

## Practicing Breast Self-Examination Related Knowledge among Women at General Hospitals in Duhok City



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### ABSTRACT

**Background and aims:** Despite the consideration that the Breast Cancer is a preventable cancer, it's still known as the most common cancer among women worldwide. Early detection of it is performed by a medical and self-screening procedure which is Breast Self-Examination (BSE). It makes women more "breast aware", which in turn may lead to an earlier diagnosis of BC. The aims of the study are to assess the level of women's knowledge regarding practicing BSE, and identify the main reasons regarding practicing BSE.

**Methods:** A cross sectional descriptive study was conducted among 200 women attending General Hospitals in Duhok city at the time of data collection 28 January to 10 March 2020. A structured questionnaire was used by researchers to gather the data related to socio-demographic, the knowledge of practicing BSE, the reasons for practicing BSE.

**Results:** Among all women who were interviewed, about (28.5%) practiced BSE, among those women who had practiced BSE, (16.5%) of them had irregular BSE, 6.5% of the woman who had practiced it monthly, about (82.5%) of women had a poor knowledge regarding practicing BSE correctly, very little of them had good practicing BSE knowledge (2%). The main reason for doing it was getting information from mass media in (14%).

**Conclusions:** The majority of women had low knowledge level about practicing BSE. Effective media and providing health education are required to improve the level of awareness toward it. The professional healthcare provider should be contributing to knowledge transfer whenever the opportunity arises.

**Keywords:** breast self-examination, Breast Cancer, Knowledge, Practice

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## Introduction

Breast Cancer (BC) is that the commonest cancer kind and reason behind death among ladies in several countries. Meanwhile, the first discovery of breast lumps through breast self-examination (BSE) is very important for the prevention and early detection of this unwellness (1). In a few nations, even if the first location of BC will increment the survival rate, there has not been any orderly approach to increase the alertness of BC. Later, a lot of women miss early location and treatment adventure due to the need of data, knowledge, and attentiveness of BC, likewise as cancer screening applications (2,3).

Cancer is one of the main reasons of mortality and morbidity in developed as well as developing countries and is a very important think about the world burden of the disease (4). Early detection of Breast tumors beside population-primarily based screening applications would be a probably useful impends for commanding the ailment and abridgment mortality (5).

Breast most cancers define as grows cells within the breast out of control. These cells typically form a type of lump that may usually be seen on associate x-ray or felt as a lump. The tumors is malignant (cancer) if the cells will grow into (invade) close tissues or spread (metastasize) to distant areas of the breast. This kind of Carcinoma happens nearly entirely in women (6).

The three diagnostic technique screening tests, sometimes, considered for early detection of BC are clinical breast examination (CBE), X-ray mammography, and breast self-examination (BSE) (7).

Brest self-examination (BSE) is considered the prevention of BC and by means of practicing it regularly, women can follow themselves from getting this disease and death can be prevented too. It's really easy, desires no device and without difficulty completed via each woman. The first discovery is significant for effective treatment and long term survival in breast cancer. Monthly BSE and Periodical mammograms, clinical breast examinations (CBE) are early detection of

BC would be a probably useful technique for controlling the disease and lowering mortality (5).

in Republic of Iraq, carcinoma is that the most typical type of cancer in women forming concerning 1/3 of different cancer varieties, in line with the statistic records of the ministry of health in 2010 ,there are about seven thousand cases of cancer since 2010 and also the carcinoma forming concerning 30% of all cancer (8). Although, the American Cancer Society (ACS) recommended in 2003 that ladies starting in their 20s ought to be told concerning the advantages and limitations of BSE, this procedure isn't thought about the best method for early detection but the first rate option for interval screening among women of all ages (9). The worldwide burden of breast most cancers is expected to cross 2 million by way of the year 2030, with growing proportions from growing countries (10).

The Promotion of self-care, and mind-set fostered early in life, might additionally pay lifelong dividends. The adolescent period is a time of speedy change that gives teaching possibilities for shaping health behaviors into adulthood, like, encouraging breast self-care can also increasing the positive attitude together with applying BSE, and seeking regular practice for breast examinations regularity (11).

