast cancer, recruitment protocol and factors that impact adherence to Pap screening and/or mammogram. This qualitative study established findings were trustworthy and credibility through use of triangulation among research team members [30]. Investigator triangulation was used to enhance the overall rigor of findings.

Results

Table 1 represents sample demographic information. Women ranged in ages from 22 – 75 years old. According to NIH developmental age categories, there were eight younger adults (18-40 years old); six middle-older age adults (41-64 years old); and four older adults (65 years and older). Most women were single (n=8), with an average of 2 children, and approximately 28% of the sample (n=5) were caring for family members. There were eight younger women who had school aged children; and middle-older and older aged adults who were caring for family, took care of seniors in their family. All of the women had some college training or had obtained a 4-year college degree. The professional status included three students, three retirees, and 12 employed women. Most were either students or employed in the educational profession (n=10). Ten were unmarried and eight were married.

Community Partner ID	Age	Education	Marital Status	Professional Status	Number of school age children	Caregiver
1.	22	Yes	Single	Student	0	No
2.	28	Yes	Single	Doctoral Student	0	No
3.	37	Yes	Single	Manager	1	No
4.	40	Yes	Single	Animal Researcher	1	No
5.	23	Yes	Single	Broker Trainee	0	No
6.	38	Yes	Single	School Counselor	2	No
7.	32	Yes	Single	Doctoral Student	0	No
8.	49	Yes	Married	Administrator	2	Yes
9.	40	Yes	Married	First Lady/ Homemaker	4	No
10.	68	Yes	Married	Retired Educator	1 (older)	Yes
11.	60	Yes	Married	Social worker	2 (older)	No
12.	58	Yes	Single	Accounting dept.	0	Yes

13.	65	Yes	Divorced	Teacher	1 (older)	Yes
14.	75	Yes	Married	Retired - Director of Childcare Center	2	No
15.	69	Yes	Divorced	Retired Teacher	2 (older)	Yes
16.	50	Yes	Married	Administrator	1	No
17.	61	Yes	Married	Educator	3 (older)	No
18.	45	Yes	Married	Administrator	4	No

Table 1: Sample demographic information.



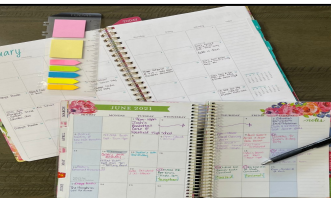
Themes







There were age-specific experiences for younger vs. older women. Differences in personal health experiences had to do with the developmental stage of the woman and where they were in their lives. Younger women describe the inexperience with mammogram screening and the lack of discussion from their health care providers, unless initiated by the patient. These women, who all had college degrees, discussed the desire for more dialogue and proactive engagement from healthcare providers about preventive

screenings like mammograms and pap smears. Younger women also discuss age-specific sentiments about prevention, like the focus on technology leading to a “more sedentary lifestyle” and the “termination of coverage from parents” health insurance.

Both groups of women discuss the relevance and importance of family history and influences. Women report personal health experiences and stories about health scares, cancer diagnoses, and family health history.

Table 2 presents the barrier and enabler themes and codes, and exemplary quotes with corresponding images.

Themes - Barriers/ Enablers	Codes	Exemplary Quote	Photovoice Results
Logistical Barrier	Childcare	<p>“People don't have the money or the resources to have daycare to schedule this extra appointment.” (<i>Younger WOMAN</i>)</p> <p>“As we know childcare in America can be expensive. If you wanted to visit the doctor's office and you have children, you would need childcare because there are even more restrictions with having visitors come to your appointment due to COVID. Most people cannot afford to miss work and pay the medical bill plus childcare fees.” (<i>Younger WOMAN</i>)</p>	 <p>This picture represents the second quote.</p>
	Time Constraints	<p>“The clock is always present in our lives. As a retiree, I've realized that life is like a game against time. From the moment we wake up in the morning, we find ourselves running to beat the clock. Mothers, especially single moms, have to prepare their children for school by walking them to school, taking them to the bus stop, or even driving them. After getting back home, they have to get ready for their workday. Once work is over, they have to pick up their children, help them with homework, and prepare dinner before finally getting to bed, only to do it again the next day. The clock symbolizes life, reminding us there is always something to do. When can we make a doctor's appointment or go in for a screening?” (<i>Older WOMAN</i>)</p>	
		<p>“Scheduling appointments around our daily lives is a challenge. The clock doesn't stop for healthcare; we're always racing against it, trying to fit crucial screenings and check-ups into already packed schedules.” (<i>Older WOMAN</i>)</p>	
	Transportation	<p>“Impact of inflation on transportation costs to healthcare appointments: Inflation has impacted gas prices ... if you have a vehicle that is only half the battle ... you also have to be able to afford gas to get to appointments.” (<i>Younger WOMAN</i>)</p> <p>“The distance to healthcare facilities is a real barrier for many in our community. It's not just about getting there; it's about the time and effort, especially when public transportation</p>	

