

## Awareness of Breast Cancer Risk Factors and Practice of Breast Self-Examination among Nurses of Tertiary Care Hospital

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### Abstract

**Background:** Worldwide, one of the leading causes of mortality and morbidity in females is invasive cancer of the breast. Despite the advent of modern screening methods, more than 90% of cases of cancers of the breast are detected by women themselves, stressing the importance of breast self – examination. Nurses (para-medical staff) being a very important component of Health Staff who come in contact with patients and local population more frequently. Therefore teaching them Breast Self-Examination (BSE) would be a fast media to further educate the general population about the risk factors of breast cancer and five easy steps of Breast Self-Examination. The purpose of this study was to investigate attitude and practice of breast self-examination and to determine knowledge of risk factors for breast cancer among nurses in tertiary care hospital.

**Objectives:** To study the knowledge of breast cancer and attitude and practice of Breast self-examination among nurses.

**Methods:** A descriptive and cross-sectional study was performed. It was conducted in OPD and wards of Dr. D.Y. Patil Medical College, Pimpri Pune. The study sample included 200 staff nurses working in hospital. A simple questionnaire consisting of 20 questions on knowledge of risk factors of breast cancer, attitude for breast self-examination and practice for the same was administered through face to face interview.

**Results:** regarding the risk factors of disease, majority subjects (61.5%) mentioned aging, nulliparity (54%), oral pills (59%), radiation at young age(85%) increases the risk of getting breast cancer. Regarding attitude for breast self-examination 82.5% mentioned that it causes embarrassment, 33.5% said it was troublesome and 54.3% time consuming. Regarding practice only 15.6% were performing BSE every month.

**Conclusion:** The findings of this study may provide a basic ground for ideas for future nursing research and projects for nurses in India. This is an important initial step toward increasing awareness about breast cancer and it encourages early adoption of breast screening initiative.

**Key words:** Breast cancer, Risk factors, Nurses, Breast self-examination, Tertiary care hospital

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### Introduction

Cancer is one of the commonest life threatening disease ever known to mankind but still not given sufficient priority today because of its classification under non-communicable diseases.

Breast cancer causes 22.9% of the invasive cancers among females<sup>1</sup> and 16% of all female cancers.<sup>(2)</sup>

In 2008, breast cancer caused 458,503 deaths worldwide (13.7% of cancer deaths in women and 6.0% of all cancer deaths for men and women together).<sup>(1)</sup> In a developing country like India, incidence of breast cancer has risen from 22% to 27% in the last four years.<sup>(3)</sup> Despite the advent of modern screening methods, more than 90% of cases of cancers of the breast are detected by women themselves, stressing the importance of breast self – examination.<sup>(4)</sup> Nurses

(Para-medical staff) being a very important component of Health Staff come in contact with patients and local population more frequently. Therefore teaching them Breast Self-Examination (BSE) would be a fast media to further educate the general population about the risk factors of breast cancer and five easy steps of Breast Self-Examination.

Thus, making an attempt to overcome the barrier or shame of breast cancer and contributing to the War against Cancer.

### Aim

To spread awareness about Breast self-examination among nurses of Tertiary care hospital.

### Objectives

1. To assess the awareness among nurses about risk factors of breast cancer.
2. To assess their practice of breast self examination.
3. To check the efficacy of teaching BSE among study group.

### Material & Methods

- a. **Study Design:** Nonrandomized Interventional Study.

- b. **Place of study:** Wards and OPD of Dr. D.Y. Patil Medical College, Pimpri, Pune.
- c. **Duration of Study:** July to September 2015 for data collection.
- d. **Inclusion criteria:** All staff nurses who gave consent to participate in the study.
- e. **Exclusion criteria:**
1. Nurses from ICU & OT.
  2. Nurses who didn't give consent.
  3. Nursing students.
- f. **Informed consent procedure:** A written informed consent was taken from all the nurses
- g. **Preparation of the questionnaire:** For the purpose of collection of data a simple questionnaire was prepared consisting of 20 questions.

