

'I want to live for them'; Determinants of Uptake of Clinical Breast Examination: A Qualitative Inquiry

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Abstract

Background

Clinical breast examination is still relevant in resource-constrained countries for the early detection of breast cancer. Uptake of breast cancer screening programmes in developing countries remains low. It is imperative to explore the factors that influence women's decision to participate in screening services.

Objective

To examine the perceptions, motivations, and barriers to uptake of clinical breast examination.

Methods

This was a descriptive qualitative inquiry. Twelve women who participated in clinical breast examinations were purposively sampled for semi-structured interviews. Interviews were audio-taped, transcribed verbatim, and thematically analysed.

Results

Fear of death, personal interest, excellent customer service, and public education motivated participation in the clinical breast examination. Perceived benefits included psychological relief, early detection, inspiring other women, and the acquisition of skills and knowledge. Anxiety about being diagnosed with breast cancer, financial constraints, poor service delivery, and peer pressure were the perceived barriers. Participants who felt anxious about breast cancer performed self-breast examinations more often than the standard practice. The knowledge of participants about breast cancer and breast cancer screening techniques was generally poor.

Conclusion

Health interventions designed to promote health seeking behaviors need to be realigned to reflect the evidence on the factors influencing the uptake of these interventions.

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Background

The incidence of breast cancer is on the increase worldwide. Breast cancer is one of the leading causes of death in women worldwide,[1–3] with developing-country women bearing a disproportionate share of the burden.

It is estimated that 2.1 million new cases of breast cancer are diagnosed each year.[4] In Ghana, breast cancer remains a major public health concern and is the most common cancer among women, with about 4482 new cases recorded in the year 2020. [5]

Although developing countries record lower incidences of breast cancer compared to developed countries, mortality rates are observed to be higher among African-born women[6], probably due to late-stage diagnosis.[7]

Delayed diagnosis of breast cancer leads to a high morbidity and mortality rate and a high economic loss to the state. Evidence suggests that over 60% of breast cancer patients in Ghana report having late stage 3 or 4 of the disease.[8] Lack of resources for preventative services for early detection and adequate treatment also accounts for the increasing mortality rates. [4] Further evidence reveals that black women are diagnosed with breast cancer at an earlier age. This was confirmed by a study conducted in Ghana in 2016 showing a possible shift in the incidence of breast cancer to women in their early twenties. [9] It has been projected that 1.2 million new cancer cases and 970,000 cancer deaths will be recorded among Africans by 2030 because of aging and growth in the population.[1] All efforts are needed to implement health interventions that can nip the surging menace of the disease in the bud.

Over the years, much confidence has been placed in the critical role of screening programmes in the early detection of breast cancers.[10,11] However, early detection of breast cancer is a challenge in many developing countries, including Ghana, where resources are limited and structured screening services are uncommon or appear inaccessible.[12] A nationally accessible provision of advanced screening services such as mammography, breast ultrasound, breast magnetic resonance imaging, etc. is neither feasible nor cost-effective in many LMICs.[13,14] Ghana does not have a comprehensive national cancer registry nor a breast cancer control policy[9] to guide public health programme planning and patient care enhancement. Thus, improving the uptake of cost-effective breast cancer screening methods such as Clinical Breast Examination (CBE) has become the best affordable life-saving strategy.

CBE is recommended in resource-constrained countries to support early detection of breast cancer despite the paucity of sufficient evidence on its benefits.[10]

Uptake of breast cancer screening programmes is poor in many developing countries including Ghana.[15] Yet, health promotion interventions have not adequately improved the situation. It has been projected that, by 2024, over 55% of the breast cancer cases globally will be from LMICs. [16] However, the 2014/2015 Study on global AGEing and adult health (SAGE) data estimated that only 4.5% of older women in Ghana have ever undergone breast cancer screening.[17] Many reasons have been adduced for poor uptake of breast cancer screening services among women from developing countries. For instance, African women continue to underestimate their susceptibility to breast cancer probably due to their inadequate knowledge of breast cancer and breast cancer screening services[18] and their lack of appreciation of the importance and practice of early breast cancer detection interventions.[2] Cultural differences, religious beliefs, language barriers on their perception of health and attitude to illness in general also accounted for the poor uptake among Africa women.[19–21]

Previous studies investigated breast cancer-related knowledge and perceptions of women with breast cancer, [13,22]their relations, [22] or practices and barriers to self-breast examination (SBE).[23] However, there is a dearth of evidence on the perception of healthy women who voluntarily patronise CBE programmes to enable health promoters to understand the motivations of such groups and formulate effective communication strategies to increase utilization of the screening services among the populace. In a cross-sectional study assessing women's perceived risks of breast cancer and its influence on their behaviour towards breast cancer screening, the authors found that although there was a positive association between perception of breast cancer risk and uptake of breast cancer screening programmes, the association was not statistically significant.

