

Original Research Article

Knowledge, attitude and perception on breast cancer awareness among paramedical workers

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ABSTRACT

Background: The projected incidence of patients with cancer in India among females was 712,758 (103.6 per 100,000) for the year 2020. 1 in 29 females will develop cancer during their lifetime (0-74 years of age).

Methods: This is a descriptive cross-sectional study conducted using a self-administered questionnaire distributed among 392 Registered nurses in a community care hospital. Totally 130 nursing staffs gave consent and were eligible for the study having work experience of more than one year.

Results: Total 83 (63%) of study participants belonged to 21-30 years. 113 (86%) thinks breast cancer is a public health problem. 80 (61.5%) thinks breast lump is a most common sign of breast cancer. 121 (93.07%) heard of breast self-examination and 126 (96.9%) thinks it is a useful tool for early detection of breast cancer. 82 (63.07%) said BSE should be done monthly. 114 (87.6%) has been taught how to do BSE. We found 113 (86.9%) has got satisfactory score and average score is 4.67. P value 0.44 when scores of people with breast cancer in their families are compared to people without a positive family history.

Conclusions: Based on the results of this study, it was discovered that the low levels of practise were closely related to the lack of awareness of breast cancer screening and the willing to practise breast self-examination. An Indian woman disregards clinical breast examination. By creating awareness, we can reduce the occurrence and death rates from this illness.

Keywords: Breast cancer, Breast self-examination, Breast cancer screening

INTRODUCTION

Cancer ranks as a leading cause of death and an important barrier to increasing life expectancy in every country of the world. Among all the cancers, breast cancer has now surpassed all other cancers, the leading cause of global cancer incidence in 2020, with an estimated 2.3 million new cases, representing 11.7% of all cancer cases. It is the fifth leading cause of cancer mortality worldwide, with 685,000 deaths. Among women, breast cancer accounts for 1 in 4 cancer cases and for 1 in 6 cancer deaths, ranking first for incidence in the vast majority of

countries (159 of 185 countries) and for mortality in 110 countries. The projected incidence of patients with cancer in India among females was 712,758 (103.6 per 100,000) for the year 2020. 1 in 29 females will develop cancer during their lifetime (0-74 years of age).¹ According to the recently released NCRP 2020 report, Breast cancer, Age Adjusted Incidence Rate (AAR) per 100,000 population was high in metro and urban cities ranging from 48.0 (Hyderabad) to 7.0 (Meghalaya). A steady increase in breast cancer based on population based cancer registry rate poses great challenge. Risk factors of breast cancer are female gender, age group, late age of menopause (50 years), usage of hormonal contraceptives

methods and post-menopausal hormonal therapy, positive family history, benign breast disorders. Life style changes such as overweight, obesity, alcohol consumption, smoking, diet rich in low polyunsaturated and saturated fatty acids. Other factors such as socioeconomic status (high>low), diabetes in postmenopausal women, predispose to development of breast cancer.

In India, there is increased risk of breast cancer for women with lower BMI ($<18.5 \text{ kg/m}^2$) compared with normal BMI due to poor nutrition, metabolic syndrome or other factors correlated with low weight or height. Increased risk of BC for higher waist hip ratio and WC in rural and urban women among both pre and postmenopausal women. This is because Asian-Indians has surprisingly high prevalence of high WHR even for normal BMI.³

Aim and objectives

Objectives of current study was to assess awareness level and behavior of nursing staff on breast self-examination and to compare the score obtained with specific socio demographic details obtained.

METHODS

Study design and settings

The study design is descriptive cross-sectional study. This study was conducted using a self-administered questionnaire distributed to Registered nurses in a government tertiary care hospital in Mumbai. Period of study is from February to April 2021. Universal sampling was used it included every participant who is eligible for study in the stipulated period of study time period. Total population of participants in the institute was 392. Confidentiality of the data has been maintained during all stages of the study.

Inclusion criteria

Inclusion criteria for current study were; patients whoever has given consent was taken as a study participant. To be eligible, they should consent and married and should have work experience of more than one year duration.

Exclusion criteria

Exclusion criteria for current study were patients who already were diagnosed with breast cancer in past or currently and nurse staffs without one year experience in work. Totally 130 nursing staffs were eligible for the study.

