Awareness and Attitudes Regarding Breast Cancer and Breast Self-Examination among Females in Umm Al-Qura University, Mekkah, Saudi Arabia

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ABSTRACT

Background: Among Saudi patients, the number of women with breast cancer was increased steadily from 1990 to 2010. Huge efforts in increasing the level of breast cancer awareness are attempting in the Kingdom.

Objectives: To assess the level of knowledge about breast cancer, attitude and practicing breast self-examination (BSE) among females in Umm Al-Qura University. Makkah, Saudi Arabia.

Subjects and methods: A cross sectional study was carried out that included student, employees, and academics staff in Umm Al-Qura university, Makkak, Saudi Arabia. A self-administered Arabic valid questionnaire was used for data collection. It has 3 main parts: (i) 2 questions to determine the demographic background of respondents, (ii) 9 questions to assess the respondent's awareness about breast cancer, and (iii) 2 questions about their attitude towards breast cancer awareness method (BSE).

Results: The study included 95 participants. Majority of them (70.6%) aged below 25 years. Only 14.7 % had a family history of breast cancer. Almost all of the respondents have heard about breast cancer (98.9%) and breast self-examination (91.6%). The commonest sources of information about breast cancer and breast self-examination were social media (49.5%) and place of study/work (47.3%). Breast self-examination was performed by only 32.6% of women. Overall, adequate knowledge regarding breast cancer and breast self-examination was observed among 82.1% of the respondents.

Conclusion: Despite the knowledge of women regarding breast cancer and BSE was adequate in general; the practice of screening BSE was suboptimal. Therefore, there is a need to teach women about the importance of practices for early detection techniques.

Keywords: Breast Cancer, Breast self-examination, Awareness, Saudi Arabia.

INTRODUCTION

Breast cancer is the commonest cause of cancer death in women worldwide.[1] The American Cancer Society estimated the numbers of new cancer cases and deaths that will occur each year in the United States. In the current year (2016), it is estimated that 1,685,210 new cancer cases and 595,690 cancer deaths will occur.[2] Among Saudi patients, the number of women with breast cancer was increased steadily from 1990 to 2010, on the basis of the number of cases; the percentage distribution of breast cancer appears to be increasing as there were 1152 cases in 2008 in comparison with 1308 in 2009, and 1473 in 2010.[3] Breast cancer ranked first and accounts of 27.4% among all newly diagnosed female cancers (5378) in the year 2010.[3]

Moreover, around 73% of breast cancer cases in the Kingdom of Saudi Arabia decided to consult the doctor at a very advanced stage of disease that cannot be cured compared with 30% of cases in developed countries.[4] According to WHO, early detection methods are remain the corn stones in improving breast cancer outcome and survival.[5] This can be achieved by increasing awareness of early disease signs and symptoms in populations, in conjugation with Mammography screening programmers.[5] Even there is no evidence on the effect of screening through breast self-examination (BSE). However, the practice of BSE has been seen to empower women, taking responsibility for their own health. Therefore, breast self-examination is recommended for raising awareness among women at risk rather than as a screening method.[5]

The present study aimed to assess the level of knowledge about breast cancer, attitude and practicing breast self-examination (BSE) among females in Umm Al-Qura University. Makkah, Saudi Arabia.

MATERIALS AND METHODS

Using a cross sectional research design, this study examined the knowledge of female in Umm Al-Qura University, Makkah, Saudi Arabia as regards breast cancer, in addition to their practice of BSE.

The target population of the study included female students, employees, and academics staff in university without exclusion. The average age of those population ranged between18-60 years. A quantitative research approach was conducted using self-administered survey. The used questionnaire was adapted from previous study which has been conducted in University the University of Lagos, Nigeria.[6] After attaining permission to use this questionnaire, it was translated into Arabic language, and modified to be appropriate for cultural differences. Validity of the Arabic version was ascertained by three family medicine consultants.