### Methodology

After taking informed consent from the subjects we used purposive convenience sampling method to include 200 nurses in our study. At the time of starting

the study we prepared a register for covering names and respective contact numbers of the study participants for easy follow up. They were given the prepared questionnaire (Marathi/English) and they were asked to fill it. Then 5 simple steps of Breast Self Examination (BSE) and risk factors of Breast cancer were displayed using a PowerPoint presentation and they were asked to practice it on themselves. This was followed by a section of interaction and their doubts were solved. After a gap of one month same nurses were contacted and followed up using a basic scoring system. A score of 2 was given to every correctly answered step. A minimum score of 0 for those who couldn't recollect a single step and a maximum score of 10 for them who remembered all 5 steps. Grouping was done according to their score of less than 6 (negative score) and more than or equal to 6 (positive score). Data collected was entered into MS Excel and data analysis was done using Epi-Info Results were presented in form of proportions and appropriate test of significance was applied.

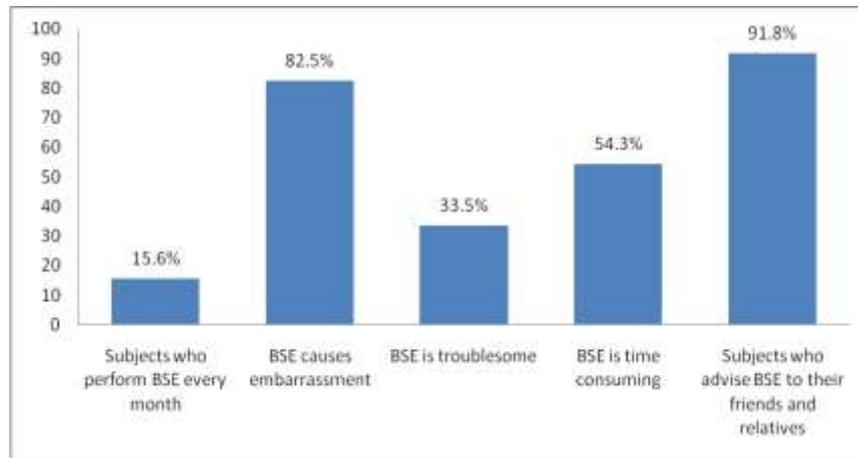
**Table 1: Knowledge about Risk factors that increases the risk of breast cancer development**

S. No.	Risk Factors	<25years N (%)	25-50years N (%)	>50years N (%)	Total N (%)	X <sup>2</sup>	P
1.	Growing older increases risk for breast cancer	68(69.4)	48(54.5)	7(50.0)	123(61.5)	5.15	0.07
2.	Nulliparity	58(59.2)	43(48.9)	7(50.0)	108(54.0)	2.08	0.35
3.	Late menopause	39(39.8)	20(22.7)	5(35.7)	64(32.0)	6.30	0.04*
4.	Early menarche	34(34.7)	35(39.8)	3(21.4)	72(36.0)	1.90	0.38
5.	Alcohol	21(21.4)	14(15.9)	1(7.1)	36(18.0)	2.15	0.33
6.	Postmenopausal obesity	39(39.8)	36(40.9)	4(28.6)	79(39.5)	0.77	0.67
7.	Oral Contraceptive Pills & Hormone Replacement Therapy	63(64.3)	46(52.3)	9(64.3)	118(59.0)	2.93	0.22
8.	Radiation	83(84.7)	78(88.6)	9(64.3)	170(85.0)	5.63	0.05

\*statistically significant

**Table 2: Knowledge about Protective factors that decreases the risk of breast cancer development-**

S. No.	Protective Factors	<25years N (%)	25-50years N (%)	>50years N (%)	Total N (%)	X <sup>2</sup>	p
1.	Oophorectomy	32(32.7)	30(34.1)	9(64.3)	67(33.5)	0.07	0.96
2.	Breast feeding	64(65.3)	54(61.4)	11(78.6)	129(64.5)	1.61	0.44