		<p>routes don't align with our needs.” (Older WOMAN)</p>	 <p>This picture represents the second quote.</p>
		<p>“The location of healthcare services means traveling far from our neighborhoods, which is inconvenient and sometimes impossible for those without reliable transportation. This disparity in where services are located, compared to where people live, creates significant access issues.” (Older WOMAN)</p>	
Mental Health	Fear from previous health scares	<p>“Also, a bit of fear around a mammogram because of my family's history of breast cancer since mammograms and Pap's can have negative impacts on the body, as well as positive for detection.” (Younger WOMAN)</p>	
	Stigma	<p>“The stigma around mental health can be more debilitating than the (cancer) condition itself. It prevents people from seeking help and isolates them when they need support the most. As a community, we can change this narrative and foster a culture of understanding and empathy.” (Older WOMAN)</p>	 
Structural	Environmental influences	<p>“We're dealing with asbestos in old buildings and lead paint in homes we move into. These aren't just concerns, they're realities we live with, captured in my collected photos. Although I haven't compiled them yet, these images tell a story of environmental neglect and the need for greater community awareness and action.” (Older WOMAN)</p>	

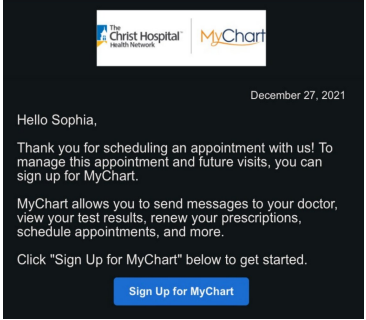

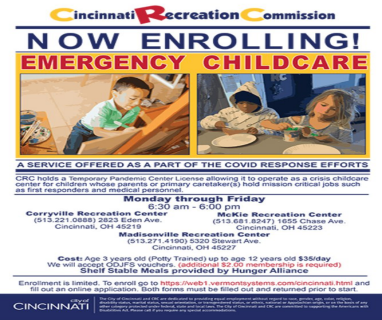

	Provider systems	<p>“On the outside, looking in, when you're talking to somebody from your own community, they kind of have maybe not the same background, but at least know a lot more of what your situation is or what it could be, as opposed to somebody who has a completely different background.” (<i>Younger WOMAN</i>)</p> <p>“I specifically try to find a Black woman OB/GYN, but a lot of times, mine have been White women or White men ... I'd rather have a White woman over a man, but preferably a woman of color.” (Younger WOMAN)</p>	 <p>This picture represents the second quote.</p>
Family Enablers	Elder influences	<p>I haven't had much experience with mammograms and things like that. I know that although I am on the younger side, because of my family history and the way that cancer and breast cancer specifically run in my family, that's something that my primary physician is starting to tune more in, like, 'What age did other family members get it?' so they know when I should start getting my checkups...” (<i>Younger WOMAN</i>)</p> <p>“This picture was taken last year at my grandmother's 90th birthday celebration. That's my grandmother. I took this picture because I was thinking about breast cancer and its hereditary nature. My grandmother is very intentional. She's very deliberate about going to the doctor, keeping her appointments, and things of that nature. At 90 years old, she's still driving, texting, grocery shopping, and visiting the pantry. Her mobility is inspiring. This photo is my favorite because it embodies a powerful message: If she, at 90, can maintain her independence and diligently keep her doctor's appointments, I am surely capable of doing the same.” (<i>Older WOMAN</i>)</p>	 <p>This picture represents the second quote.</p>
Impact of COVID-19	Childcare burdens	<p>“If you wanted to visit the doctor's office and you have children, you would need childcare because there are even more restrictions with having visitors come to your appointment due to COVID.” (<i>Younger WOMAN</i>)</p>	
	Preventive care	<p>“I was hesitant about getting the HPV vaccine for my kids at first. I didn't have a history of cancer, so I was unsure if it was necessary. However, when the COVID-19 vaccine was released, I decided to get my kids vaccinated. It made me think about the HPV vaccine again and why we were so against it. We get the flu and other vaccines, so what was the issue with this one? After discussing it with my husband, we couldn't find a reason not to get it. We decided to catch our kids up on their HPV vaccines during their upcoming well-check visits.” (<i>Older WOMAN</i>)</p>	