Questionnaire was structured in two parts; first part is about socio demographic details of study and second part is about knowledge and behavior of paramedical staff on breast self-examination practice.

Statistical analysis

Data entry and analysis was carried out using SPSS version 23 and Microsoft Office Excel 2019.

RESULTS

Majority of age group in the study belong to 21-30 years that accounts for 83 (63.8%) and 31-40 years has 36 (27.6%) participants. 106 (81.5%) has family member diagnosed with breast cancer.

Table 1: Knowledge about breast self-examination among paramedical workers.

Knowledge variables	N	%
Do you think breast cancer is a public health problem?		
Yes	113	86.9
No	17	13.07
Risk factors for breast cancer		
Family history of breast cancer	79	60.7
No breast feeding	10	7.6
Early menarche	4	3.07
Obesity	14	10.07
Radiation exposure	3	2.3
Nulliparity	1	0.76
OCP	10	7.69
Smoking/alcoholism	9	7
Signs and symptoms of breast cancer		
Breast lump	80	61.5
Change in shape and size of breast	26	20
Discharge through nipple	13	10
Pain in breast	6	4.6
Ulcer/swelling over breast	2	1.5
Discolouration over breast	2	1.5
Retraction of nipple	1	0.7
Method(s) to diagnose breast cancer through screening		
Mammography	58	44.6
Breast self-examination	48	36.9
FNAC/biopsy	23	17.69
Breast USG	1	0.76
Have you heard of breast self-examination (BSE)?		
Yes	121	93.07
No	9	6.9
Do you know that BSE is a useful tool for early detection of breast cancer?		
Yes	126	96.9
No	4	3.07

114 (87.6%) have been taught how to do BSE. Out of which 70 (61.4%) has been taught by senior nurse staff, 24 (21.05%) taught by self-learning by internet and 20 (17.54%) by doctor. 99 (76.1%) practice BSE. Out of which 40 (40.4%) does monthly practice of BSE and 41 (41.4%) does occasionally. 128 (98.4%) thinks BSE is a good practice. 82(63.07%) said BSE should be done monthly, 18 (13.8%) said BSE should be done weekly,

15 (11.5%) said BSE should be done daily and 9 (6.9%) had no idea. Minimum score is one and maximum score is 12. Average score is 4.67. Study subjects who had satisfactory results were compared with those who had non satisfactory study score P value is 0.00034, ($p < 0.05$).

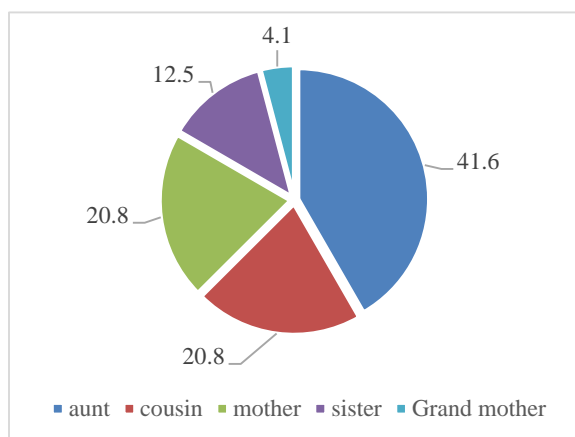


Figure 1: Family member diagnosed with cancer.

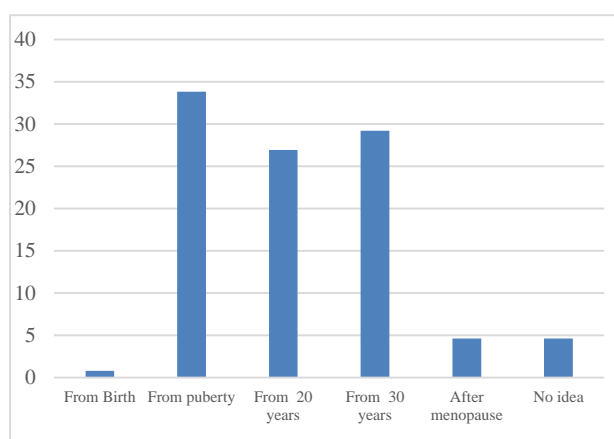


Figure 2: Age at which breast self-examination to be started among women.

