



Breast Self-examination: Knowledge, Attitude and Practice among Female Nursing Undergraduate Students in the Northern Border University, KSA

Authors

**Dr Heba A. Osman¹, Ms. Deepa Jothirajan^{2*}, Ms. Maurine T. Conde³,
Ms. Chithra Thanganadar⁴, Ms. Lylathul Nisha Rasheed⁵, Ms. Reshmi RS⁶**

¹Assistant Professor of Obstetric and Gynaecological Nursing, Faculty of Nursing, Northern Border University, KSA

^{2,3,4,5,6}Lecturer of Obstetric and Gynaecological Nursing, Faculty of Nursing, Northern Border University, KSA

*Corresponding Author

Ms. Deepa Jothirajan

Abstract

Breast self-examination (BSE) is one of the interventions to detect the breast cancer (BC) earlier. Nowadays, BSE didn't known by the many adolescent and young women, so that it is needed to do promotive effort to increase their knowledge about BSE. This was a cross sectional study of 100 female nursing students that were selected by cluster sampling technique, data was collected using self-administered questionnaires and analysis done using SPSS Version 19. The level of awareness of breast cancer and BSE was high among the respondents; 98% of surveyed girls had heard about BC, but only few had limited knowledge. The breast feeding and breast self-examination reported as a methods of prevention breast cancer. Breast lump was a well-known symptom of breast cancer. 57% of the respondents knew the correct time BSE should be done, minority of the participants had a good knowledge of BSE, the practice of BSE was poor, only 34% of them carried it out monthly; more than half of the respondents 52% said they will seek help immediately if they observed breast lump.

Keywords: Breast cancer, Breast self-examination, Undergraduate Nursing Students, Arar.

Introduction

Breast cancer is the most common cancer in women globally and has become an issue of public health importance. According to the International Agency for Research on Cancer (IARC) GLOBOCAN 2012, 1.7 million women were diagnosed with breast cancer in 2012.^[1] It was responsible for approximately half a million deaths in women worldwide in 2012, affecting both developed and developing countries. Breast cancer is one of the health problems in KSA and the World and it has been identified as a major

impact on health of women worldwide and the Kingdom of Saudi Arabia (KSA) is no exception. Breast self-examination (BSE); it is still could be a life-saving technique through inspiring and empowering women to take better control over their body/breast and health.

To reduce the burden of breast cancer in KSA, it is necessary to first determine the level of knowledge and practice relating to breast self-examination as a breast cancer prevention strategy especially among our teaming youths who at this stage of life can continue this practice to

adulthood. Therefore this study was aimed to identify the level of knowledge and practice of breast self-examination among female undergraduates in Arar, KSA.

Statement of the Problem

A study to assess the knowledge, attitude and practice among Female Nursing Undergraduate Students in the Northern Border University, Arar KSA.

Objectives

To find out the knowledge and attitude of breast self-examination and to describe the extent of practice of breast self-examination among them.

Research design and approach

Research approach selected for this study was non experimental approach.

Descriptive- correlational design.

Setting of the study

The study was conducted in Northern Border University, KSA

Population

The populations of this study were all female nursing students Northern Border University, Arar KSA

Sampling Technique

Cluster sampling technique was used for this study

Sample size

100 participants were from second, third and fourth year Nursing Students, Northern Border University, KSA.

Tools used

1) A Self-Administered Questionnaire:

It has five sections. Part A. part B, part C, part D and part E.

Part A: Socio-demographic characteristic used in this study were age, marital status, gravidity, previous knowledge on breast self-examination, family history for breast cancer, father education and mother education.

Part B: Menstrual, medical, and family history age at menarche, regular cycle, have menstrual

problem, have chronic disease, problems is related to menses etc.,

Part C: Sources of information about breast cancer among participants.

Part D: Barriers for practicing breast self-examination among participants.

Part E: Methods for prevention or decrease risk of breast cancer among participants.