Table 2: Overarching Question: What are some cervical and breast cancer prevention barriers and enablers?

Barriers and Enablers

Logistical Barriers: Barriers to Pap screening and/or mammogram included logistical, mental health, and structural

issues; and enablers included family influences. We were also interested in the influence of COVID-19 on mammograms and Pap smear screening.

Younger women discuss the barrier of caregiving; not just the logistical issues related to finding childcare, but also the additional expenses related to childcare. The financial expenses related to the clinic appointment were an extra stressor for mainly younger women with school age children. Results highlight the logistical challenges women face in accessing mammogram and Pap screening, underscoring the need for in part, systemic and structural changes. There were many references to the importance of time, specifically the lack of time creating barriers to preventive screening. Older women mainly describe the issue of time to be of particular concern, especially as it relates to constraints of restricted clinic hours and balancing appointments, which often interfere with work schedules. Older women also spoke about the lack of information and resources needed to access preventive health care.

Another logistical issue discussed by both groups of women involved proximity of appointment location from their neighborhoods. Women discussed the inconvenience and travel needed to access health care. Along with this discussion came the issue of transportation, discussed among both young and older women. Transportation barriers often involved the discussion about cost concerns related to “inflation” and the increased cost of gas. Women also discussed the affordability and the reliability of transportation. These quotes underscore the complexity of managing time and scheduling, particularly when accommodating healthcare appointments amidst other life responsibilities. The references to clocks and calendars highlighted the constant negotiation between personal, work, and healthcare needs, illustrating how time and organization play critical roles in healthcare access and management.

Mental Health - Psychological Barriers: Both groups of women discussed the fear, stigma, and psychological and emotional impact of previous health scares and the stigma associated with mental health that often contributes to delay in accessing preventive healthcare. These quotes emphasized the need to shift how mental health is perceived and discussed within communities. The participants highlighted the detrimental impact of stigma on individuals' willingness to seek help.

Structural Barriers: Older women discussed the issue of environmental justice and the uneven distribution of environmental hazards. Only younger women brought up discussions which reflect a broader narrative of health disparities faced by women of color, influenced by historical and ongoing discrimination in the healthcare system. This included issues like being underrepresented in clinical research, disparities in treatment and diagnosis, and the systemic nature of these challenges. Younger women pointed out the critical issue of healthcare providers lacking an understanding of patient background, which often leads to disparities in care: These examples underscore the multifaceted nature of health disparities and discrimination, spanning from interpersonal interactions with healthcare providers to systemic issues embedded in laws, policies, and healthcare practices.

Family Enablers: Older women highlight the enabling and motivational role family members play in maintaining preventive health. Elder family members set an example of proactive health management and the importance of staying healthy to continue fulfilling roles within the family and community. Results illustrate the family's critical role in health-related decision-making, support during medical

procedures, and motivation for attending to one's health. Results convey a sense of shared responsibility, emotional support, and the importance of family in the healthcare journey, emphasizing how family members, from grandparents to children, contribute to and are affected by healthcare experiences.

Impact of COVID-19: Both groups of women discuss the impact of the COVID-19 pandemic lockdown on mammography and cervical screening preventive screenings, but mainly for slightly different reasons. Younger women specifically discussed how COVID-19 restrictions with having visitors come to appointments created childcare burdens. Several of these women discussed how having to find available childcare and the related expenses were barriers to accessing clinic services. Whereas older women discussed the impact of COVID-19 being positively related to a greater focus on their general preventive health behavior, as well as for their family. Older women discussed reported thinking more about improving their lifestyle through exercising more. One woman also discussed how COVID-19 prompted her to get other preventive vaccinations for her children (i.e., HPV vaccinations).