The poor knowledge and wrong beliefs concerning breast carcinoma prevention among women are liable for a negative perception of the curability of most cancers detected early and the efficacy of the screening tests. There were studies finding that the notice of BC and the practice of BSE amongst Arab ladies were few and pointed to deficit knowledge about breast cancer (12).

In an attempt to control the most cancers burden, in 2012, the government created a 10-12 year cancer manipulate plan that ambitions to address risk, early detection, treatment, rehabilitation, and palliation. This method turned into formulated inside the National Development Plan, which seeks to cut back health inequity. However, several obstacles have hindered its implementation, and rather than a complete cancer care program, Colombia

has visible the disparities in get entry to and treatment widen over time (13). Ultimately , useful assessments are important to the plans that promote wholesome behavior.

#### Subjects and Methods

A cross sectional descriptive study was done to assessing women's knowledge regarding breast self-examination practice. The subject of the present study included all women aged 18-60 years who attended general hospitals in Duhok city. Exclusions criteria included women who were health care worker (medical staff) and have had mastectomy for both breast. The study was extended from the time of data collection 28 January to 10 March 2020. The purposive (non-probability) sampling was applied to 200 women. The permission was taken from the Directorate General of Health in Duhok city. The construct questionnaire consists of three parts: The first one was aimed to collect women' demographic characteristics, including (Age, Residence, Occupation, Level of education, and Family history of BC). The second part was related to knowledge about practicing BSE, There

were (10) close-ended questions which are as yes and no and rated as one for yes and zero for no, one for correct answer and zero for incorrect answer. The last part was listing the reasons for practicing BSE. The approaches for assessing the result were (Frequency and percentage). The levels of knowledge related to practicing BSE among women are computed through the application of score (cut of point) as: 0-3 = Low knowledge, 4-7 = Average knowledge, and 8-10 = Good knowledge. Each question in the questionnaire was coded and the data were entered and analyzed by using the SPSS program version 23).

#### Results

Table 1: Shows that the age of the participant woman ranged from 18-60 years of , the highest percentage was in the age group (18-27) about 35%. (75%) were housewife. More than one-third of them were Illiterate about (37.5%). The higher number of them (87.5%) did not have a family history of BC.

#### Tables and figure related to results

**Table 1: Personal characteristics of participants.**

Items (n=200)	Number	Percent
<b>Age (year)</b>		
18-27	70	35.0
28-37	60	30.0
38-47	48	24.0
48- more	22	11.0
<b>Residency</b>		
Urban	126	63.0
Rural	74	37.0
<b>Occupation</b>		
Housewife	150	75.0
Worker	3	1.5
Employee	11	5.5
Profession	36	18.0
<b>Level of Education</b>		
Illiterate	75	37.5
Primary	53	26.5
Intermediate	24	12.0
Secondary	18	9.0
Institute	12	6.0
College	18	9.0
<b>Family history of breast cancer</b>		
Yes	25	12.5
No	175	87.5

Table 2: Regarding whether participants had practiced the BSE or not, noted that more than one third about (28.5%) had practiced it, while (71.5%) reported that they had never practiced it; among those

women who had practiced BSE (57) women out of 200, (16.5%) of them had irregular BSE, 6.5% of the woman who had practiced it monthly, (2%) were practicing it yearly.

**Table 2: Proportion of women Practicing BSE.**

Practice Items	Number	Percent
<b>Types of practice</b>		
Have been practiced	57	28.5
Never have been practiced	143	71.5
<b>Frequent of practicing BSE</b>		
Daily	1	0.5
Weekly	6	3.0
Monthly	13	6.5
Yearly	4	2.0
Irregular	33	16.5

Table 3: Displays the proportion of women who answered properly concerning the endorsed BSE steps. The most often recommended steps had been (20.5%) is implemented it by means of Use right hand to exam left breast and left hand to have a look at right breast , exam the breasts in a circular, clock wise motion moving from outside in (20.5%) .