The screening behaviour of women who participated in the study was, nevertheless, influenced by their religious and socio-cultural beliefs.[24] Previous qualitative studies with other women's groups reported a low perception of the risk of breast cancer. Fear, fatalistic beliefs, belief in the unavoidability of suffering due to fate, and discomfort in undergoing sensitive physical examination all influenced screening programme participation. [16,22] An adequate understanding of the perceptions, motivations, and barriers to the uptake of CBE therefore becomes relevant to inform the design of effective behaviour change policies. This is critical to augmenting concerted efforts to promote early detection of the disease. This study was therefore conducted to advance our understanding of the perceptions, motivations, and barriers of women participating in a CBE programme.

Methodology

Study design and study setting

A traditional qualitative descriptive method of inquiry was used in this study. This particular design was chosen as the study was a naturalistic inquiry into understanding the experiences of the women who underwent a clinical breast examination. According to Creswell, the desired method for an exploratory study is the qualitative approach, and it helped to comprehend the health-seeking behaviour of participants.[25] The study setting was a 400 bed-capacity facility in the Greater Accra region of Ghana that caters for the health needs of military personnel and their dependents as well as civilians. It is also the emergency and disaster management hospital for the government of Ghana. It is bordered by the Obasanjo highway, the Army officers' mess, Maamobi township, and the Akuffo-Addo interchange on its northern, southern, western, and eastern borders, respectively.

Study population, sample size and sampling technique

The study population comprised adult civilian women aged above 25 years who lived outside or within the barracks and voluntarily participated in the 2020 global breast cancer awareness month CBE programme at a tertiary military hospital.

Twelve (12) participants were purposively recruited for the study by the first and fourth authors. The sample size was obtained upon attainment of data saturation, when further data collection and/or analyses yielded no new information. The participants included women who were mentally capable of making informed decision to participate in the study and could speak English. Participants' ability to communicate in English enhanced the data collection process. Women who were being treated for any breast condition by the medical personnel were excluded because the breast problems could confound their decision to undergo the CBE.

Data collection instrument and procedure

The authors reviewed and selected existing interview questions from previous related studies[18,26–28] that used the Health Belief Model (HBM) framework as a guide. These questions made up the semi-structured interview guide. Data was collected through face-to-face interviews from October 1st to October 31st, 2020. The purpose of the study was explained to all eligible women visiting the hospital for CBE. Participants who consented to participate in the study were booked for interviews in a designated interview room to maintain privacy. All interview sessions were audio recorded with the permission of the participants. All interviews were conducted in English. Responses were probed further and, where necessary, re-directed to ensure absolute understanding of the participants' statements and keep interviewees in consonance with the study objectives. Field notes were taken in the course of each interview session to capture non-verbal gestures, the interviewer's reflections, and key accounts of interviewees.

Data analysis

The data analysis was conducted simultaneously with the interviews using general themes and specific constructs of HBM. This was useful in the achievement of data saturation. Audio recordings of the interviews were replayed and transcribed verbatim by the first author immediately after each interview session. Transcription accuracy was assessed through member-check.

The interview transcripts were printed and thoroughly perused several times to identify differences and similarities in phrases and concepts and gain insight into the data. A coding table was prepared by the authors based on the authors' first impressions of the interview transcripts. Coding of the data was done independently by the first and second authors using NVivo (version 11) qualitative software. All disparities in the codes were resolved through consensus. Interesting phrases and concepts were coded and notes were made in respect of phrases or sentences that were salient.

