Assessing the Knowledge and Effect of Planned Teaching Regarding Breast Cancer and Breast Self-Examination (BSE) among Perimenopausal Women in Selected Urban Community of Mumbai

Varsha Kadam

Abstract

According to the American Cancer Society, more than 1,93,000 cases of breast cancer are diagnosed every year with an estimated 40,000 deaths. It is thus very important that women themselves are made aware about the importance of breast self-examination, which is possible through adequate information and motivation by the health care provider itself. With the promise that the incidence of breast cancer is preventable and curable with proper awareness through nurses, an evaluator approach pre-test post-test study involving 50 perimenopausal womens was undertaken. The findings proved that planned teaching can improve the knowledge of the women to a great extent and improve the practice of breast self-examination. Thus, it is possible to reduce the breast cancer-related mortality and morbidity rate through self-examination of the breast.

Breast is a symbol of beauty, sexuality and feminity of women. Any loss or deformity of the organ causes a considerable psychological strain on women over and above the physical deformity. The outstanding obstacles in early detection and treatment of breast cancer are fear, shame and ignorance. The factors contributing to rise in breast cancer are largely the changing life style and dietary pattern among urban Indians (Jagannath, 2005). People are shunning traditional food that is rich in fibres in favour of fast food. Moreover women have few babies and lactate for shorter periods. This increases the risk of breast cancer among women. It is also linked with greater life expectancy. The author also pointed out that cancer is in most cases preventable if people follow a healthy lifestyle and timely treatment after early detection.

India is rapidly stepping towards industrialisation, urbanisation along with change of lifestyle factors. These factors possibly contributed to a gradual increase in the incidence of breast cancer in the country. The burden of breast cancer will continue to grow not only in terms of the absolute number of cases but also in terms of incidence. As mammography will be difficult to implement in India for various reasons, efforts should be made to detect breast cancer at an early stage by educating the perimenopausal women about risk factors and through screening by physical examination or by self breast examination. Breast cancer is the leading cancer among women in Mumbai. Its incidence has been steadily rising and it will be considered as one of the major factor of death in Indian women in the coming decades.

However, before implementing any teaching measures it is essential to assess the awareness level of the women. The investigator thus decided to conduct a study on knowledge of breast cancer and breast self-examination (BSE) and its practice among women in a selected community of Mumbai.

The study was aimed at establishing the effectiveness of planned teaching regarding breast cancer and breast self-examination to disseminate the knowledge for early detection of the disease and prevention from breast cancer.

Objectives

The study was carried out with the following objectives:

- To identify the existing knowledge about breast cancer and breast self-examination in perimenopausal women before giving the planned teaching.
- To assess the knowledge about breast cancer and breast self-examination in perimenopausal

Author is Tutor, College of Nursing, Sir JJ Group of Hospitals, Mumbai.

women after planned teaching.

- To determine the relation between selected demographic variables and its effect on the knowledge of perimenopausal women regarding BSE.

Methodology

An evaluatory approach was used for this study covering 50 women as samples, selected from urban community of Mumbai using non-probability convenient sampling technique as per the criteria laid down.

Hypothesis

H_0- Planned Teaching does not help to improve knowledge about breast cancer and breast self-examination.

H_1- There will be improvement in knowledge regarding breast cancer and BSE following systematic teaching.

H_2- There will be improvement in the ability to perform BSE following systematic teaching.

Research approach adopted was evaluatory type.

Research design: One group pre-test and post-test research design was followed.

Variables: Dependent variable was the knowledge of the women is the dependent variable. The independent variable was planned teaching programme on breast cancer and breast self-examination

Techniques and tools: These included a semi structured questionnaire and an observation check list to assess the improvement of practices of breast self-examination.

Self-reporting technique was used for data collection using a semi-structured questionnaire regarding planned teaching and breast cancer and breast self-examination from selected community of Mumbai.

Semi-structured questionnaire included three sections: Section I was Demographic Data record – which contained personal data and obstetrical data of the respondents. Section II was a semi-structured questionnaire to assess the knowledge of breast cancer and breast self-examination with respect to pre- and post-planned teaching on breast cancer and breast self-examination with following subsections: Section-II A: Knowledge related to breast cancer. Section-II B: Knowledge relate to risk factors of breast cancer. Section II C: Knowledge related to signs and symptoms of breast cancer. Section II D: Knowledge related to investigations done to detect breast cancer. Section III was knowledge related to BSE. Questions on knowledge of breast cancer of women were scored on the number of correct responses, that is, one mark for correct response and zero mark for incorrect answer.