Squeezing the nipple of every breast to search for discharge (13.5%), searching at the breasts in the mirror with hands on the sides (9%), the smallest percentage have been examining the breasts while lying down, place the hand above the head before examining the breasts on that side (7.5%).

**Table 3: Percentage of participants performing correct steps of breast self-examination.**

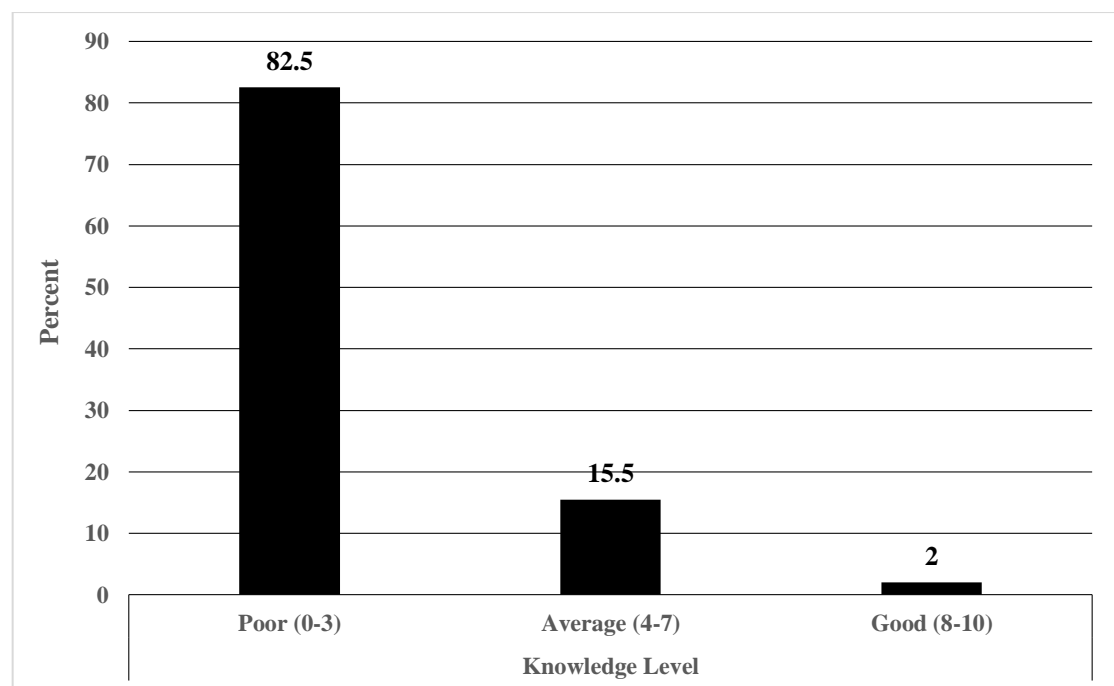
Breast self-examination steps	Practiced Information	
	No.	%
Examining breasts at end of the menstrual period	17	8.5
Looking at breasts in mirror with arms at sides	18	9.0
Looking at breasts in mirror with arms raised over head	25	12.5
Looking at breasts in mirror with hands on thigh	7	3.5
When looking at breast in mirror looking for swelling dimpling of skin or changes in nipple	33	16.5
Examining Breasts While Lying down, Place a towel or pillow under shoulder before examining breast on that side	16	8.0
Examining Breasts While lying down, place hand above head before examining Breasts on that side	15	7.5
Use right hand to examine left Breast and left hand to examine right Breast	41	20.5
Examining Breasts in a circular, clock wise motion moving from outside in	41	20.5
Squeezing the nipple of each Breast to look for discharge	27	13.5

Table 4: Show the main reasons for practicing BSE, about 14% of participants whom had practicing BSE regarding the information from mass media.

