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BARRIERS TO BREAST CANCER SCREENING AMONG A SAMPLE OF THE IRAQI WOMEN

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ABSTRACT

Background: Breast cancer (BC) is still a major public health problem, and the rates of new cases, deaths, and survival differ throughout the world. Screening for early detection is important for improving outcomes, especially in areas with few resources. Goal: This study looked at the personal, economic, and health system-related hurdles that make it hard for a group of Iraqi women to get screened for breast cancer. **Methods:** From June 2024 to January 2025, 200 women took part in a cross-sectional research at Al-Yarmouk Teaching Hospital in Baghdad. A systematic interview-based questionnaire with three parts, one of which asked about awareness of BC risk factors, was used to gather data. **Results:** 52.5% of the participants had a college degree or higher, 82% lived in cities, 78% were married, 61.5% were working, and 44% did not use birth control. Most people knew about BC risk factors: 96.5% knew that not breastfeeding raises the risk, 96% knew that having a family history of the disease raises the chance, 85.5% knew that being older raises the risk, 76.5% knew that smoking raises the risk, and 68.5% mentioned hormone replacement treatment after menopause as a risk factor. The most common reasons people didn't get screened were that they didn't know about it (73.5%), only went to the doctor when they were sick (70%), were afraid of getting bad results or thought cancer couldn't be treated (68%), didn't want to get mammograms without a doctor's recommendation (62%), or were worried about their privacy at screening facilities (56.5%). **Conclusion:** The study shows that there are big problems that make it hard for Iraqi women to get screened for breast cancer. To get more people to be screened and find out about problems early, we need to deal with these issues through culturally relevant awareness programs and changes to the healthcare system.

KEYWORDS: Breast cancer, Barriers, Screening.

INTRODUCTION

Breast cancer is the most common kind of cancer in women throughout the world, with 2.2 million cases recorded in 2020. It is also the leading cause of death among women. One in every twelve women is likely to have breast cancer at some point in her life.[1] The most common age group for this disease is 45 to 65 years old, when hormonal changes place before and after menopause.[2] The average survival rate for breast cancer after five years is 89.2%, but the stage at which it is diagnosed has a big influence on this. For example, the survival rate drops from 98% to 24% depending on whether it is diagnosed at stage I or stage IV.[3,4] Mammography is the most common way to find breast cancer in those who don't have any symptoms or are in the early stages of the disease.[5] It is quite worrying that some groups of women don't know enough about cancer screening. These groups often don't know what a breast cancer screening is, where to get one, or what could happen next.[6–8] Health education, especially for women who are at risk, and encouraging women to modify their behaviour and have positive attitudes will help cancer screening programs have better results.[9–11] Also, a good doctor-patient relationship (DPR) is thought to be an important element in adherence because it makes people feel comfortable, trust their doctor, and follow through with follow-up care, all of which make it easier to communicate and take part in cancer screening and early detection programs.[12,13] The World Health Organisation (WHO) wants to cut breast cancer fatalities by 2.5% per year, which would mean 25% fewer deaths by 2030. The efficacy of screening programs depends mostly on how

many women take part in them, hence it is important to encourage all women to do so.[14] There are a number of things that have been shown to affect screening rates, such as women's sociodemographic traits, how much they know about breast cancer risk factors, and whether or not they have a family history of breast cancer.[15] Researchers have shown that different categories of people have trouble getting breast cancer screenings.[16–18] They have put these problems into three broad areas: personal, economic, and health system obstacles.[19–21] In Iraq and other developing nations, breast cancer is often found at later stages and in younger people.[22] People sometimes don't be diagnosed until later because there aren't enough health services and awareness programs, and the patient is afraid of the condition.[23] Breast cancer still kills more people in Iraq than anywhere else in the world. This suggests that there are barriers that make it harder for Iraqi women to take part in the breast cancer screening program.[24, 25] Some research[6,7,11,13] say that women are embarrassed to be checked by a male doctor, which is a barrier. Some of these ladies also said that they would feel better if female doctors took care of them.[7] There are many and complicated hurdles. The most frequent reasons people don't go to the doctor are because they don't know about it, they don't go unless they're sick, they don't know where to go, they're ashamed, they're busy, they're too far away, they're not allowed, they're afraid of getting bad results, and they're afraid of getting radiation.[26] The study's goal was to find out what personal, economic, and health system constraints could make it hard for certain Iraqi women to get screened for breast cancer.