Content validity of the tool was established by verification with experts from the field of oncology, obstetrics and gynaecology and nursing.

Reliability: The reliability of questionnaire was assessed by the split-half method (2) by using formula of Pearson product movement method. It was found to be 0.905 for the tool used for women. Therefore, the tool was found reliable.

Pilot study: A pilot study was conducted after selecting samples from women from selected urban community of Mumbai, which helped the investigation to get confidence and to identify any difficulties that may be encountered for conducting the main study.

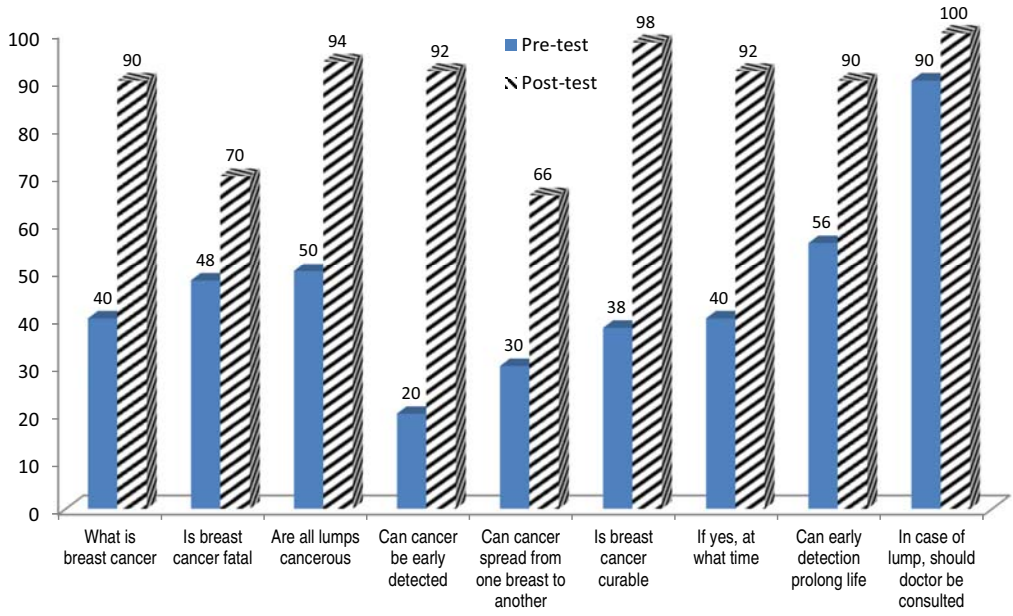
Data collection: Data collection was carried on 50 women samples from the selected community. Each sample was interviewed for 25 to 30 minutes. After this, planned teaching session was conducted which took another 25 to 30 minutes, with the help of slide show, breast model, charts, lecture and discussion method. After seven days women's knowledge was again tested with the same interview schedule and the knowledge gained was assessed with the help of the tools.

Results

Demographic data of women: Thirty-six percent women were in the age group of 30 to 35 years, 26 percent in the age group of 36 to 40 years, 30 percent between 41 to 45 and 8 percent between 46 to 50 years. As for education, 26 percent had studied upto primary level and 42 percent upto secondary education; 6 percent women were illiterate, 26 percent had graduation or higher qualification. Majority of samples (68%) belonged to Hindu family and 18 percent belonged to Muslim family, 12 percent belonged to Christian family, and 2 percent belonged to any other category of family.

From the 50 samples of women, 20 percent consumed vegetarian diet and, 80 percent preferred non-vegetarian diet. Majority of samples were housewives. There were 50 women in data: 38 housewives making it 68 percent, 1 woman professional making it 2 percent and 11 women employed making 22 percent. Six percent of them had breast fed their children for period of six months, 44 percent for one year, 50 percent for more than one year and none of the women who had not given breast feeding at all; 4 percent women had sister as a familial history of breast cancer, 88 percent had no familial history of breast cancer. It was found that 8 percent women showed

Figure 1 : Comparison of pre-test knowledge with post-test knowledge scores among women (n=50)



problems of the breast whereas 92 percent women showed none of the breast problems.