Discussion

This section interprets the qualitative findings on the experiences of younger and older African American women accessing preventive cancer care, exploring age-specific differences, barriers and enablers, and the influence of COVID-19. The results highlight how age and developmental life stage shape health information needs, the navigation of logistical and psychosocial challenges, and responses to broader systemic issues. This section also addresses women's recommendations and implications for clinical public health practice aimed at improving equitable access.

Age-specific experiences with preventive cancer health

The finding that younger women felt a lack of proactive dialogue from healthcare providers regarding mammogram and Pap smear screening underscores a critical gap in communication within the clinical setting. These participants, all having some degree of college education, expressed a desire for more comprehensive engagement, rather than having to initiate these conversations themselves. This reflects a generational difference in health literacy and a reliance on providers for guidance, particularly during a life stage when preventive cancer screenings may be a new experience. In contrast, the experiences reported by older women point to a well-established pattern of proactive health management, influenced by family history. This suggests that as women age, and potentially witness family health concerns, their health-seeking behavior shifts from reactive to proactive, a phenomenon documented in existing literature [31]. The emphasis on family history among both younger and older women, though stemming from different life experiences, highlights a universal motivational factor for engaging with preventive cancer care, suggesting that family health narratives are powerful drivers for health behavior change across all ages.

Barriers, enablers, and systemic inequities

The study identified a multifaceted range of barriers to accessing preventive cancer care, including logistical, psychological, and structural issues. Concrete logistical challenges related to time, childcare burdens, transportation, and appointment scheduling were particularly pronounced among younger women with children, amplifying financial stressors and the constant negotiation between competing life priorities. For older women, time constraints were more related to navigating inflexible clinic hours alongside work schedules. The shared issues of clinic proximity and reliable transportation underscore broader systemic access issues exacerbated by economic pressures like inflation, consistent with other research on healthcare access barriers [17].

Beyond logistics, psychological barriers such as fear and stigma were apparent for both age groups. This finding emphasizes the need for a shift in how mental health is discussed within communities to encourage help-seeking behavior for health-related anxieties and past health scares. The study also revealed distinct structural barriers based on age. Older women's concerns about environmental justice might reflect a longer history of observing and experiencing environmental health inequities [32] while younger women uniquely discussed systemic health disparities impacting women of color. The younger women's reflections on historical discrimination, underrepresentation in research, and providers' lack of cultural understanding point to an awareness of systemic issues influencing equitable care that may be more prominent among this generation.

The critical role of family as an enabler for health maintenance was highlighted, particularly by older women, who drew upon elder family members' examples as motivation. This suggests that positive family health role modeling can be a significant motivator for preventive health behavior.

The dual impact of COVID-19

The COVID-19 pandemic presented distinct challenges and motivations for both groups of women. For younger women, lockdown restrictions created significant barriers to preventive screenings, especially due to visitor policies that complicated childcare arrangements. This finding adds to the growing literature on the pandemic's disproportionate impact on caregivers and highlights how public health measures, while necessary, can create unintended access barriers [33]. Conversely, older women often reported a more positive impact, describing increased focus on general health behaviors, such as exercise, prompted by the pandemic. The pandemic's ability to trigger a greater sense of health awareness and motivation among older adults is a novel finding with potential implications for future public health campaigns [34]. The discussion of increased vaccination uptake for family members among older women also highlights the pandemic's influence on family health priorities beyond immediate COVID-19 concerns.

Limitations and Future Research

This study's findings are based on qualitative data from a specific group of women and may not be generalizable to broader populations. Future research could utilize mixed-methods approaches to quantify the prevalence of these barriers

and enablers and assess the broader impact of age-specific experiences on preventive screening rates. Additionally, studies could focus on developing and testing interventions, such as provider communication training or community-based support programs, designed to address the specific needs and concerns of different age cohorts. Further research is also needed to explore the long-term impacts of COVID-19 pandemic-related disruptions and subsequent behavioral changes on women's preventive health outcomes.