The questionnaire has 3 main parts distributed on 13 questions, with following subclasses: (i) 2 questions to determine the demographic background of respondents, (ii) 9 questions to assess the respondent's awareness about breast cancer, and (iii) 2 questions about their attitude towards breast cancer awareness method (BSE).

The questionnaire was hand-delivered by researcher throughout 4 days starting in 23 October 2016, with explanation of the main objective of the study and assurance of confidentiality and anonymity of data. Respondents were informed that participation in this study was voluntary.

Among 104 completed questionnaires, 9 of them were voided due to incompleteness or multiple choices while 95 of which had required criteria were analyzed.

Analysis of date was done using SPSS software, version 22. Frequency and percentages were utilized for data description whereas chi-square and Fischer exact tests were used for data analysis and p-value less than 0.05 was utilized as a cut of level for statistical significance.

Table 1: Demographic Profile of Respondents

Variable	Number	(%)
Age		
<25 year	66	70.6
25-35 year	14	4.7
>35 year	14	14.7
Family history of breast cancer		
Yes	14	14.7
No	81	85.3

RESULTS

Of 104 questionnaires distributed, 95 were returned, yielding a response rate of 91.3 %. Table 1 shows that majority of respondent (70.6%) aged below 25 years and only 14.7 % had a family history of breast cancer.

Table 2 shows the level of breast cancer and breast self-examination awareness among the respondents. Almost all of the respondents have heard about breast cancer (98.9%) and breast self-examination (91.6%). Most of them (75.8%) knew that breast cancer is common in kingdom of Saudi Arabia. All of them thought that it can be detected early and 98.9% knew that early detection can modify the disease results. Most of the of the respondents (73.7%) knew that breast self-examination should be started at age of 20 years, 67.3% knew that breast self–examination should repeated monthly and almost half of them (49.5%) recognized that breast self-examination should be performed after menstrual period.

The commonest sources of information about breast cancer and breast self-examination were social media (49.5%) and place of study/work (47.3%) as illustrated in figure 1.

Table 3 demonstrates that the breast self-examination was performed by only 32.6% of women. Of those who never performed breast self-examination, the main reasons were decrease the confident of ability in perform it in right way (34.4 %), haven`t any symptoms of breast cancer (25%) and ignorance of its performance (17.2%).

Table 2: Respondents knowledge of breast cancer and breast self-examination

Question		Number	(%)
Have you heard before about breast cancer?	**Yes**	94	98.9
	No	1	1.1
Is it common in kingdom of Saudi Arabia?	**Yes**	72	75.8
	No	23	24.2
Do you think it can be detected early?	**Yes**	95	100
	No	0	0.0
Can early detection modify the disease result?	**Yes**	94	98.9
	No	1	1.1
Have you heard before about breast self-examination?	**Yes**	87	91.6
	No	8	8.4
At what age breast self-examination should begin?	**20 years**	70	73.7
	30 years	18	18.9
	40 years	7	7.4
How often breast self-examination should repeated?	**Daily**	1	1.1
	Weekly	3	3.2
	Monthly	64	67.3
	Yearly	27	28.4
What is the proper time to perform breast self-examination?	**Before menstrual period**	9	9.5
	During menstrual period	11	11.5
	After menstrual period	47	49.5
	Any time	28	29.5