Trustworthiness

The credibility, transferability, dependability, and confirmability concepts of Lincoln and Guba, which parallel the traditional quantitative assessment criteria of validity and reliability,[29] were used as assessments of the study's trustworthiness. The following steps were taken to assure the study's credibility: adopting a suitable data collection procedure, prolonged engagement with the data to familiarise with the data and conducting member checks. The full description of study methods and characteristics of participants and other factors contributed to the study's dependability and transferability. This will improve the research findings' applicability in comparable situations. Credibility, transferability, and reliability were all established, resulting in confirmability.[29]

Ethical considerations

The purpose of the study was explained to all participants, and oral consent for participation was obtained before the face-to-face semi-structured interviews. Participants were free to withdraw at any point during the study. To guarantee confidentiality, interview records were code-labelled and identifiable information was deleted from the transcripts prior to data validation. Files, audio tapes, and transcripts were saved on a password-protected laptop. Ethical approval was granted by the Institutional Review Board of 37 Military Hospital (37MH-IRB/DS/IPN/522/2020) before the commencement of the study.

Results

Demographics of Participants

A total of 12 women aged between 25 and 58 years were interviewed. Eight participants (67%) had attained tertiary education, were married, and were Christians. Ten participants (83%) were employed, and two (17%) were unemployed. No participant reported awareness of a family history of breast cancer. Seven participants (58%) had ever performed SBE and five (42%) had ever had CBE. Table 1 presents the demographic profile of the participants.

Table 1. Demographic Profile of the Participants (N=12)

Variables	Frequency
Age	
20-29	2
30-39	3
40-49	4
50-59	3
Educational level	
No formal education	1
Secondary education	3
Tertiary	8
Religion	
Christian	8
Muslim	4
Marital status	
Single	3
Married	8
Widowed	1
Occupation	
Trader	4
Intern	2
Civil servant	2
Biostatistician	1
Educationist	1
Accountant	1
Beautician	1
No. of children	
No child	4
More than or equal to one child	8
Family history of breast cancer	
Yes	0
No	12
Ever carried out self breast examination?	
Yes	7
No	5
Ever had clinical breast examination?	
Yes	5
No	7

Major Themes of the Study

Seven major themes were supported by the analysis of the data. These include the perceived susceptibility of participants (R) to breast cancer, the perceived seriousness or severity of breast cancer, and the perceived benefits of CBE. Other themes include cues to participate in CBE, perceived barriers to CBE uptake, self-efficacy, and participants' knowledge of breast cancer and breast cancer screening techniques.

Perceived Susceptibility to Breast Cancer

In response to the question of whether participants were at risk of developing breast cancer, almost all the participants believed that every woman was at risk of such a development and so were they. This was espoused by a participant that *"yes, everybody is at risk (of breast cancer). That is why early detection through the screening is important"*. [R12]

To add, another participant held the view that there was no clear information on the cause of breast cancer and regular physical examination of the breast could help when *"something gets into the breast"*. [R11]

'Yes, because everybody is at risk. To me, it is a sickness that I have asked everybody about, and there is no clear cause for it. What I know is that if you don't do the examination and then something gets in there and you don't see it, you are at risk of developing breast cancer'. [R11]

Other participants believed they were not susceptible to breast cancer. They believed their 'good' lifestyle, *"good care of the breast"* [R6] and no family history of breast cancer put them at no risk of developing breast cancer. For instance, a participant stressed that *"not at all. I eat well, exercise regularly, and most importantly, I keep an eye on myself. I can say almost every day"*. [R10] Another participant believed she was not at risk of breast cancer due to certain lifestyle choices she made or the absence of breast cancer in her family. She stated:

'No... I take care of it [breast] very well. And for me, one thing that I don't do, like those tight brassieres that people wear to show off or something. You see, I heard it is genetics, so I don't have that kind of thing in my family.'

From the father's side or mother's side, no, I don't have in the family I am married to, I have never seen anybody having that kind of problem. So that is why I am saying that I won't get it'. [R6]

Two participants, however, were ambivalent about whether they were at risk of developing breast cancer. They believed God decides an individual's risk of breast cancer. *"God decides what happens to each one of us. I don't know whether I will suffer from breast cancer"*. [R7]

Perceived Severity or Seriousness of Breast Cancer

Participants' perceptions about the severity of breast cancer varied from the medical to social consequences of breast cancer. Some perceived breast cancer to be a severe medical problem that was dreadful and had no cure.

A participant stated that breast cancer *"has no cure. No one knows how it happens"*. [R2]

Other participants believed breast cancer was unbearable. A participant recounted that *"I have heard, they said it hurts a lot, you can't sleep, you have to take medicine, and the treatment is very expensive when it comes to that tough time"*. [R5]

They have either seen a friend suffer or die from the disease, and that experience of losing a friend to the disease motivates them to seek professional assessment. They believed their deceased friends probably did not seek early medical care. A participant stated:

'When we were in the barracks, a certain woman lost her life. I was a kid. I saw a certain lady too, on the internet. The breast became very big [expressed surprise] and I said no, no, I have to get up and go to the hospital. That means they did not go to the hospital. So it was in my mind that breast cancer can kill'. [R3]

Some have learned of breast cancer affecting people younger than them and others having their breasts surgically removed.