Knowledge level of women in various areas: Among the 50 women samples 40 percent from study group knew about breast cancer in the pre-test but after planned teaching the awareness increased to 90 percent; 48 percent of study sample knew that breast cancer is a fatal disease which increased to 70 percent in the post-test (Fig. 1). Half of the women (50%) answered that all breast lumps are not cancerous which increased to 94 percent. Only 20 percent women knew that breast cancer can be detected at an early stage, which increased the score to 92 percent; 38 percent of women believed that breast cancer is curable, this knowledge increased to 98 percent. It was observed that 90 percent of samples were aware that early detection can prolong life span. All (100%) believed that it is important to refer to the doctor in case a lump is found in their breast; 96 percent women's were able to answer the correct reason of developing breast cancer; 96 percent were able to tell that family history bears a risk of developing breast cancer; 74 percent women were able to answer about knowledge regarding warning signs of breast cancer and 93 percent women were able to answer about other warning signs of breast cancer. All (100%) samples were aware about the various investigations done to detect breast cancer, and 64 percent women sample became awareness about cancer detection centres.

The knowledge of samples about breast self-examination increased to 100 percent after planned teaching; 100 percent women knew the different sources of knowledge regarding breast self-examination; 80 percent samples gained the importance of knowledge about importance of BSE; 92 percent women gained knowledge about frequency of practicing BSE and 94 percent about the timings of practicing BSE regularly (Fig. 2). The score rose to 91.2 about the positions to be used while practicing BSE; 86 percent women knew the part of hand to be used for palpation of the breast; 88.5 percent women sample gained knowledge about the technique to be used for BSE and 94 percent women gained confidence in practicing BSE.

Overall interpretation showed a marked increase in the scores of women knowledge regarding breast cancer and breast self-examination (Table 1, Fig. 3). This indicates that the planned teaching had been effective.

A critical element in the fight against breast cancer is education of health assessment, the public, breast cancer patients and there family and friends knowing the facts about breast cancer will help all of us to work together to reach our ultimate goal of early detection (Malik, 1993).

Figure 2: Comparison of pre-test and post-test related to knowledge about BSE (n=50)

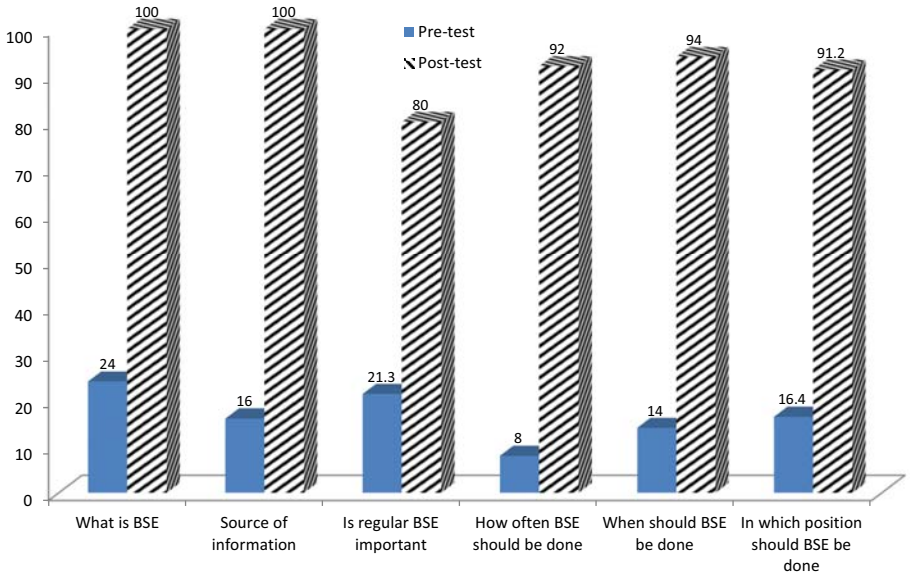


Table 1: Mean scores of pre-test and post-test along with the level of significance

S. No.	Knowledge Score	Mean score	SD	SEMD	't' value	Level of significance
1	Pre-test	14.32	12.50	1.768	1.68	0.01
2	Post-test	47.64	3.41	.482		0.05

Implications of the study

Nursing Education: Nursing education, the means through which nurses are prepared for practice in various settings and the educational institutions can play a more significant role in creating awareness among women at large. Women should be convinced that they give prime importance to health practices and care of themselves. The nursing students can spread information to the women during their training by conducting an education programme for women specifically related to breast self-examination and its importance.