2) Breast Self - Examination Knowledge Checklist

It was used to assess the participants' knowledge regarding BSE. It consists of 20 statements which, include meaning of BSE, purposes of doing BSE, ideal age for practicing, proper time for performing BSE, the frequency of practicing BSE...etc. For knowledge items, categorical responses (true/false/don't know) were applied.

Scoring System

Each question had a group of answer points, each correct response had two grades, one grade for don't know while, incorrect response had zero. The total score level for these items were between 0 and 40 when the total participants' score level for knowledge was 60% and above is considered satisfactory knowledge, while below 60% was considered unsatisfactory knowledge.

3) Breast Self- Examination Attitudes Assessment Sheet:

It was prepared to assess and measure the participants' attitudes towards BSE. It consists of 13 statements. All statements were scored on a scale from (0-3), whereas, participants' responses with strongly agree scored (3), agree scored (2), disagree scored (1) and strongly disagree scored (Zero).Whereas, the total attitude score was 39 scores. The total score was divided into two categories as the following: (Scores from (20 -39) referred to positive attitudes while Scores from (0-<20) referred to negative attitudes.

4) Breast Self - Examination Performance Checklist

This tool was developed by the researchers to assess participants' performance of BSE through observation. It consists of seven consecutive steps. All items were made using done or not done

Results

Table 1: Socio-demographic profile of the participants

Data	No (100)	%
Age		
18-20	49	49%
21-23	42	42%
23-25	9	9%
Marital status:		
Single	84	84%
Married	16	16%
Divorced	0	0%
Widowed	0	0%
Gravidity		
Yes	10	10%
No	90	90%
You have children?		
Yes	8	8%
No	92	92%
If yes, numbers of children		
0	92	92%
1	4	4%
2	3	3%
3	1	1%
4	0	0%
5	0	0%
6	0	0%
Previous knowledge on Breast self – examination		
Yes	98	98%
No	2	2%
Family history for breast cancer		
Yes	17	17%
No	83	83%
“If yes “kind of relation		
Mother	5	5%
Sister	4	4%
Aunt/ (for mother)	4	4%
Aunt /(for father)	2	2%
Grand (mother / father)	2	2%
Fathers education:		
Illiterate	11	11%
primary school	13	13%
High school	34	34%
Graduate	23	23%
Postgraduate	15	15%
Any other	4	4%
Father job:		
Policeman	25	25%
Teacher	20	20%
Doctor	12	12%
Driver	4	4%
Businessman	5	5%
No job	33	33%
Any other	1	1%
Mother education:		
Illiterate	22	22%
primary school	34	34%
High school	24	24%
Graduate	10	10%
Postgraduate	4	4%
Any other	6	6%
Mother job:		
Teacher	0	0%
Doctor	70	70%
Housewife		

Table 2: Menstrual, medical, and family history of the women participants

	No (100)	%
Age at menarche:		
<20	94	94%
20+	6	6%
Regular cycle		
Yes	65	65%
No	35	35%
Have menstrual problems:		
Yes	16	16%
No	84	84%
Problems:		
Mastalgia	4	4%
Nipple secretions	6	6%
Nipple color change	0	0%
Engorgement	6	6%
Problems is related to menses		
Yes	9	9%
No	7	7%
Sought medical advice		
Yes	5	5%
No	4	4%

Table 3: Sources of information about breast cancer among the study participants

Sources of information:	No	%
Newspaper	2	2%
Magazine	2	2%
TV	15	15%
Radio	4	4%
Internet	34	34%
Health personnel	28	28%
Family member	10	10%
Teacher	5	5%
Friends	0	0%

Table 4: Barriers for practicing breast self -examination among the study participants

Items	No	%
Yes	30	30%
No	70	70%
Barriers for practicing breast self –examination in case of yes		
Lack of knowledge	5	16.7%
Dislike to touch breast	7	23.3%
Fear/worry to find a lump	6	20%
No time	7	23.3%
Forgetfulness	4	13.3%
Culture and health beliefs	0%	0%
In availability of specialized center	0%	0%
Embarrassment	0%	0%
Lack of privacy	0%	0%
Lack of confidence	0%	0%
Fear of finding some abnormality	1%	3.3%
Not at risk hence not required to do	0%	0%