Other participants hold perceptions about the social consequences of breast cancer. They believed their children and whole family would suffer if they died prematurely from breast cancer.

A participant lamented that *“I have four children, and if anything happens to me, you can imagine what will happen to them. Everything is about me”*. [R10] They perceive the treatment of breast cancer to be expensive and will drain resources of their families that could be used for other family expenses.

Perceived Benefits of Clinical Breast examination

Under this theme, participants shared many thoughts on what they believed were the benefits of undertaking CBE. Four sub-themes emerged from these thoughts and are presented below.

Early detection

Participants believed CBE helped in detecting breast cancer early. They held that early detection gives clinicians the opportunity to treat them early and save them from premature death.

A participant asserted that early detection of lumps through CBE enables doctors to *“get it out faster and it takes you out of the danger of breast cancer”*. [R11] Another participant stated:

‘...when you come early and they see whether you have a lump or have breast cancer, they can treat you early. But if you stay home and it is there, you might not know, and by the time you come, it might be out of hand’. [R10]

Other participants added that early detection through CBE is an opportunity to save their lives so that they can take care of their families.

Some participants also see socioeconomic benefits in the early detection of breast cancer. Others believed early detection would save their lives so that they could enjoy the wealth they had acquired. A participant believed that breast cancer detected early is cheaper to treat than the advanced form and hence saves family resources. The participant recounted that:

‘Early detection helps the family in that they won’t spend much money on you compared to when you get to the late stage. So family resources that could have been used for something else will be saved’. [R12]

Psychological relief

Participants believed that coming for CBE enabled them to know their breast cancer status. They believed that would give them psychological relief from feeling anxious about possible breast cancer. They believed they would have a ‘free mind’ when they were examined by the clinicians and found not to have breast cancer. A participant recalled:

“You know, they said they were going to take me to a doctor. So if I know that there is nothing that will harm me, I will be free”. [R3]

Acquisition of skills and knowledge

CBE gives participants the opportunity to experience and learn breast examination skills from the procedure and ask questions if necessary. For instance, a participant recounted that *“since I don’t even know or have no idea about it [breast cancer], I will have the knowledge about it. How to keep a good health and all that...”*. [R4]

Inspiration to other women

Some participants believed that their participation in CBE inspired other women who saw them as role models to also undergo CBE. They believe that successful participation in CBE enables them to share their experiences and motivate other family members and peers to screen for breast cancer. A participant stated:

‘... it is very beneficial because I can relay information to them [family], tell them more about it. Some of them probably have some perception of it. I can clear their doubts and also encourage and motivate them to... also conduct the examination themselves’. [R4]

Perceived Barriers to Uptake of CBE

Participants shared their perceptions about the barriers to undertaking CBE. Five sub-themes emerged from their responses.

Anxiety about being diagnosed with breast cancer

Some participants expressed concern about the possibility of a breast cancer diagnosis following screening as a factor preventing them from engaging in regular CBE. A participant stated that *“because of anxiety, that person will not come for the examination”*. [R8]

They believed that not knowing one's breast cancer status was better. This was supported by another participant who stated that, *"it is fear, so when that fear is killed, I am sure many people will like to [take up CBE] because not knowing is better than knowing"*. [R4]

Financial Constraints

The cost associated with screening and transportation was another factor that could hinder some participants from regular uptake of CBE. Some participants felt that the cost of breast cancer screening might be beyond their financial ability and would prefer to stay away from screening if they had no money. A participant stated that *"I don't really know how much it will cost to screen, but since you will have to pay something after this month" (breast cancer awareness month)*. [R9] She felt any cost attached to screening would not be affordable for her and would deter her from regular uptake of CBE.

