
Effectiveness of Health Teaching on Women's Knowledge and Skills Regarding Breast Self-Examination in Primary Health Centers in Erbil City/Iraq

Kareem Fattah Aziz; *Department of Nursing, College of Nursing, Hawler Medical University, Erbil, Iraq.*

(Correspondence: kareem.fattah@nur.hmu.edu.krd)

Shayma Sameer Maqsud; *Department of Nursing, College of Nursing, Hawler Medical University, Erbil, Iraq.*

ABSTRACT

Background and objectives: Breast cancer is a general term used for different types of cancers that develop from breast tissue cells. Breast self-examination may help detection of breast cancer in early time. The aim of the study is to identify women's knowledge and skills about Breast Self-Examination. The objectives of the study was to identify the overall effectiveness of health teaching on knowledge and skills of women about Breast Self-Examination.

Methods: A Quasi-experimental study was conducted on 100 women who attended to three main primary health care centers in Erbil city during November 2017 to April 2018. Data collection was done two times, one before teaching session and second after that through direct interview and a questionnaire format. Chi-square test was used for comparing pre and post –test results of the study sample.

Results: Regarding level of knowledge about Breast Self-Examination the results revealed that there were three levels as: poor 28%, fair 49% and good 23%. Regarding their skills about Breast Self-Examination, the results indicated that there were three categories as poor 78%, fair 6% and good 16 %. There was significant difference between overall knowledge and skills of participants before and after teaching session.

Conclusion: Teaching session was effective on Breast Self-Examination knowledge and skills. Public education can be developed by health policy in the region in order to breast cancer prevention and early detection.

Keywords: Breast Self-Examination, Knowledge, Skills.

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INTRODUCTION

The main causes of mortality and morbidity among women in developed and developing countries are breast cancer [1]. In Malaysia, there is the most common cancer among women regardless of ethnic groups and begin from age 15 onwards [2]. Clinical breast examination, mammography and Breast self-examination BSE may help detection of breast cancer in early time. [3]. BSE alone is not enough for early detection of breast cancer, but it is still an important screening tool for early detection of breast cancer in most developing countries,

because it is cheap, widely available, and does not need difficult technical training [4]. Practicing BSE help a woman to be familiar with her normal breast structure, helps her to learn and see any abnormal changes in her breast tissue, size or shape of her breast. [5] Most studies indicated that the majority of Malaysian women have not enough knowledge about breast cancer, and other research demonstrated that breast self-examination practices have a significant association with breast cancer knowledge [6] Breast cancer is the main causes of morbidity and mortality among

women and with a high rate especially the malignancy cancer every year, nearly one million new cases of breast cancer are diagnosed worldwide. There were about 519,000 women who die from breast cancer annually and about one millions of women develop breast cancer each year and information by WHO, 2010 [7]. Breast cancer is the second cause of death among women in the Eastern Mediterranean Region and it is a general term used for different types of cancers that develop from breast tissue cells and also it is an uncontrolled growth of malignant tissue (uncontrolled and causes death) that arises in the breast [8]. Breast self-examination is necessary for women to know any abnormality in their breast. But early breast cancer is often found on a mammogram (for women 45 years and older) before a lump can be felt. [9]. The woman's chances of developing breast cancer increase with age, i.e. as a woman ages, her likelihood of developing breast cancer also increases. Close to 80 percent of breast cancers occur in women age 45 or older. The rates of breast cancer in young women actually quite low, but they increase rapidly with advancing age state that, many patients do not realize the impact of age on risk. They often 10 overestimate or underestimate their risk of breast cancer. Although breast cancer can strike both men and women, the majority of breast cancer occurs in women. Less than 1% of all cases are diagnosed in men. In fact, being female is the single greatest risk factor for breast cancer. [10] High dose radiation exposure is associated with increased breast cancer risk. [11]. Clinical breast examination CBE is performed by advanced practice nurses and other healthcare providers. [12].The first and common sign of breast cancer is often a painless lump or thickening in the breast [13]. Agars and McMurray reported that breast cancer continues to have no exact

known cause or primary prevention. [14]. The rates of breast cancer in young women actually quite low, but they increase rapidly with advancing age [15]. This study aimed to assess women's knowledge and skills about BSE and to identify the overall effectiveness of health teaching contents on knowledge and skills of women about Breast Self-Examination BSE.

METHODS

The design of the study included a quasi-experimental study and it was conducted to evaluate the effect of teaching on knowledge and skills of women regarding BSE. The sample size was included 100 women who attended to three primary health care centers in Erbil city (Mala Fandi, Nazdar Bamarni and Kurdistan) according to geographical area of Erbil city, depending on a non-probability convenient sampling method. The study was begun from 1-Nov-2017 to 1-April -2018. A questionnaire format was used for data collection which developed according massive review literature. The questionnaire was reviewed by panel of experts in nursing field for validity and according their comments the questionnaire was revised and it included three parts: part one socio-demographic data and part two questions related to knowledge on BSE and part three related to skills of women about BSE. Data collected in two different days: first day pre-test and conducting teaching session and second day posttest done on theoretical and skills of BSE. Regarding ethical consideration, the approval was taken from Ethical Committee/College of Nursing. Agreement was taken from General Directorate of Health in Erbil City. The informed consent was taken from all study sample after explaining the purpose and knowing right of withdraw during study. Regarding the contents of health teaching it was focused on the importance of BSE

and breast cancer prevention and early detection as general and specifically focused on knowledge of BSE and skills of performing BSE. There was no any exclusion criteria just refusing to participation. The data entered in Statistical Package of Social Science (SPSS) version 23 and analyzed with descriptive and inferential statistics (frequency, percentage, chi-square).