Table 5: The participants' knowledge about breast cancer and breast self-examination (BSE)

Satisfactory Knowledge of:	No.	%
Methods for prevention or decrease risk of breast cancer		
Breast self-examination	16	16%
Breastfeeding	84	84%
Not using the contraceptive for a long time	0	0%
Healthy food	0	0%
Don't known	0	0%

Satisfactory of knowledge:	Incorrect	Don't know	Correct
Knowledge questions	%	%	%
The meaning of BSE	26	6	68
The main purpose of doing BSE	36	9	55
The ideal age in years when the women should begin practicing BSE	34	9	57
BSE must be done between day 7 until day 10 after menses	27	17	56
BSE should be done during this period because breast becomes soft	18	26	56
BSE should be done every 2 months	47	16	37
BSE done to detect any abnormality	0	48	52
BSE should be done in front of the mirror	7	18	75
Undress until the waist when doing the BSE	11	24	65
Hands should be raised up alternately above the head when doing the BSE in front of the mirror	17	17	66
BSE should be done from the front view only	40	28	32
BSE can be done in a supine position	44	21	35
Palpate in the right breast while left-sided lying when doing the BSE	18	26	56
Use finger pulps to examine any lumps or thickening of the skin	9	20	71
BSE can be done using the vertical strip and circular technique	10	23	67
Need to press on the nipple to check any unusual discharge	8	22	70
BSE includes arm-pit examination to check for any lump	9	20	71
Need to observe any unusual change in the shape and size of breast	12	19	69
Retraction of the nipple is a warning sign that should be observed	6	23	71
Lump is the early sign for cancer	15	27	58

Table 6: Distribution of the participants by Knowledge Score

Knowledge Score	Frequency	%	Mean Knowledge score	Mean percentage	Interpretation
< 24 unsatisfactory	31	31%	27.93	27.93	satisfactory
> 24 Satisfactory	69	69%			

Table 7: Distribution of the participants by BSE Attitude

Attitude	Strongly dis agree		Disagree		Agree		Strongly agree	
	0	%	1	%	2	%	3	%
Doing BSE makes me feel so funny	36	36	18	18	22	22	24	24
BSE will be embarrassing to me	16	16	20	20	49	49	15	15
Doing BSE is wasting time	23	23	34	34	36	36	7	7
Doing BSE makes me feel unpleasant	19	19	37	37	39	39	5	5
If there is a lump, I prefer to get treatment from a traditional healer	14	14	15	15	52	52	19	19
Feel uncomfortable, can't do BSE once in a month	35	35	24	24	21	21	20	20
All women should do BSE	18	18	10	10	37	37	35	35
I really care about my breasts	17	17	21	21	39	39	23	23
I am not afraid to think about the breast cancer	22	22	26	26	31	31	21	21
Avoid BSE because I worry about having breast cancer	21	21	16	16	36	36	27	27
Interested in doing BSE	35	35	21	21	29	29	15	15
Always search for information regarding BSE from the internet, magazines, and newspaper	22	22	18	18	44	44	16	16
Discuss with my friends about BSE	16	16	22	22	47	47	15	15

Table 9: Distribution of the participants by Attitude Score

Attitude Score	Frequency	%	Mean attitude score	Mean percentage	Interpretation
0- < 20 Negative	52	52	19.72	19.72	Negative
20- 30 Positive	48	48			

Table 10: Distribution of the participants by BSE Practice

Practice	Not done		Done	
	0	%	1	%
Do BSE once a month	66	66	34	34
learning the correct method of BSE	67	67	33	33
Parents or partner always advise to do BSE	71	71	29	29
Advise friends to do BSE	65	65	35	35
Discuss the importance of BSE with friends	63	63	37	37
Have been taught on BSE by health staff	55	55	45	45
If notice any breast abnormality, directly go to public health care	52	52	48	48