Poor Service Delivery

Participants also perceived the manner hospital services are rendered to clients as barrier to uptake of regular CBE. Some participants believed that poor customer care would deter them from screening services. A participant said *"like you shout at me or they just manhandle you when you come... that will discourage me"*. [R9] Disrespect for client's privacy by clinicians and lack of privacy during the screening were other deterring factors. Other participants believed that the gender of the service provider could also hinder their uptake of the breast cancer screening. Religious affiliation was not a factor in the recruitment of participants, but moslem women in this study would decline from having male clinicians examine their breasts. A participant recounted that *"the barriers will be maybe a man doing it (CBE) and lack of privacy"*. [R11]

Peer Pressure

Some friends and family members of participants were also perceived to influence the poor uptake of breast cancer screening services. A participant stated that *"my friend influenced me not to come, but I gathered more courage this time and came"*. [R8]

This was supported by another participant who said, *"if she [friend] has done it (CBE) and then I bring it up and then she has a myth that if you go they might just press you or something, it may discourage me"*. [R9]

Cues to Action

Several factors motivated participants' uptake of CBE. These cues are presented in four understated sub-themes: fear of premature death, personal interest in good health, excellent customer service, and public education.

Fear of premature death

Some participants heard a lot about the case fatality ratio of breast cancer from the media and felt frightened that they could have the disease. Some have lost close friends to breast cancer. The uptake of CBE became an opportunity for them to know their status early and have peace of mind. They believed that CBE would prevent them from developing the disease and hence save them from premature death.

A participant stated, *"a best friend died of breast cancer... and after her death last year, when October came, I said I have to come"*. [R12]

Personal interest in good health

The desire to stay healthy motivated some of the participants to undergo the CBE. They see CBE as an opportunity to seek expert advice and opinions on their SBE practices. They believed that breast cancer could be treated if detected early, and hence, CBE became an avenue to know their status. Some expressed worry about the welfare of their children and would want to stay healthy and alive to take care of them. *"I want to live for them," stated participant 10*. [R10]

Excellent customer service

The good customer care practices of the facility also motivated participants to take up CBE in the facility. The one-on-one services, respect for privacy, timeliness of screening services, professionalism of staff, and the free screening provided were perceived to have influenced participants' uptake of the CBE at the facility.

Public education

Awareness of the dates of breast cancer screening and the media discussions influenced some of the participants. Some participants were motivated to undergo CBE based on pieces of advice and health talks by health professionals. A participant recounted that *“because of the information about early detection, prevention, or cure for any breast issue ... prompted me to come”*. [R12]

Self-Efficacy

Almost all participants expressed the desire and ability to participate in annual CBE programme if they are prompted by health workers through the media. A participant stated that *“it is about education and awareness creation. I just saw the poster and I said oh then I will be coming around”*. [R3]

This was supported by another participant that:

‘Awareness, you see, if they are not really stressing on it, advertisement and public education. Sometimes you forget but if everywhere you are, they are encouraging you to get screened, get screened, it will definitely motivate you to get screened’. [R9]

They believed that reminders about the days and dates of CBE programmes would be helpful. A participant stated that:

‘If I know the date to come, I will have to come. Aside from that, your health is also important. Personally, this one we were not aware of until we were being told. So, as they also said, we should check frequently. So, as you asked that we should come, we will come’. [R2]

Some participants believed that good customer service could motivate them to keep up a regular screening habit. A participant stated that *“being truthful in customer service is key. If I come and I am given the best of care, I will be encouraged to come the next time”*. [R4] Most participants believed that nothing could stop them from undergoing CBE.

Knowledge Level of Participants on Breast Cancer and Screening Practices

All the participants in this study had some ideas about breast cancer and breast cancer screening techniques from various sources. Television was the common source of information. Radio, social media, printed materials, breast cancer awareness month campaigns, health professionals, friends and relatives were the other sources of information on breast cancer and screening services.

The level of knowledge of breast cancer among participants was generally poor and varied. Some participants believed that breast cancer could be due to genetic factors, exposure to radiation, certain lifestyles (such as cigarette smoking and alcoholism), old age, obesity and not breastfeeding. In response to what a participant believed could cause breast cancer, one participant stated:

“The causes sometimes, I think, are genetic. If your family member had it (breast cancer), then you are likely to have it too. You have to come and check frequently. And maybe you being obese, I think, also contributes to it, or may be drinking alcohol or smoking, yeah...”. [R10]