Conclusion/ Implications

The study's findings highlight how women's experiences with preventive cancer care are profoundly shaped by their developmental life stage, intersecting with broader systemic and contextual factors. The age-specific differences in health information needs, navigation of logistical hurdles, and responses to COVID-19 provide crucial insights for targeted public health interventions. Healthcare systems must recognize and address the nuanced needs of women across their lifespan. This includes enhancing provider communication training to promote proactive dialogue, implementing flexible and accessible service models, and developing culturally competent care to address structural inequities. By prioritizing these age-specific and systemic considerations, public health strategies can better support all women in accessing and maintaining optimal preventive health.

Conflict of Interest

The authors deny any conflicts of interest.

References

1. American Cancer Society (2024-2025) A Cancer Journal for Clinicians and in Breast Cancer Facts & Figures 2024-2025.
2. Chavez-MacGregor M, Lei X, Malinowski C, et al. (2023) Medicaid expansion, chemotherapy delays, and racial disparities among women with early-stage breast cancer. *JNCI: J Natl Cancer Inst* 115(6): 644-651.
3. Huq MR, Woodard N, Okwara L, et al. (2021) Recommendations for breast cancer education for African American women below screening age. *Health Educ Res* 36(5): 530-540.
4. Johnson AJ, Johnson MJ, Williams JB, et al. (2025) Cervical cancer prevention behaviors in young Black women. *Women's Health* 21.
5. Spencer JC, Kim JJ, Tiro JA, et al. (2023) Racial and ethnic disparities in cervical cancer screening from three U.S. healthcare settings. *Am J Prev Med* 65(4): 667-677.
6. Benard VB, Watson M, Castle PE, et al. (2012) Cervical carcinoma rates among young females in the United States. *Obstet Gynecol* 120(5): 1117-1123.
7. Agénor M, Noh M, Eiduson R, et al. (2024) Barriers to and opportunities for advancing racial equity in cervical cancer screening in the United States. *BMC Women's Health* 24(1): 362.
8. Komen SG (2025) How Do Breast Cancer Screening Rates Compare Among Different Groups in the U.S.?

