



Attitude, Awareness and Experience of Women towards the Breast Self-examination in Saudi Arabia

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Authors' contributions

This work was carried out in collaboration between both authors. Author NHZ designed the study, performed the statistical analysis, wrote the protocol and wrote the first draft of the manuscript. Author FKA managed the analyses of the study and literature searches. Both authors read and approved the final manuscript.

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ABSTRACT

Objective: To evaluate the attitude, awareness and experience of Women towards the breast self-examination.

Methods: This is population-based study with the total number of the participants were 349 between 25-70 yrs of age, between December 2017 to February 2018 at King Abdulaziz University Hospital, Jeddah. A questionnaire was given to females attending the clinic or attending a lecture for breast cancer awareness.

Results: A total of 349 patients were studied. Saudi was 76.5% and non-Saudi was 23.5%. Patients less than 25 years were 26.4% and above 25 years were 73.6%. The majority were

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between 25 to 45 years of age which was 66.4%. The majority were married 64.5%, single 30.4%, widow 2.9% and divorced were 2.3%. 65% had children and 59.3% did lactate their kids. Use of contraceptive pills was 50.4%. Family history of breast cancer was in 18.1% and sister had breast cancer in 3.46%, aunt 3.7%, stepdaughter in 6%, grandmother in 3.2% and mother in 2% of cases. Smokers were 10.6%. Family history of other malignancy was in 9.7% with colon cancer in 6.3% and uterus in 3.4%.

History of taking herbs was in 14.6% of cases of which soya in 3.4%, baboon 2.6%, green tea 2.3%, ginger 2.3% and weight lowering herbs 1.7%. 12.3% of patient had breast biopsy and 12% had another tumour like thyroid, uterus, colon etc. 22.1% admitted that they did self- breast examination. Their source of knowledge about breast self-examination was Television in 13.5%, hospital 5.7% and doctor in 2.9%. Routine clinical examination was done in 82.2% and the reason for it was not known to the majority of them. Examination by doctors was done in 25.5% of cases. Mammography was done by 16.9%, ultrasound in 16.9%. 12.3% preferred mammography. Regarding the belief that biopsy will lead to spreading of the tumour, 16.3% said that they believe it. 3.4% believed that cancer is infective disease and 86.2% believed that breastfeeding decreases breast cancer incidence.

Conclusions: Breast self-examination is an effective tool to detect early breast cancer especially in poor and underdeveloped countries which lack resources for proper screening of breast cancer. Cultural beliefs and ritual practices may affect early detection of breast cancer.

Keywords: Breast self-examination; breast cancer awareness.

1. INTRODUCTION

Breast cancer is rapidly increasing among the female population, which can partly be attributed to newer diagnostic modalities and awareness among the population. Breast cancer is the most common cancer among females worldwide and causes deaths in 20% of breast cancer diagnosed between 40-50 year of age [1,2]. In developing countries, there are proportionally more deaths caused by breast cancer than in developed countries [3]. In Saudi Arabia, breast cancer accounts for a quarter of newly diagnosed cancer among females [4]. These women are not aware of screening due to lack of knowledge which results in late diagnosis when the disease is at an advanced stage [5]. Screening of breast cancer in Saudi Arabia is still not performed well in large population despite free health services [6].

American cancer society recommends starting screening at 40 years of age [7], while the US Preventive services task force recommends at 50 years of age which should be then biannually [8]. Breast self- examination as screening although detects early lesion but not recommended by various studies due to false-positive results [9]. Clinical breast examination, on the other hand, has been approved by various studies as a method of breast screening in conjunction with mammography [10]. Screen film mammography is another method of screening which is being replaced with full-field digital mammography.

Digital breast tomosynthesis which creates three-dimensional views is now a standard feature of digital mammography [11].

In developing countries where there are poor health services and lack of instruments, apparatus and machines breast self- examination may prove to be beneficial. There are some studies which show a positive association with breast self- examination and early detection of breast cancer [12]. In some studies, most early breast cancers were detected by breast self-examination [13]. In our study, we will evaluate attitude, awareness about breast self – examination in our population.

2. METHODS

This is a population-based study of 349 participants of 25-70 years of age, from December 2017 to February 2018 at King Abdulaziz University Hospital, Jeddah. A questionnaire was given to females attending clinic or attending lecture for breast cancer awareness which included age, nationality, marital status, lactation, use of contraceptive pills, smoking, family history of malignancy, use of herbs, breast biopsy, self-breast examination, source of knowledge of breast self-examination, routine clinical breast examination, mammography, breast ultrasound, belief that breast biopsy will lead to spreading of tumour, belief that breast cancer is infective disease and breastfeeding will decrease breast cancer

incidence. Statistical analysis was done using SPSS software.

3. RESULTS

A total of 349 patients were studied. Saudi was 76.5%, and non -Saudi was 23.5%. Patients less than 25 years were 26.4% and above 25 years were 73.6%. The majority were between 25 to 45 years of age which was 66.4%. The majority were married 64.5%, single 30.4%, widow 2.9% and divorced were 2.3%. 65% had children and 59.3% did lactate their kids. Use of contraceptive pills was 50.4%. Family history of breast cancer was in 18.1% and sister had breast cancer in 3.46%, aunt 3.7%, stepdaughter in 6%, grandmother in 3.2% and mother in 2% of cases. Smokers were 10.6%. Family history of other malignancy was in 9.7% with colon cancer in 6.3% and uterus in 3.4%.