Some participants also had many misconceptions about the causes of breast cancer. Some held superstitious beliefs that breast cancer could be due to bad spirits. A participant recounted, *“People are having breast problems and they think that some bad spirit or somebody is doing (bewitching) you and your breast”*. [R3] It also emerged from the responses that participants believed some ‘bad habits’ by women could lead to breast cancer. These ‘bad habits’ included putting money in the brassiere, cosmetic breast surgeries, wearing brassieres with embedded silicon, high sugar consumption, wearing brassieres to bed, and eating canned or processed foods. To buttress the role lifestyle plays in breast cancer, a participant stated that

‘...I know there are some ladies that like to get injections that will make their breasts big and all that. And also, there are some that wear brassieres with silicon in them... some medications too’. [R4]

It also emerged that some participants believed failure to allow a woman's sexual partner to "*play with the breast*" [R6] could lead to breast cancer. Breast discharges, lumps, breast sores, changes in breast size, and retracted nipples were the common signs and symptoms participants knew.

The participants had inadequate knowledge on SBE and CBE. Five participants have never practiced self-breast examination and had little knowledge on how it was done. Seven participants ever practised SBE but with varied regularity. Participants who felt anxious and curious about breast cancer performed SBE more often than the standard practice. For instance, a participant reported she conducts SBE "*weekly. Sometimes... twice a week. Every time I am curious I want to feel my breasts. I even raise my hand up and feel it*".[R10]

This is corroborated by another participant who performs SBE "*frequently, many times, just between my menses*"...[R3] after she detected a small lump in her breast.

Discussion

The aim of this study was to understand the perceptions, motivations, and barriers to the uptake of CBE among women who voluntarily participated in the programme. The result revealed that fear of death, personal interest, good customer care and public education motivated participation in the CBE. Majority of the participants felt they were at risk of suffering breast cancer. Psychological relief, early detection, acquisition of skills and knowledge and inspiring other women were the perceived benefits of CBE. Anxiety about being diagnosed of breast cancer, financial constraints, poor service delivery, and peer pressure were the perceived barriers to uptake of CBE. The knowledge of participants on breast cancer and breast cancer screening practices were generally inadequate. Breast cancer is the leading cancer among women in Ghana and many productive lives involving younger and older women are lost annually. [5] Early detection of breast cancer can significantly control the disease progression and save many lives.

Resource constraints have been a bane on the ability of many governments in LMICs to establish advanced breast cancer screening facilities in vantage places. Consequently, access to and affordability of the few advanced facilities such as mammography is limited.[13] To nip breast cancer in the bud in these challenging situations, the design and implementation of health interventions need to incorporate evidence-based strategies that can improve the uptake of existing cost-effective screening techniques.

In this study, fear of premature death from breast cancer was a key motivation for the uptake of CBE for participants. Though none of the participants reported a family history of breast cancer, some have witnessed friends or neighbours die from breast cancer and are frightened that they could be the next victims.

This confirms a previous study involving African immigrants in the United States of America, which found that awareness of neighbours suffering from breast cancer was a motivation to seek more information and to get examined.[28] This finding also corroborates what previous studies conducted in Ghana and other developing countries showed. [13,30,31] which reported the attitude of fear among study participants. It would be unethical to share client's diagnostic status with community members, but this finding brings to the fore the role death of breast cancer patients plays in increasing the uptake of screening services. Nevertheless, fear of being diagnosed of breast cancer was also expressed as a perceived barrier to subsequent uptake of CBE for some participants. They felt they would be psychologically better if they didn't know their statuses. This finding is not surprising because breast cancer is a dreadful and highly stigmatized disease[32] and the feeling of fear of the unknown is a common barrier to uptake of other health screening methods.[13,28,31]

This is emphasised by other studies which stressed that the perceived seriousness and social meaning of breast cancer as a stigmatized incurable disease[33] associated with loss of femininity, fuel client anxiety and fears.[12,34] It is particularly a genuine worry for women living in countries where medical care for people living with breast cancer is limited or expensive and survival rate of the disease is low.[17] Health educators must innovate and inform the public of the success stories of breast cancer survivors. Health education should emphasise the correlation between early diagnosis and good prognosis of the disease. Effective counselling sessions for relatives and peers of breast cancer patients may also be a key measure to facilitate positive attitude towards breast cancer patients and help address the fear associated with the disease.

Participants believed that CBE was beneficial in determining early breast cancer status. This may be a demonstration of confidence and trust in the ability of clinicians to make correct clinical judgment following CBE.