9. Christensen K, Bauer AG, Berkley-Patton JY, et al. (2024) "Black Women Don't Always Put Our Healthcare First": Facilitators and barriers to cervical cancer screening and perceptions of human papillomavirus self-testing among church-affiliated African American Women. *Community Health Equity Res Policy* 44(2): 137-150.
 10. Akinlotan M, Bolin JN, Helduser J, et al. (2017) Cervical cancer screening barriers and risk factor knowledge among uninsured women. *J Community Health* 42(4): 770-778.
 11. Chen T, Kharazmi E, Fallah M (2023) Race and ethnicity-adjusted age recommendation for initiating breast cancer screening. *JAMA Netw Open* 6(4): e238893.
 12. DeGroff A, Miller J, Sharma K, et al. (2021) COVID-19 impact on screening test volume through the National Breast and Cervical Cancer early detection program, January–June 2020, in the United States. *Prev Med* 151: 106559.
 13. Marcondes FO, Cheng D, Warner ET, et al. (2021) The trajectory of racial/ethnic disparities in the use of cancer screening before and during the COVID-19 pandemic: A large U.S. academic center analysis. *Prev Med* 151: 106640.
 14. Zhang X, Elsaid M, DeGraffinreid C, et al. (2023) Impact of the COVID-19 pandemic on cancer screening delays. *J Clin Oncol* 41(17): 3194-3202.
 15. Silverman E, Woloshin S, Schwartz LM, et al. (2001) Women's views on breast cancer risk and screening mammography: A qualitative interview study. *Med Decis Making* 21(3): 231-240.
 16. Cathcart-Rake EJ, Ruddy KJ, Bleyer A, et al. (2021) Breast cancer in adolescent and young adult women under the age of 40 years. *JCO Oncol Pract* 17(6): 305-313.
 17. Miller JW, King JA, Trivers KF, et al. (2024) Vital signs: Mammography use and association with social determinants of health and health-related social needs among women — United States, 2022. *MMWR Morb Mortal Wkly Rep* 73(15): 351-357.
 18. Zeno EE, Brewer NT, Spees LP, et al. (2022) Racial and ethnic differences in cervical cancer screening barriers and intentions: The My Body My Test-3 HPV self-collection trial among under-screened, low-income women. *PLOS ONE* 17(10): e0274974.
 19. Hansmann KJ (2022) Medicare 101: Navigating the rules for coverage and benefits in clinical practice. *Fam Pract Manag* 29(1): 21-25.
 20. Higgason N, Nguyen L, Le Y, et al. (2024) Facilitators to cervical cancer screening in a minority, urban, underserved population. *Gynecol Oncol Rep* 51: 101315.
 21. Wang C, Burris MA (1997) Photovoice: Concept, methodology, and use for participatory needs assessment. *Health Educ Behav* 24(3): 369-387.
 22. Mayfield-Johnson S, Rachal JR, James Butler III (2014) When we learn better, we do better: Describing changes in empowerment through photovoice among community health advisors in a breast and cervical cancer health promotion program in Mississippi and Alabama. *Adult Educ Q* 64(2): 91-109.
 23. Capewell C, Ralph S, Symonds M (2020) Listening to women's voices: Using an adapted photovoice methodology to access their emotional responses to diagnosis and treatment of breast cancer. *J Patient Exp* 7(6): 1316–1323.
 24. López EDS, Eng E, Randall-David E, et al. (2005) Quality-of-life concerns of African American breast cancer survivors within rural North Carolina: Blending the techniques of photovoice and grounded theory. *Qual Health Res* 15(1): 99-115.
 25. Montano DE, Kasprzyk D (2002) The theory of reasoned action and the theory of planned behavior. Glanz, R., Lewis, Rimer, B.K., Lewis, F.M., Eds., *Health Behavior and Health Education*, Jossey-Bass, San Francisco, United States of America, pp. 67-98.
 26. Williams DG, Best JA, Taylor DW, et al. (1990) A systematic approach for using qualitative methods in primary prevention research. *Medical Anthropology Quarterly* 4: 391-409.
 27. Glaser B, Strauss A (1967) The discovery of grounded theory: Strategies for qualitative research. Aldine de Gruyter, New York.
 28. Strauss AL, Corbin J (1998) Basics of qualitative research: Techniques and procedures for developing grounded theory. Thousand Oaks, Sage, CA.
 29. Miles MB, Huberman AM (1994) Qualitative data analysis. (2nd edn), Thousand Oaks, Sage Publishing, CA.
 30. Intellectus Consulting by Intellectus360 (2025) What is trustworthiness in Qualitative Research?
 31. Greco KE, Nail LM, Kendall J, et al. (2010) Mammography decision making in older women with a breast cancer family history. *J Nurs Scholarsh* 42(3): 348-356.
 32. Williams WM, Fu MR (2023) Understanding breast cancer disparities affecting black women: Obtaining diverse perspectives through focus groups comprised of patients, providers, and others. *J Community Health* 48(5): 834-839.
 33. MacCallum-Bridges CL, Admon LK, Daw JR (2024) Childcare disruptions and maternal health during the COVID-19 pandemic. *Health Aff Sch* 22(5): qxae061.
 34. Sams N, Darnell D, Fisher D, et al. (2023) Understanding the impact of the COVID-19 pandemic on U.S. older adults: Self-reported pandemic-related concerns and consequences in a cross-sectional survey study. *Front Psychol* 16: 14.
- *Corresponding author:** Anjanette Wells, PhD, LISW, College of Allied Health Sciences, School of Social Work, University of Cincinnati, USA; e-mail: wells2aa@ucmail.uc.edu
- Received date:** October 10, 2025; **Accepted date:** December 01, 2025; **Published date:** December 14, 2025
- Citation:** Wells A, Allen-Brown V, Alam N (2025) Improving Adherence to Cervical and Breast Cancer Prevention among African American Women: A Photovoice Study. *J Health Sci Educ* 9(4): 261.
- Copyright:** Wells A, Allen-Brown V, Alam N (2025) Improving Adherence to Cervical and Breast Cancer Prevention among African American Women: A Photovoice Study. *J Health Sci Educ* 9(4): 261.