History of taking herbs was in 14.6% of cases of which soya in 3.4%, baboon 2.6%, green tea 2.3%, ginger 2.3% and weight lowering herbs 1.7%. 12.3% of patient had breast biopsy and 12% had another tumour like thyroid, uterus, colon etc. 22.1% admitted that they did self-breast examination. Their source of knowledge about breast self- examination was Television in 13.5%, hospital 5.7% and doctor in 2.9%. Routine clinical examination was done in 82.2% and the reason for it was not known to the majority of them. Examination by doctors was done in 25.5% of cases. Mammography was done by 16.9%, ultrasound in 16.9%. 12.3% preferred mammography. Regarding the belief that biopsy will lead to spreading of the tumour, 16.3% said that they believe it. 3.4% believed that cancer is infective disease and 86.2% believed that breastfeeding decreases breast cancer incidence.

4. DISCUSSION

Breast cancer in the world is increasing due to many factors related to our changing lifestyles. Despite tremendous progress in media, the vast majority of the population in developing countries are unable to reap the benefits of media and health awareness. Attitudes about breast cancer in middle eastern countries still are formed in cultural ways attributing it as a curse, or God's wishes. In our study, 73.6% were above the age of 25 and 64.5% were married while in one study half of women were above 30 years and 68% were married [14]. So, early detection of breast cancer is vital for treatment with good prognosis. Awareness about breast cancer and screening depends on education and due to this, many

women are unable to get early diagnosis and treatment [15]. Saudi Arabia has a low rate of breast cancer screening despite free medical care [16]. Breast self-examination (BSE) is an important tool in developing countries because it is easy, safe and does not require any equipment [17,18]. There is an association between detection of breast cancer and breast self-examination [19]. In Saudi Arabia, there is insufficient knowledge among females about breast cancer and screening [20,21]. This low level of awareness has a strong relationship with the level of education, marital status and level of job [22]. In our study, 22.1% of patients had breast examined by themselves while in one study 41% of females did self-breast examination [23]. Another study in Nigeria showed breast self-examination from 19% to 43%, in India 0 to 52%, and 54% in a study in the west [24,25,26]. In Saudi Arabia, lack of knowledge and awareness, shyness are the reasons for not doing breast-self-examination [27].

American cancer society recommends BSE regularly for females above 20 years of age [28]. Awareness of BSE varies among different countries in Asia and Africa. Awareness of breast cancer was 81% in Malaysian study, 64% in an Iranian study, 98% among female students in Nigeria [29,30,31]. Different beliefs were found about breast cancer in different cultures like God's curse in a study in Ethiopia, evil eye in female teachers in Saudi Arabia, punishment from God and fate among females in Qatar [32,33,34]. In our study many believed in taking herbs may be a reason for developing breast cancer, others believed that biopsy will lead to spreading of the tumour, 16.3% said that they believe it. 3.4% believed that cancer is infective disease and 86.2% believed that breastfeeding decreases breast cancer incidence. Even though 18.1% had a family history of breast cancer in our patients and history of other malignancy in the family in 9.7%, their main source of information of BSE was a television in 13.5%. So, there was a lack of information about breast cancer in our patients.

Freeman et al suggested that young girls to taught the technique of BSE so that when they grow old, they will be doing BSE regularly and will detect breast cancer at an early stage [35]. There is an emphasis on early detection of breast cancer to have a favourable outcome. In poor countries where due to lack of resources screening mammography cannot be done for a large population, BSE can help in early detection of breast cancer.

Table 1. Questionnaire

	Characteristics	Number	Percentage
1	Saudi	267	76.5%
2	Non-Saudi	82	23.5%
3	Age below 25 yrs.-	92	26.4%
4	Age above 25 yrs.	175	73.6
5	Married	225	64.5%
6	Unmarried	124	35.5%
7	Have children	227	65%
8	H/O of lactation	207	59.3%
9	Use of contraceptive pills	176	50.4%
10	H/O of breast tumour	63	18.1%
11	Smoking	37	10.6%
12	Family H/O Malignancy	315	90.3%
13	Use of herbs	51	14.6%
14	History of breast biopsy	43	12.3%
15	Breast self-examination	272	77.9%
16	Source of knowledge of breast self-exam	77	22%
17	Routine clinical examination	287	82.2%
18	Mammography	59	16.9%
19	Ultrasound	59	16.9%
20	The belief that biopsy leads to spread of tumour	57	16.3%
21	The belief that breast cancer is infective	12	3.4%
22	The belief that lactation will decrease breast cancer	301	86.2%

5. CONCLUSION

Breast self-examination is an effective tool to detect early breast cancer especially in poor and underdeveloped countries which lack resources for proper screening of breast cancer. Cultural beliefs and ritual practices may affect early detection of breast cancer. Education of masses is pivotal in curbing the menace of breast cancer.

CONSENT

As per international standard, patient’s written consent has been collected and preserved by the author(s).

ETHICAL APPROVAL

It is not applicable.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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