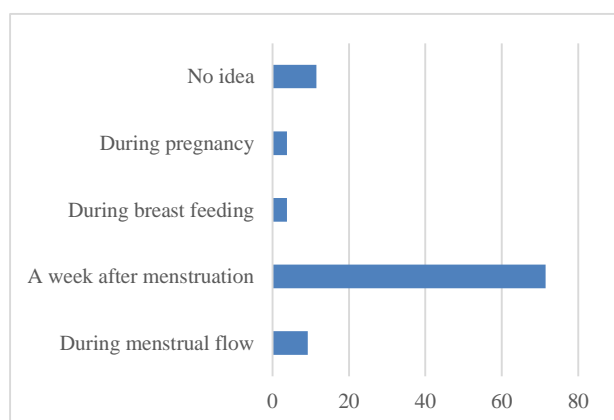


Figure 3: Best time to do breast self-examination.

This suggests there is statistically difference between the scores of two groups. Scores of people who had history of

breast cancer in family is compared with people who didn't have positive family history in a family p value is 0.44. This suggests there is no statistically difference between the scores of two groups.

Table 2: Assessment of knowledge of BSE among paramedical workers (n=130).

Knowledge of BSE among the study subjects	N	%
Satisfactory	113	86.9
Non-satisfactory	17	13

DISCUSSION

Total 83 (63%) of study participants belonged to 21-30 years. A majority of the respondents in this study belong to the younger population. Eighty percent are below the age of 40 years in a study done by Madubogwu and et al. 24 (18.4%) has family member diagnosed with cancer, 113 (86%) thinks breast cancer is a public health problem in the present study. Only 29% knew inverted nipple as a warning sign. 58 (44.6%) of participants thinks mammography is best method to diagnose breast cancer. Majority of study subjects 44 (33.8%) said BSE should be carried out from puberty.⁴ Total 79 (60.7%) thinks family history of breast cancer and obesity is a risk factor which was also in the study done by Ahmed et al and it was noted that even they have fair amount of knowledge on screening breast cancer they did not know exactly which age to start and the frequency of screening to be done.⁵ Total 80 (61.5%) thinks breast lump is a most common sign of breast cancer and less than one percent said inverted nipple is a warning signal in the present study, also in study conducted by Dalal and et al 230 participants (88.1%) were aware of all breast cancer symptoms and warning signals.⁶

Total 121 (93.07%) heard of breast self-examination and 126 (96.9%) thinks it is a useful tool for early detection of breast cancer. 93.75 percent of the female interns, postgraduate students, female faculty, and female nursing staff Kawalkar et al surveyed at a teaching medical college and tertiary care hospital in central India had heard of BSE.⁷ In a study conducted by doshi and et al 72% heard of BSE.⁸ According to research by Sujindra et al in Puducherry, India, 89.2% of nursing students had heard of BSE.⁹ Majority of the study participants had knowledge about breast cancer screening but it apparently showed that they did not know how to perform BSE step by step correctly as was found in Shankar and et al.¹⁰ Rafia et al found in their study that just 38.6% of participants knew all positions, despite the fact that 61.4 percent were able to perform BSE. 82 (63.07%) said BSE should be done monthly in the present study.¹¹ In the present study 40 (40.4%) rightly carryout BSE once in a month this is lower than the 59% study conducted by Pervez et al.¹² Shortcoming in the present study in terms of number of persons performing BSE once a month can be due to low response rate of the workers. Junaibi et al

also noted that a higher percentage of individuals (72.6%) did monthly BSE.¹³

Limitations

Only a small proportion of paramedical staffs are represented by the one tertiary care Government hospital where the study was conducted, which limits the generalizability of our research conclusions. But results are however certainly applicable to other public health facilities in India that need proper training of paramedical staffs and to increase the awareness about breast cancer screening.

CONCLUSION

Based on the results of this study, it was discovered that the low levels of practise were closely related to the lack of awareness of breast cancer screening and the willing to practise breast self-examination. An Indian woman disregards clinical breast examination. By creating awareness, we can reduce the occurrence and death rates from this illness.

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Conflict of interest: None declared

Ethical approval: The study was approved by the Institutional Ethics Committee

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