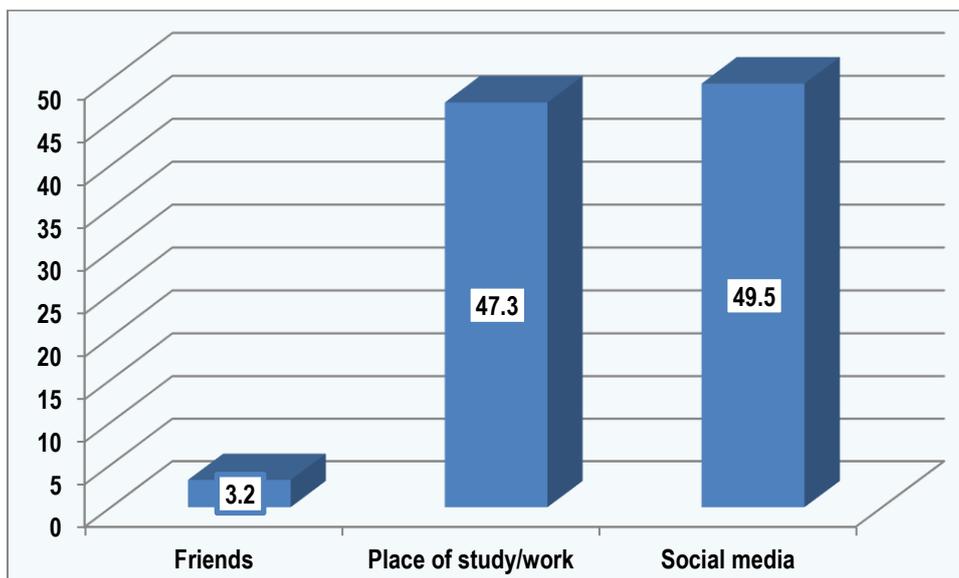**Figure 1: Source of information about breast cancer and breast self-examination.**

Table 3: Attitude of the respondents to breast self-examination

| Question	Number	(%)
Have you done breast self-examination before?		
Yes	31	32.6
No	64	64.4
If the answer was no, why?		
I don't know how to do it	11	17.2
I am not sure I can do it in the right way	22	34.4
I don't believe in the accuracy of that test in diagnosis of breast cancer	2	3.1
I feel shame of do it	3	4.7
I don't have any symptoms of breast cancer	16	25.0
I think I can never have breast cancer.	3	4.7
I am scared of finding any sign of breast examination during examination	7	10.9
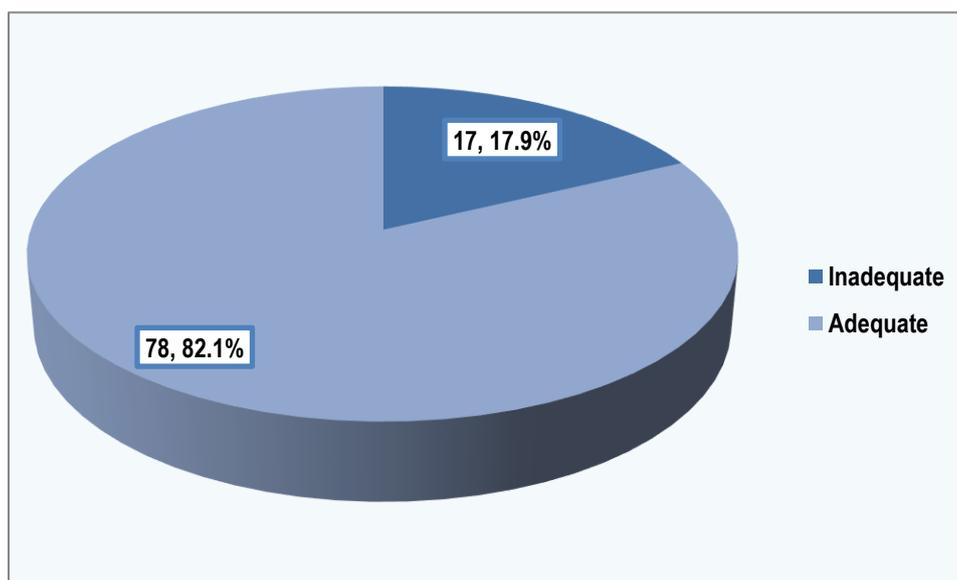
Figure 2: Level of knowledge regarding breast cancer and breast self-examination Among females in Umm Al-Qura University, Mekkah, Saudi Arabia.

Overall, adequate knowledge regarding breast cancer and breast self-examination was observed among 82.1% of the respondents as displayed in figure 2.

From table 4, it is evident that breast cancer/BSE knowledge were not significantly associated with respondent`s age and family history of breast cancer.