Figure 1: Illustrated the knowledge level regarding practicing BSE, about (82.5%) of women had a poor knowledge regarding BSE on the other hand very little of women had good knowledge about (2%).

**Table 4: Reasons for practicing BSE (N= 57)**

Items	Yes		No	
	No.	%	No.	%
Physician or other health provider's advice	15	7.5	185	92.5
Self-study about Breast self-examination	6	3	194	97
Discomfort in the Breast	8	4	192	96
Getting information from mass media	28	14	172	86

**Figure 3.1: Grading of knowledge levels about BSE****knowledge level of practicing BSE**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Poor (0-3)	165	82.5	82.5	82.5
avarage(4-7)	31	15.5	15.5	98.0
good(8-10)	4	2.0	2.0	100.0
Total	200	100.0	100.0	

### Discussion

The present study was carried out to assess the women's knowledge regarding BSE. The result shows that a total variety of 200 women who attending general hospitals participated in this study, the highest

percentage was in the age group (18-27) about (35%). More than one-third of them were Illiterate about (37.5%). Three quarters of women (75%) were housewives. The higher number of present study (87.5%) has not a family history of BC. The finding of the study done by

Ibrahim (2018) concluded that women's ages extended between 18-30 years. More than one quarter (31.4%) of them had primary education, little more than half (51%) were laborers. (96.1%) of ladies A study conducted at Panineeya Institute of Dental Sciences, India, on dental students to assess the knowledge, attitude, and practice (KAP) about practicing BSE, concluded that the knowledge and practice were very low. Also highlights the importance of educational programs to improve awareness for regularity of breast cancer screening (22). On the other hand, these findings disagree with the study done by Salaudeen, in Nigeria; they found that there is a gap in knowledge on BSE which ends up to poor practice (23). This disagreement may be due to the absent of the risk factors and signs of the BC amongst the study groups and that they believe they don't have the disease.

#### Regarding whether or not had practiced the BSE;

more than one quarter about (28.5%) had practiced it, while (71.5%) reported that they had never practiced it. On the opposite; the student's university of Asian country in Yemen, the proportion is not up to this result (16). In addition to other different countries like; Malaysian women the percentage is (55.4%), Turkish female teachers is (43.9%) and Turkish midwivesIn is (52%) which supported this finding (17, 18).

In the current study, women who had practiced BSE, (16.5%) of them had irregular BSE, only (6.5%) of practiced women had performed it monthly, in addition, (2%) of women had practices BSE once a year. The finding of the study done in Baghdad only (33%) were practices (BSE), and (60%) of females who had practice it once a month, while (23.3%) of them had practices (BSE) once or twice a year (19). Contrary to different researchers established that Other findings reported (78%) of females know benefits and correct technique to look at their breast, however despite their knowledge only (33%) performed it either once a month, or three to five times a year, or once or twice a year, This findings disagree with the findings of Haji-Mahmoodi (20).

#### Distribution of knowledge levels about BSE

In the present study, participants had low knowledge level regarding practicing BSE About (82.5%) of women, which probably had low percentage of practicing it. As mentioned by Gok et al. (2009) the findings are completely agreed with the present study and shown the Knowledge

distinction with the study observed that practicing women had enough understanding regarding BSE and BC, Variables like BC knowledge, awareness of BC screening methods, and regular visits with a health professional person inspired BSE behavior (24).

The finding of study conducted on Kingdome of Saudi Arabia from the Faculty of Education for Science Departments in Dammam University at Hafer Al Batin Governate, , indicates that the knowledge of breast cancer, as well as a practice of BSE among participants were poor before starting the educational program. Factors contributed to this could be gaining such information from a nonprofessional source. Further, lack of awareness regarding the correct methods of how to perform BSE could also be a factor. The researchers recommended: developing a community awareness programs targeted toward women to improve their knowledge and prioritize their concerns and raise women awareness regarding BSE early in their life through media, schools, premarital examinations and maternity clinics (25).