METHOD

This research looked at a group of people at one point in time, from June 2024 to January 2025. We chose 200 ladies from Al-Yarmouk Teaching Hospital in Baghdad. The questionnaire was filled out after an interview. There are three sections to the questionnaire. The first section asked about sociodemographic information and obstetric history. The second part asked about breast cancer risk factors. The third part asked about personal, economic, and health system obstacles to breast cancer screening. Before the interview, every lady gave her informed permission after being told what the study was about. We figured out how much people knew about the risk factors for breast cancer. For each item, the knowledge score was based on a 0-1 scale, with one point for each correct response and zero points for each erroneous or unknown answer. The total scores for all items were 11. An artificial cutoff level of seven, which was the median score of the distribution, split the total knowledge score into excellent knowledge (7–11) and bad knowledge (0–6). The total score for breast cancer screening hurdles was found by adding together all the personal, economic, and health system barriers that were equivalent to 16 items. Each item was given a score between 0 and 2, and the total for all things was 32. We gave two points for each answer that agreed with a certain barrier, zero points for answers that disagreed, and one point for answers that were uncertain. This made up the overall barrier score. The overall barrier score was then broken down into three groups: low (≤10), middle (11–21), and high (22–32). It was agreed that the components worked well as a scale score. Using SPSS version 23.0, variables were shown as percentages and frequencies.

RESULTS

The mean age and age at menarche of the participants were 53±9.7 SD (standard deviation) and 12±1.5 SD, respectively. Regarding the socio-demographic characteristics of the participants, the majority of women were undergraduates and above (52.5%), whereas 1.5% were illiterate. Only 18% were living in rural areas, whereas 82% were living in urban areas. The majority of the women were currently married (78%), and 61.5% of them were working. The majority of them had children (1-12) (74.5%), and (44%) don't use contraceptives, while (15%) use OCP and (5%) use injections, as shown in table (1).

Table 1: Socio-demographic characteristics and obstetrics history of participants.

Variable		N	%
Education	Illiterate	3	1.5
	Primary school	5	2.5
	Secondary school	87	43.5
	Undergraduate and above	105	52.5
Residence	Urban	164	82
	Rural	36	18
Occupation	Working	123	61.5
	Not working	77	38.5
Marital status	Married	156	78
	Unmarried	44	22
Number of children	Zero	51	25.5
	1-12	149	74.5
Type of contraceptives	Don't use	88	44
	OCP	30	15
	Injection	10	5
	IUCD	11	5.5

	Others	61	30.5
Total		200	100

OCP: oral contraceptive pills, IUCD: intrauterine contraceptive device.

Regarding the participants' knowledge of breast cancer risks, it is listed in Table (2). The majority of women correctly indicated that females who don't breastfeed their babies (96.5%), who had a family history of breast cancer (96%), who were aged 35 years or more (85.5%), who smoked regularly (76.5%) and who took HRT after menopause (68.5%). The mean total knowledge score (±SD) was 7.05 (±1.46). Approximately 62.5% of the sampled women were classified as having a satisfactory knowledge score and 37.5% as a poor knowledge score.

Table 2: Knowledge of participants about risk factors of breast cancer.

Knowledge item	**Correct answers N (%)**
Age of 35 years or more	171 (85.5)
Early menarche	42 (21)
Late menopause	59 (29.5)
1st pregnancy after the age of 30 years	112 (56)
Female who don't breast feeds their babies	193 (96.5)
If obesity effected	133(66.5)
Family history of breast cancer	192 (96)
Smoking	153 (76.5)
HRT used after menopause	137 (68.5)
Consumption of unhealthy foods	134 (67)
Not practicing sport	85 (42.5)
Mean total knowledge score(SD)	7.05(1.46)
Level of knowledge total score	**N (%)**
Satisfactory(7-11)	125 (62.5)
Poor(0-6)	75 (37.5)

HRT: hormonal replacement therapy.

Table (3) shows that the sample found several reasons why breast cancer screening is hard to do. About personal obstacles, 70% of the people stated they only go to the doctor when they are sick, 68% said they were afraid of getting abnormal findings and that cancer has no cure, and 49% said they were ashamed to have their breasts checked. 51.5% of the people who answered said they were busy and couldn't take time off work for the appointment because of economic difficulties. When asked about the problems in the health system, 73.5% of the people indicated they didn't have enough information on the program. 62% of the ladies indicated they didn't want to undergo a mammogram unless their doctor told them to. Fifty-six percent said that the screening facilities didn't provide enough privacy. People thought that not having a female doctor or nurse and having to travel a long way to get to the doctor's appointment would make it hard to seek health care (54.5%, 39%, and 19.5%, respectively). Table (3) shows that the barrier scale scores were similarly divided into three groups: low (30%), medium (21.5%), and high (48.5%).

Table 3: Distribution of number and percentage of breast cancer screening barriers among participants.