Table 4: Association between breast cancer/BSE knowledge and respondent`s age and family history of breast cancer.

	Breast cancer/BSE knowledge level		P-value
	Inadequate N=17 N (%)	Adequate N=78 N (%)	
Age (years)			
<25 (n=67)	13 (19.4)	54 (80.6)	
25-35 (n=14)	1 (7.1)	13 (92.9)	
>35 (n=14)	3 (21.4)	11 (78.6)	0.516*
Family history of breast cancer			
Yes (n=14)	1 (7.1)	13 (92.9)	
No (n=81)	16 (19.8)	65 (80.2)	0.233**

* Chi-square test   ** Fischer exact test

DISCUSSION

In order to have a successfully implemented breast cancer control program, assessment of public awareness as well as attitudes and practice of BSE should be essential components of such programs.[7]

In developing countries, like Saudi Arabia, the primary goal of breast cancer awareness programs is to encourage and promote the importance of early detection.[8] Therefore, this study was carried out to assess the level of knowledge about breast cancer, attitude and practicing breast self-examination (BSE) among females in Umm Al-Qura University, Makkah, Saudi Arabia.

In the current study, majority of respondent aged below 25 years and this is an advantage of this study as these young populations should gain more information on breast cancer and breast self-examination before they reach the age of common prevalence of the disease.

Fortunately, in the present study, almost all of the respondents have heard about breast cancer and majority of them were aware of breast self-examination. In a similar study carried out in Nigeria,[6] most of the respondents surveyed had heard of breast cancer (97.3%) and 85.8% claimed they knew how (BSE) is done.

The present study revealed that adequate knowledge regarding breast cancer and breast self-examination was observed among 82.1% of the respondents. This high rate could be attributed to the fact that our population was recruited from workers in a University with expected higher educational level. In a similar study carried out in Nigeria,[9] it has been reported that higher education women were more knowledgeable about breast self-examination while those who had primary education were the least knowledgeable.

The most frequently reported source of information about breast cancer and BSE in the current study was social media. In a Nigerian study,[6] the commonest reported source was television/radio whereas in Jordan,[10] most information were obtained from friends and health workers.

Overall, adequate knowledge regarding breast cancer and breast self-examination was adequate. This is contrary to what has been reported in Jordan where knowledge about breast cancer and BSE were below average, despite they included highly educated university students, and therefore they described their results as disappointing.[10]

Despite adequate BSE knowledge observed in study, only one-third of women performed BSE. This is in line with the findings of Abdel Hadi,[11] who found that 37.3% of his study population practiced BSE. Other studies that showed lower rates of BSE practice suggested that the practice is globally low among women, regardless of their age and occupation.[11,12] However, the rates reported in this current study were higher than those described by previous Egyptian and Iranian studies, in which only 6% and 2.7% of the general study populations practiced BSE monthly, respectively.[12,13] It has been reported that in the Middle East, breast cancer comes with a heavy cultural stigma, as exemplified by the study in which Laura Bush stated that, "Women in [the] Middle East are sometimes abandoned by their family when the disease is diagnosed, [and] such stories are discouraging".[14]

In the current study, never performance of breast self-examination was mainly due to decrease the confident of ability in perform it in right way (34.4 %), haven`t any symptoms of breast cancer (25%) and ignorance of its performance (17.2%). In a similar Jordanian study,[10] women reported the reasons of not performing BSE as they did not feel that screening was necessary, and 28.8% of them reported being too busy. Therefore, it is essential to raise women's awareness and confidence regarding the life‑saving benefits of BSE practice.

One of the important limitations of the study is that inclusion of participants from one institution which could impact generalizability of results.

In conclusion, despite the knowledge of women regarding breast cancer and BSE was adequate in general; the practice of screening BSE was suboptimal. Therefore, there is a need to teach women about the importance of practices for early detection techniques, such as BSE, which will enable breast cancer to be detected at an earlier stage.

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