RESULTS

Table 1 indicated that the highest

percentage of the sample study was between the age of (16-30) years, the highest percentage of them graduated from secondary school, majority of them were housewife, which represented 93%, most of them were married which represented 78%, while majority of them were from urban which represented 82%, and most of them were having no history of breast cancer, half of them had more than two children while majority of them had more than two years of marriage.

Table 1: Socio-demographic characteristics of the sample study

Socio-demographic	Categories	F	%
Age group/	16-30	47(47)	47(47)
	31-45	38(38)	38(38)
	46-60	15(15)	15(15)
Level of education	Illiterate	26(26)	26(26)
	Primary	31(31)	31(31)
	Secondary	36(36)	36(36)
	Bachelor	7(7)	7(7)
Occupational status.	House wife	93(93)	93(93)
	Employee	5(5)	5(5)
	Unskilled	2(2)	2(2)
History of Breast cancer.	Present	11(11)	11(11)
	Not present	89(89)	89(89)
Marital status	Marriage	78(78)	78(78)
	Single	19(19)	19(19)
	Widowed	3(3)	3(3)
Years of marriage	Not marriage	19(19)	19(19)
	One year	4(4)	4(4)
	Two years	14(14)	14(14)
	More than 2	63(63)	63(63)
Number of children	None	19(19)	19(19)
	One	15(15)	15(15)
	Two	14(14)	14(14)
	More than 2	52(52)	52(52)
Residential area	Urban	82(82)	82(82)
	Suburbs	10 (10)	10 (10)
	Rural	8(8)	8(8)

Table 2 revealed that overall knowledge of sample study was classified in to three levels as following poor level 28%, fair level 49% and good level 23% in pre-test while the capacity of knowledge for all women had improved properly to 100% in post-test, because of effectiveness of application health teaching .

Table 3 indicated that the skills of women about BSE were classified into three levels

poor 78%, fair 6% and good 16% in pretest, while in post-test the skills were improved properly to 100% because of the effectiveness of health teaching.

Table 4 indicated overall knowledge and skills of sample about BSE. There were highly significant differences between pre-test and post-test (13.9 ± 5.89 , 24.9 ± 0.17) this was interpreted that teaching that was applied for them was effective on their knowledge and skills about BSE.

Table 2: Overall Knowledge level on BSE

Overall Knowledge	Pre-Test		Post test -Test	
	F	%	F	%
Poor	28(28)	28(28)	0(0)	0(0)
Fair	49(49)	49(49)	0(0)	0(0)
Good	23(23)	23(23)	100(100)	100(100)
Total	(100)	(100)	(100)	(100)

Table 3: Overall skill level of Breast Self-Examination BSE

Overall Practice	Pre-test		Post-test	
	F	%	F	%
Poor	78(78)	78(78)	0(0)	0(0)
Fair	6(6)	6(6)	0(0)	0(0)
Good	16 (16)	16 (16)	100(100)	100(100)
Total	100	100	100	100

Table 4: Overall Knowledge and skills of BSE

Overall Knowledge ,skills	Pre-test	Post-test	P-Value Paired t-test
	M ± SD	M ± SD	
Overall Knowledge	13.9 ± 5.89	24.9 ± 0.17	< 0.001 VHS
Overall Practice	2.3 ± 4.21	12.0 ± 0.001	< 0.001 VHS

DISCUSSION

The results of the study indicated that sample study was classified in to three levels for each of their knowledge and skills about breast self-examination BSE these findings were agreed with a study done by Milat who found that mothers in Jeddah had little knowledge about BSE [16]. Regarding overall knowledge and skills about BSE , the study revealed that there were highly significant differences between pre-test and post-test 13.9 ± 5.89 pre-test , 24.9 ± 0.17 post-test about their knowledge and skills, regarding breast self-examination BSE the interpretation for that due to effectiveness of teaching contents that had been implemented upon women who attending to main primary health care centers in Erbil City, this results were agreed with the study done by Elfituri A. etal, who found that it was necessary to apply the teaching process upon women to increase their knowledge and skills about BSE [17]. The results of the study was also similar to the study done by Al-Tawil and Abdul Ameer who found that lack of knowledge and skills about BSE due to lack of implementation of teaching for women [18]. The findings of the study revealed that teaching program was effective to change their knowledge and skills about BSE and was agreed with the study done by Abdel-Hadi who said that in Arab Countries mother's knowledge and skills toward BSE was low because of lack of teaching process [19]. The limitation of the study was sample size and refusing to participate in the teaching session.

CONCLUSIONS

The results of the study revealed that women have poor knowledge and skills regarding BSE and health teaching can improve their level of knowledge and practice. The study recommended establishing

BSE centers in main primary health care centers in Kurdistan Region for early detection and prevention from breast cancer among women as Breast Cancer Awareness Program (BCAP).

CONFLICTS OF INTEREST

The authors report no conflicts of interest.

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