

Breast self- examination practice among female students in Iraq

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Abstract

All over the world, the most frequent cancer and death among women is breast cancer (BC), among BC can be treated and its risks can be reduced if it diagnosed in early stages.

Early diagnosis of breast masses can be achieved by performing breast self- examination (BSE). physical examination by a physician, and mammography.

Objective: Aim of this study is to evaluate the practice of breast self-examination female students in Al-Bayan University.

Method: A cross sectional study was used; a pre-validated questionnaire was distributed to 142 female students from Al-Bayan university. The questionnaire covered the sociodemographic characteristics of participants (age, sex, and marital status), knowledge about correct timing of BSE, attitude and practice of BSE, willing to instruct others, and their source of information about BSE.

Results: More than three quarter of our participants did not know the correct timing of breast self-examination, only 39.4% of them perform the breast self-examination, less than half of them (42.3%) reported that they will visit a doctor if they feel pain or lump in the breasts. The majority of our participants (69.7 %) had a desire to teach others how to perform breast self-examination. Their main source of information about breast self-examination was from TV.

Conclusion: Breast self-examination practice among our participants was poor, so it is recommended to increase the awareness campaigns and training programs among students by National Breast Cancer Early Detection and Research program and focusing on the benefits of early detection of breast cancer by performing BSE.

Keywords: Breast self- examination, Iraq

Introduction

All over the world, the most frequent cancer and death among women is breast cancer (BC), it accounts for 23% of total cancer cases and 14% of cancer deaths (1). World

health organization record about 2.1 million women worldwide was diagnosed with breast cancer in 2018(2). In Iraq, breast cancer ranks the first malignant cancer that affect women which equal to 34.3% of female

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cancers (3).

BC can be treated and its risks can be reduced if it diagnosed in early stages (4,5).

Early diagnosis of breast masses can be achieved by performing breast self-examination (BSE), physical examination by a physician, and mammography (2).

BSE is recommended to be performed by premenopausal women monthly 1-10 days from the start of their menstruation. For postmenopausal and pregnant women BSE should be performed on the same day every month (6).

BSE can be helpful in detection 10% of BC especially in younger women who were not undergo mammography. In addition, women become familiar with both the appearance and the feel of their breasts, and can notice any changes as early as possible during examination. Previous studies revealed that 90-95% of the women discovered breast cancer by herself during practicing BSE (7).

In Iraq, it has been reported that about 90.6% of women detected the lumps by themselves (6).

Previous studies in Iraq have reported poor practice of BSE among female students in secondary schools (8), in institutions (9) and in universities (10,11). Similar findings were recorded among female students in Amman and southern region of Jordan (12,13), in Ajman university also there was poor practice of BSE (14). The magnitude of regular BSE practice was poor among female health workers and nursing students in Ethiopia (15,16) and among female health care professionals in Turkey (17).

Aim of study

The aim of our study is to determine the level of knowledge and practice of BSE among female students in Al-Bayan university.

Method

A cross-sectional descriptive survey was conducted from January to April 2019 among (142) female students in Al-Bayan private University in Baghdad. The students answered a prepared questionnaire valid by the Breast Cancer Unit of Baghdad Medical College (8). It was translated into Arabic language to be easier for students.

The questionnaire covered the sociodemographic characteristics of participants (age, sex, and marital status), knowledge about correct timing of BSE, attitude and practice of BSE, willing to instruct others, and their source of information about BSE. Correct answers scored 1, false answers or don't know scored 0.

Data were analyzed by using SPSS, version 14. Frequencies, percentages and tables were used to describe study variables.

Results

Our study evaluates the knowledge and practice of BSE among 142 female students with average age of (21.9) year in Al-Bayan University. The majority of them (88%) was single and only (12%) of them married.

On asking our participants about the correct timing of BSE, only (14.8%) knew the correct time of BSE in premenopausal women and (18.5%) knew when BSE should be performed in postmenopausal women. (Table1)

Table 1. Knowledge regarding BSE timing among participants

Knowledge items	Correct answer	Wrong answer	Total
Timing of BSE in premenopausal women	21 (14.8%)	121(85.2%)	142
Timing of BSE in postmenopausal women	26 (18.3%)	116 (81.7%)	142

Regarding practice of BSE, only 56(39.4%) of female students perform BSE, while 69(48.6%) of them said never practice BSE and (12%) did not respond. Out of the participants that don't perform BSE, 40.6% of them

answered that they don't know the technique and 37.7% of them do not trust in their ability to perform the test, and 4.3% did not believe in the benefit of BSE (Table 2).

Table 2. Practice of breast self-examination by the female participants

Do you practice BSE	Frequency	Percentage
Yes	56	39.4%
No	69	48.6%
No response	17	12%
Total	142	
Why not		
Afraid of finding a lump	9	13%
I don't know how to perform the technique	28	40.6%
I don't believe in my ability in examination process	26	37.7%
I don't think it is of benefit	3	4.3%
Others	3	4.3%
Total	69	

Regarding the female desire to teach others in BSE, the respondents was 123 of participants (69.7%) indicated they would be willing to instruct others in the technique and (16.2%) have no desire to instruct others BSE, and

the reasons given including lack of time (52.2%) and lack of interest(30.4%), and 17.4% have other reasons.(Table 3)

Table 3. Distribution of female desire to instruct others in BSE

Would you instruct others in BSE?	Frequency	Percentage
Yes	99	69.7%
No	23	16.2%
No response	20	14.1%
Total	142	

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Why not		
I am not interested	7	30.4%
I don't have time	12	52.2%
Other	4	17.4%
Total	23	

Regarding their attitude when they feel pain or lump in the breast, 123 of participants answered the questionnaire, (42.3%) of the respondents reported that they will visit the doctor while (44.4%) will not visit the doctor because of fear of something wrong (25.4%), or embarrassing (17.5%), and lack of time (19%) and large proportion (38.1%) have other reasons (Table 4).