Barriers	**Number (%)**
Personal barriers	
Fear of the exposure to the radiation.	96 (48)
Breast screening and examination are painful.	88 (44)
Don't go to the doctor unless ill.	140 (70)
Mammographic screening is not important.	74 (37)
Embarrassed by breast examination.	98 (49)
Fear of abnormal results and cancer has no treatment.	136 (68)
Screening might be refused by the family.	59 (29.5)
Economic barriers	
The cost of the examination is high.	48 (24)
Transportation problems.	83 (41.5)
Busy, no time off from work for the appointment.	103 (51.5)
Health system barriers	
Lack of female nurse or doctor.	109 (54.5)
Privacy important during health care visit.	113 (56.5)
The place that provides the service is very far.	78 (39)

Unwilling to have mammography until recommend by the doctor.	124 (62)
Lack of the awareness program.	147 (73.5)
It takes too long time to get to the doctor's appointment.	39 (19.5)
Mean total BC screening barriers score (SD)	18.4 (11.8)
Barrier scale score	**Number (%)**
Low≥ 10	60(30)
Intermediate(11-21)	43(21.5)
High(22-32)	97(48.5)

BC: breast cancer, SD: standard deviation

DISCUSSION

In nations with poor and medium-income populations, breast cancer is frequently found in later stages.[27] Early identification by screening and early clinical diagnosis are likely to enhance the prognosis of the cancer for women in these places.[28] Mammography screening on a regular basis has been used to find breast cancer early on, and it is an effective way to lower the number of fatalities from breast cancer. Breast cancer is more likely to be found in Iraq at later stages and in younger people than in high-income nations. This has resulted to a higher death rate in Iraq.[22] The viability and efficiency of a monthly cancer screening program depend on getting a lot of people to sign up and stay involved.[29] In terms of the participants' social and demographic traits, the current study showed that most of the women were married (78%) and 61.5% of them were employed. 82% of the people that took part lived in cities. 74.5% of them had kids, and 44% of them didn't utilise birth control. 52.5% of people had a higher degree of education. It is higher than the other degrees of education that the participants have. This conclusion was in line with the research done in Dhi-Qar City, Iraq, in 2023[30], which found that education helps people understand the benefits of getting diagnosed early and the dangers of getting diagnosed late. According to Table 2, more than half of the women who took part in this study knew that risk factors can affect the chance of getting breast cancer. The level of knowledge was satisfactory for 62.5% of the participants and poor for 37.5%. This result was similar to a study in Dhi-Qar, Iraq (2023)[30], but not to a study in Egypt (2014)[31], which found that people didn't know much about the disease and didn't understand it well. This is because people don't know much about breast cancer, which is why they don't get screened by mammogram.[32] This study found that the most common health system obstacles were not knowing about mammograms until a doctor suggested them (62%) and not having enough privacy in the screening facilities (56.5%). It is very important to protect people's privacy; most of the people who took part in the breast cancer risk factors study were impoverished. Many personal, economic, and health system hurdles to screening were found for the present sample of Iraqi women who had not tried to use the breast cancer screening program. The most prevalent personal barriers that the current participants said kept them from going to the doctor were not going unless they were sick (70%), being afraid of getting bad findings (68%), and thinking that cancer had no therapy (68%). These results were in line with other research done in Iraq (2023)[30], Saudi Arabia (2023)[33], Saudi Arabia (2018)[34], and USA (2017)[35], when many Egyptian women were in a lot of pain and discomfort before they got sick and only went to the doctor when their symptoms got really bad. Women often have a lot of personal problems that make it hard for them to get screening services. The most prevalent reasons people didn't use the preventative services were feeling embarrassed about getting their breasts checked (49%), being afraid of being exposed to radiation (48%), and thinking that getting their breasts checked or screened would be uncomfortable (44%). You can get rid of personal obstacles by teaching people how important it is to find cancer early and by making those who want to get help act better. Participants in this survey said that one of the health system-related hurdles was the lack of an awareness campaign (73.5%). These barriers not only make it harder to find problems, but they also make it harder to start therapy. This result was in line with studies done in Saudi Arabia (2017)[34] and Portugal (2014)[36], but not with a study done in Vietnam (2024)[37] that said people who were more aware of cancer were more likely to get screened and that this could make regular screening more important. It was vital for the participants that healthcare practitioners promote mammograms. Other studies[18–20] also say that this is a reason why women stick to breast screening. It shows how important it is for health system workers to try to change people's negative attitudes and urge them to seek out good health. 51.5% of the women in the study said they were busy, didn't have time off from work for their breast cancer screening visits, had a lot of family commitments, and didn't have enough time to go to breast cancer prevention programs. The results of our investigation were in line with studies done in Saudi Arabia[34] in 2018 and in Egypt[38] in 2013. Reports say that working women put off their appointments since they had too many duties and didn't have enough time. Women said that being busy and having trouble getting about (41.5%) were the two biggest economic hurdles they faced. This was different from a research done in Egypt in 2014[31], when the high cost was the biggest economic barrier mentioned by the participants.

CONCLUSION

The women who took part in the study named a number of things that made it hard for them to get screened for breast cancer. Some socio-demographic factors were linked to how well women understood these constraints. Identifying barriers to breast cancer screening in the

community can help get rid of them and come up with more culturally appropriate ways to get more women to use breast cancer screening programs and make sure they get the care they need for their breasts. Because of this, we suggest using TV, radio, street ads, and social media to teach women more about how important it is to find cancer early.

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