### Reasons of practicing BSE

The predominant reason of participants in present study was mass media in (14%), followed by (7.5%) who getting instructions from health care providers during their clinical visit. Similarly, other finding demonstrated the first source of information about practicing BSE were (37%) participants referred to television and radio, (33.5%) mentioned doctors and medical experts and (16%), (13.5%) of participants reported from health program of BSE(19) , This support the effectiveness of the media in promoting public education and changing behavior among the general population. Differently, the findings on Pakistani females, the main source of information of participant were relatives, friends, and neighbors (26). This differentiated in findings may be as a result of environmental instability, additionally, the lack of ability within the performance of BSE was associated with restrained to no BSE activity in society.

In Mosul city, a study conducted on 200 teachers in 32 schools discovered that two-thirds had heard of BSE and the main source of knowledge was TV program (72.9%). (84.4%) of participant had knowledge about the procedure of BSE, (74%) of the responders stated that they had never achieved BSE. The study concluded that obvious lack of general information, negative attitudes, very low practice rate to BSE among school teachers, certain effort required to improve knowledge, change attitude, and enhance practicing of BSE. In conclusion, only 28.5% of women attending general hospitals had ever practiced BSE. Even a high proportion of them were no longer aware of the appropriate steps of the procedure. It seems that the best way to save women's life is to increase their awareness of the potential harms of BC, raise their awareness level about early caution signs, risk factors and early detection procedures for this disease. Women who lack confidence in their capability to perform BSE effectively or who have not been taught on the way to do BSE appeared to perform it much less frequently and to have less ability in performing the technique. Therefore, education social employees, teachers and others who are seemed as depended agents

Although the role of standard BSE within the prevention of BC mortality has been debated, it will however be used to enhance breast health awareness among women (28). In fact, regular BSE has been advised as a section of the general breast health promotion concept (29).

Regarding women who stated that they have ever practiced BSE were asked about specific steps of the procedure, the most frequently endorsed steps were: (20.5%) was applied it by use right hand to examine left breast and left hand to examine right breast also

examining breasts in a circular and clock wise motion moving from outside in, squeezing the nipple of each breast to look for discharge(13.5%), looking for swelling, dimpling of skin, or changes in the nipple (16.5%), examining the breasts at the end of the menstrual period(8.5%), looking at the breasts in the mirror with arms at the sides (9%), The least frequently endorsed steps were examining the breasts while lying down, place the hand above the head before examining the breasts on that side (7.5%). The findings of other study showed that about one third of practicing women performed six or less steps correctly out of 12 steps and only 15.6% performed 11 steps (30). Similarly, the findings showed that few participants knew about BSE, and really few women applied it correctly, a finding steady with a document by way of Somdatta et al. (31). In contrast, In Iran, 1402 women were interviewed recently and only 61% of the participants knew about BSE (32)

However, despite discussion regarding the effectuality of BSE, it appears that BSE, not as a public health policy however as a precautions measure, remains a way of preference for early BC detection in developing countries. Resource constraints in low and middle income regions will limit the application of established tips for breast health care in developing countries (33).

### Conclusions and Recommendations

In conclusion, only 28.5% of women attending general hospitals had ever practiced BSE. Even a high proportion of them were no longer aware of the appropriate steps of the procedure. It seems that the best way to save women's life is to increase their awareness of the potential harms of BC, raise their awareness level about early caution signs, risk factors and early detection procedures for this disease. Women who lack confidence in their capability to perform BSE effectively or who have not been taught on the way to do BSE appeared to perform it much less frequently and to have less ability in performing the technique. Therefore, education social employees, teachers and others who are seemed as depended agents

of the community may be useful for BSE. Austoker J. Breast self examination. BMJ 2003; 326: 1– 2.

practice. Nurses are the most Frontline seen personnel and due to the fact they play an integral role in health promotion and training women in the direction of the prevention of the most diseases so health education programs are essential to encourage and improve women's practice of BSE. Media is a very important source of information about BC and BSE to all women in the society. Because a large part of them are aware of it via the media, so it need be initiated to improve women's practice of BSE.

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