Nursing Research: Research plays a vital role in nursing to increase evidence-based nursing practice. There is a need for extended and intensive nursing research in the areas of women's health problems. India is still lacking in health care services and mortality is high due to breast cancer, which is preventable in nature in interior part of the country. This study can be used as reference for further research studies. It can be used as reference for literature review in future. The tools used in the study can serve as reference for further use.

Limitations

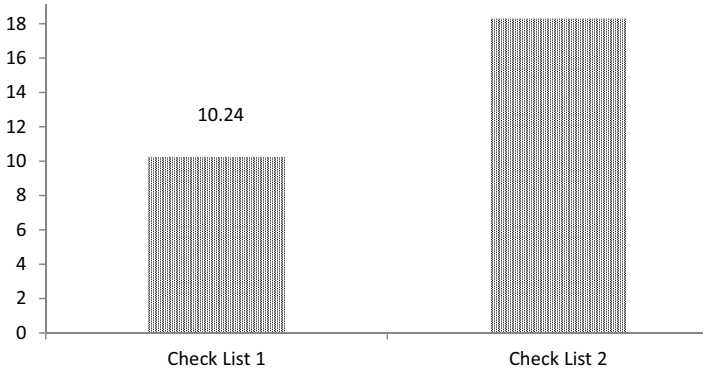
This study was limited to perimenopausal women of a particular community setting, who could read, write and follow Hindi, Marathi or English.

Findings of the study cannot be generalised as the population under investigation was small and was from the selected urban community of Mumbai.

Recommendations

- The study can be replicated on a large sample to validate and generalise the findings.

Figure 3: Mean scores of Ist & 2nd observation checklists



- Observations of the performance of BSE by women should be done monthly for at least one year to assess the regularity.
- Longitudinal studies may be conducted on women regarding BSE practice among adolescence age group till adulthood.

Conclusion

Women had varying degrees of knowledge on the different aspects of breast cancer. There is a need to provide a more detailed information of the sign and symptoms of breast cancer viz. the nature of cancerous breast lump and other common signs of breast cancer.

References

1. Brunner LS, Suddarth DS. Medical Surgical Nursing. 11th edn, 2008. Philadelphia: JB Lippincott Company
2. Jagannath P. Factors contributing to rise in breast cancer. Mumbai: *Sunday Times of India*; 2005 July 27
3. Jussawalla DJ, Yeole BB. Epidemiology of Breast Cancer in India with Special Reference to the Parsee Community. Current perspectives in Breast Cancer. New Delhi: Tata McGraw Hill Publishing Company Limited; 1988
4. Advanced Search. Med India Health Network Pvt Ltd, 2010 Feb 13
5. Hamajima N, Hirose K, Tajima K, Rohan T, Calle EE. Alcohol, tobacco and breast cancer-collaborative reanalysis of individual data from 53 epidemiological studies, including 58,515 women with breast cancer and 95,067 women without the disease. *Br J Cancer* 2002; Nov 18; 87(11): 1234-45
6. Robert H, Houlihan, Michael H, Kennedy, Robert R, Kulesher, Stephenie C. Lemon. Identification of accrual barriers onto breast cancer prevention. *Clinical Trials* 2010; 116: 3569-76
7. Kauppila A, Kyyronen P, Hinkula M, Pukkala E. Birth intervals and breast cancer risk. *British Journal of Cancer* 2009; 101: 1213-17
8. Heather JB, Laura C Collins, et al. Lobule type and subsequent breast cancer risk: Results from the Nurses' Health Studies. *Cancer* 2009; 115: 1404-11
9. Knight JA, Blackmore KM, Wong J, Tharmalingam S, Lilge L. Optical spectroscopy of the breast in premenopausal women reveals tissue variation with changes in age and parity. *Med Phys* 2010; Feb; 37(2): 419-26
10. Editorial: Gas bubbles to blow away cancer cells. *Times Trends*, The Times of India, 29 Jun 2010
11. Mangalam Sriram. Effect of Planned Teaching on Knowledge and Performance of Breast Self-examination among Women in Malvani. Unpublished dissertation in partial fulfillment of Masters of Science in Nursing Mumbai: SNDT University; 2001

■