Table 11: Distribution of the participants by Practice Score

Practice Score	Frequency	%	Mean practice score	Mean percentage	Interpretation
0- < 8 Bad practice	100	100%	2.61	2.61	Bad practice
8- 14 Good practice	0	0			

Discussion

The present study was conducted to determine knowledge, attitude and practice among female nursing university students towards BSE. The age group most affected by BC in KSA and other developing countries is women younger than 50 years of age.^[27] The age of the participants ranged from 18 years to 25 years and the mean age was 21.9 ± 2.7 years. The study was appropriate in this age group as most of them were young adults who should be more enlightened on breast cancer and breast self-examination before they reach the age of common occurrence of the disease. This is congruent with the findings of^[28] which revealed that the majority were in the age group of 20 - 24 years (40.8%). Moreover, this result is in line with advice from health experts who indicated that women should begin breast examination as early as age twenty^[29]. The result of the present study revealed that our participants had 69% satisfactory knowledge about BSE.

Early detection of breast cancer remains one of the key strategies for the control of breast cancer. Studies conducted in developing countries have established BSE as one of the most reasonable and feasible approach in early detection of breast cancer^[9]. BSE not only familiarize women with the appearance/feel of their breast but also aids in early detection of breast cancer^[31]. Some of the studies have reported that BSE is highly effective in increasing sense of ownership about health, healthcare seeking behavior, encouraging adoption of preventive health behaviors and creating awareness about breast cancer among women^[33,34]. Multiple studies have concluded that women, who regularly perform breast self-examination present with smaller neoplasm and rare involvement of axillary lymph nodes^[31, 32]. On the other hand, some researchers have seriously questioned the usefulness of BSE^[12,13], while others have revealed no added benefits of BSE in improvement of survival rates^[35].

The previous knowledge on BSE was high among our participants (98%) this may be as a result of their nursing study.

Mass media was easily available and provide broad range of information, this explain our results that mass media represented the most common source of information for breast cancer among students. The result of the present study revealed that more than half of the study participants (57%) have the source of information about breast cancer through mass media. Our study participants, reported barriers were dislike to touch, have no time, worry to find a lump (23.3%, 23.3%, 20%) respectively. The results have, additionally, shown that “barriers” was one of the significant factors that affect women’s decision to perform BSE.

In this study, breast feeding is one of the important protective factors from breast cancer. More than three quarters of the participants (84%) reported that the breastfeeding prevents breast cancer.

In this study, regarding their knowledge on the frequency of BSE, (37%) of the participants correctly reported that BSE should be done in every 2 months.. In this study, more than half of the participants (56%) reported that BSE should be performed a week after menses. Overall knowledge score (69%) regarding BSE for our study participants was satisfactory.

The attitude of the nursing students warrants addition of skills training and corrective feedback to improve the BSE proficiency.

Regarding practice of BSE more than half of the participants (71%) revealed that parents are not advised them to do BSE. 67% of them not knowing the correct method of doing BSE. 66% of the participants were not doing BSE once in a month. None of our participants had a good practice of BSE. This shows that provision of information is sufficient to obtain BSE initiation but not necessarily adequate to maintain the practice. Health education and communication have been found to promote health seeking behavioural change with sufficient utilization and compliance to breast cancer prevention and screening strategies.

Most of the participants in this research have heard of BSE. Further investigation indicated that only 33% could correctly describe the procedure. Several studies on BSE have reported similar findings^[33]. This may be as a result of poor health education in our society and also the perception that they cannot develop breast cancer. The health belief model (HBM) suggests that when a woman perceives herself at risk then she is more likely to practice BSE^[34]

Conclusion

Though the knowledge on breast cancer and the BSE is high among the study population, the level of awareness of breast cancer and BSE is still very low leading to poor BSE performance

Recommendation

Based on the research conducted, it is recommended that there is a need to create awareness about the importance of BSE among female nursing students so as to improve the practice of it. We recommend that orientation program for fresh students should include talks on screening for breast cancer. Media activities should also be intensified to give reliable information about breast cancer and BSE. Proper education of the female students will have a positive impact on the society.

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