Table 4. Distribution of female's behaviors when they feel pain or lump in the breast

Would you visit a doctor	frequency	Percentage
Yes	60	42.3%
No	63	44.4%
No answer	19	13.4%
Total	142	
Why not		
Afraid	16	25.4%
Embarrassing	11	17.5%
I have no time	12	19%
Others	24	38.1%
Total	63	

(16.9%) of the participants said that they have not heard about BSE before, while (31%) of the participants have heard about BSE through the TV, (18.3%) derived their information from physician, magazine (10.6%) from magazines, (4.2%) from posters, (2.1%) from radio and national program for cancer researches, and (1.4%) from primary care center, 13.4% of participants obtained their information from more than one source. (Table 5)

Table 5. Sources of information about BSE

Source of information	No	percentage
I haven't heard about BSE before	24	16.9%
TV	44	31%
Radio	3	2.1%
Physician	26	18.3%
Magazine	15	10.6%
Folder/ poster	6	4.2%
Primary care center	2	1.4%
National program for cancer researches	3	2.1%
More than one source	19	13.4%
Total	142	

Discussion

According to recent survey study that conducted at Baghdad oncology Teaching Hospital, the highest incidence of breast cancer occurred among women in their fifth and sixth decades of life (1). Positive risk factors for breast cancer in Iraq was old age, widow or divorced women, menopause, age at menarche less than 12 years and use of contraceptive pills for more than 1 year (18). According to the national guidelines for early detection of breast cancer in Iraq, it was recommended that Iraqi females perform BSE once each month, beginning at age of 20 and to continue each month throughout life due to high prevalence of breast cancer in younger age groups and due to the late stage at presentation (6).

Our study revealed that about 75% of our participants were unaware of the correct timing of BSE in premenopausal and postmenopausal women. This finding

is in agreement with data recorded among female students in Ajman University in which 94% of participants were unaware of BSE timing in relation to their menstrual cycle (14). Other study recorded that 86% of female university students in Saudi Arabia did not know the recommended frequency (19). These finding were higher than results registered in Ghana in which only (36.6%) of female students did not know the correct timing of BSE (20). In contrast, 73.5% of participants in South Jordan were aware of the correct timing of BSE (12).

Regarding BSE practice, our findings revealed that 39% of participants had performed BSE, this weak BSE practice is comparable with study conducted among female students in Kirkuk University (42.6%) (11), and in Dhi-Qar (25.4%) (21), in the institute of medical technology in Baghdad (33%) (9), and Samarra city (27.6%) (8). These findings are higher than results published among female Jordanian student (11%) (12) and female Ethiopian (11.3%) (16) students reported that they perform BSE. It is also higher than results from UAE (22.7%) (14) only practice BSE and in Turkey 27.3% (4).

Recent study in Vietnam recorded that there was low prevalence of sufficient BSE practice among female (22). Other study in India indicated that 9% of university students knew how to perform BSE but only 3% performed it regularly (23).

A study in Turkey revealed that most female students were aware of BSE but only half of them practice it, in addition those who practices BSE did not have enough information about how and when to perform it (2).

In contrast recent study in Nigeria reported a high level of BSE awareness among female students (24). Previous study from Nigeria Kano 91.2% of nursing in teaching hospital practicing BSE but only 41.2% of the respondents practice it monthly (25).

The participants provided various reasons that hindered them from practicing BSE. Out of (48.6%) who don't perform BSE, (40%) of them said they don't know the technique. These finding agreed with results of recent study in Ghana in which (72.5%) do not perform BSE and more half of them do not know the technique for BSE. Similar finding revealed by study among educated population in Iraq in which 43.2% of them didn't know the technique (10). Recent study in Ethiopia reported that only 11.3% of the undergraduate students practice BSE correctly (16).

Continuous education and training is effective tool in increasing awareness and practice of BSE, this affirmed by results reported among student females in Nigeria, the knowledge, attitude, and practice were improved after training the adolescents girls (25). (37.7%) of our participants said that did not have confidence in their own examination, and (4.3%) do not believe in benefits of BSE. These results are similar to findings recorded in Iraq (10).

In spite of their weak awareness of BSE technique, 69.9% of our female participants had intention to instruct others. Of the 16.2% of our sample were not interested in teaching BSE because they have not enough time. This positive attitude has been also reported in other studies in Iraq (11).

Only 42% of our female participants deciding to visit a

doctor if they feel pain or lump in breasts, and 44% they reported that they will not visit a doctor even they have pain or a lump in the breasts, 38.1% of them did not mention the reason, other reasons include fear of discovering bad news(24%), lack of time(19%), and embarrassment(17.5%).

We expected that many social and cultural barriers that prevent them from visiting the clinic to check for the presence of breast cancer. In the middle East, breast cancer is considered as a stigma, and the women with BC are sometimes abandoned by their family when the disease is diagnosed(26).

Visual media was the main source of information about BSE among our participants,31% of female students derived their information from TV. These findings are consistent with other earlier reports from (9) (Tv and radio), Dhi -Qar(21)(TV and internet), and other arabic countries such as Yemen 68.8% from mass media, (27). That emphasizes the effectiveness of the visual media in promoting education among general population. The second source of information was from physician (12%), and (10%) from magazine and only (2%) of participants had heard of the national program.

Conclusion

The study conclude that the rate of practicing BSE is lower than desired although it is easy technique, cost-free, and non-instrumental method. It is therefore recommended to increase the awareness campaigns and training programs in the high schools, institutions, and universities by National Breast Cancer Early Detection and Research program and focusing on the benefits of early detection of breast cancer by performing BSE.

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