A qualitative study conducted among women in rural villages in other developing countries found that professional support was a motivational factor for utilization of breast cancer screening.[31] In Alwan and colleagues' study, 75% of the participants believed that the best way to defeat breast cancer was through early detection via CBE and other preventive interventions.[35] The perception of these participants is supported by the international cancer awareness agencies that uptake of breast cancer screening helps detect the disease early and thus reduces the risk of breast cancer deaths.[1,14] Additionally, early detection, in the view of the participants, also has socioeconomic benefits. While some participants believed that early detection could save their lives so that they could take care of their children and family, others believed that early detection saved them from the huge financial burden of managing later stages of breast cancer.

These socioeconomic considerations are not surprising considering the economic hardships in most lower and middle income countries. The attitude to live healthier is in line with the motivation of other women in previous studies.[12,31,33,36] The government needs to broaden the health financing scheme to include treatment of breast cancer in the health insurance scheme and invest in state-of-the-art affordable and accessible diagnostic and treatment facilities across the country.

Inspiring other women to undergo CBE was one of the sub-themes of the perceived benefits of CBE to participants. Participants believed they could acquire critical knowledge and skills during CBE and subsequently share their experiences and knowledge with their family and peers. This corroborates the findings of Gethsial Kiruba and colleagues' phenomenological study which revealed that knowledge and awareness of participants was a motivational factor for utilizing breast cancer screening programmes.[31] They wanted to serve as role models to their families and peers, thus encouraging them to patronize CBE. It might therefore be worthwhile if health professionals provided adequate concurrent breast health education and CBE, although it would be difficult to evaluate the post-education information transfer from one client to another in the community. Health awareness initiatives are a global health intervention strategy that has received greater attention over the decades.[37] The evidence on the impact of health awareness days on behaviour change is, nevertheless, limited.[37]

However, the 2020 breast cancer awareness month campaign strategy saw an increased uptake of CBE at the facility, albeit not being captured in this study. It can be argued that the increased number of women utilizing the screening service in October 2020 could be due to the increased awareness through media sensitization. However, awareness is only the beginning of the change process, and it takes extra public health interventions to achieve the desired behaviour change.

We believe that the findings of the study should be helpful to health promoters to realign this widely utilized health awareness strategy with other health promotion activities to sustain public interest in screening services. Like in previous studies [35], television was the common source of information for participants. Through its health agencies, the government can implement a strategic national breast cancer prevention public education programme that addresses the knowledge gaps and barriers through this medium. Many Ghanaians rely on radio and television for many reasons. [38] The government needs to increase its sponsorship of health promotion campaigns through these channels for public education in order to slow the rising breast cancer cases and fatalities across the country.

The knowledge of participants about breast cancer and screening methods was generally poor. Correlational analysis was not possible in this type of study, but this finding was not an isolated case. Several studies assessing the knowledge and practices of breast cancer screening techniques have generally found poor knowledge levels among participants. [13,18,26,39]

This finding should be a concern to policymakers and health professionals who have the mandate to educate the public on the burden of breast cancer. It is thus vital for policymakers to improve their commitment and support for the promotion of public breast health awareness programmes. The evidence from this study also revealed the motivations of women to participate in CBE and that health professionals need to review their health education messages to create the needed awareness and education about the disease. Further studies will be necessary to assess the fidelity of the participants in this study to the uptake of annual CBE services and to assess the association between the study findings and CBE uptake in the broader population.

Limitations and strength of the study

This qualitative inquiry involved a few women who may have been more motivated and resourceful

than the average Ghanaian woman, and thus extreme caution is necessary in the interpretation and transferability of the findings. However, the study provides insight into key perceptions of women about CBE that are very relevant in the design and implementation of appropriate behaviour change communication techniques. The findings can be useful in improving early detection of breast cancer through an increased uptake of breast cancer screening services.

Conclusion

Early detection is key in the management of breast cancer. The design and implementation of health interventions that aim to promote health seeking behaviours need regular review and realignment to address the factors influencing the uptake of the interventions. It is our recommendation that policymakers should initiate a national breast cancer screening programme using national television and radio stations to provide more public education. An increased awareness of the burden and management of the disease will lead to an increased uptake of screening programmes culminating in early detection and management.

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Conflict of interest

None declared.

Authors' Contributions

CB: lead on study design, implementation, transcription, coding, data analysis and writing of the manuscript.

PN: contributed to study design, implementation, coding, data analysis, and write-up.

DM: contributed to study design, implementation, data analysis, and review of the manuscript.

CA: contributed to study design, implementation and review of the manuscript.

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