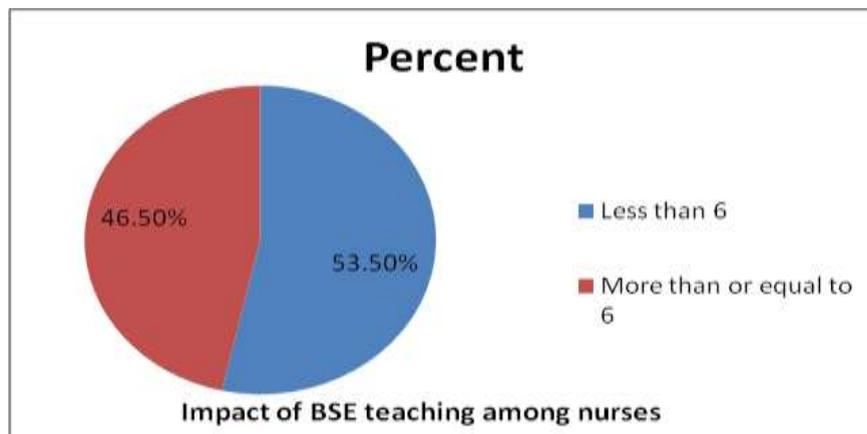
**Fig. 1: Attitude towards Breast Self-examination (BSE)-**

**Impact of BSE teaching**

It was done to check the efficiency of teaching five simple steps of Breast self-Examination. A basic scoring system was opted for this purpose. Grouping was done according to their score of less than 6 (negative score) and more than or equal to 6 (positive score).

**Table 3: Impact of BSE teaching among nurses**

Score group	No.	Percent	C.I
Less than 6	107	53.5%	46.3%-60.6%
More than or equal to 6	93	46.5%	39.4%-53.7%



**Result & Discussion**

In our study, when knowledge about breast cancer risk factors was assessed positive response were seen regarding risk factors like increasing age(61.5%), Obesity (60%), lack of breast feeding (64.5%), Nulliparity (54%) and Radiation (85%) and negative ones were about consuming Alcohol(18%), Early menarche (36%), Late menopause (32%),while among Saudi nursing students, positive response were seen regarding risk factors like increasing age(82%), Obesity (82%), lack of breast feeding(88%), hormonal therapy(88%) causing breast cancer and family history of breast cancer (70%). Whereas people gave negative response about the facts like nulliparity(46%), Late menopause(21%), Early menarche(30%).<sup>(5)</sup>

Attitude towards BSE suggested that the majority of the nurses in Saudi<sup>(5)</sup> believed that BSE was not difficult and was not time consuming (76% and 67%, respectively), 55% of them stated that BSE causes embarrassment and about 27% believed that BSE was troublesome. In comparison, our study nurses believed that BSE is time consuming (54.3%) but not troublesome (66.5%) and majority said it causes embarrassment (82.5%). The difference in the attitude of nurses may be because of difference in geographical background, culture and different subjects.

In our study it was found that the percentage of those that perform regular BSE was rather low (15.6%). Likewise, a Turkish study<sup>(6)</sup> of female physicians and nurses reported that 25% of those studied, performed

regular BSE. However, our study results were lower than results of the previous studies.<sup>(7,8,9,10)</sup>

## Conclusion

The motives of this study are to emphasize the need of teaching nursing staff about breast cancer awareness and early detection of breast cancer in their undergraduate courses. In addition, the provision of regular interventions is necessary to increase and build up the confidence and skills of nursing staff in teaching BSE.

## Summary

Based on the findings, researcher believes that more frequent awareness programmes should be held in order to increase their knowledge, and enhance their confidence and skills to teach women about breast cancer and its early detection.

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