

A STUDY TO ASSESS THE KNOWLEDGE, ATTITUDE AND PRACTICE REGARDING BREAST SELF EXAMINATION AMONG FEMALE B.Sc. NURSING STUDENTS IN JAIPUR

Mr. Ashok Kumar Dhanwal* | Dr. Virendra Singh Choudhary**

*Ph. D. Scholar, Himalayan University, Itanagar, Arunachal Pradesh, India.

**Principal, Sheedling Nursing College, Jaipur, Rajasthan, India.

ABSTRACT

Aim: The aim was to assess the knowledge, attitude, and practice (KAP) regarding breast self-examination (BSE) among female B.Sc. nursing students.

Materials and Methods: A cross-sectional descriptive questionnaire study was conducted on nursing students at Mahatma Gandhi nursing college Jaipur, India. Data were analysed using SPSS software (version 12). Chi-square test was used for analysis of categorical variables. Correlation was analysed using Karl Pearson's correlation coefficient. The total scores for KAP were categorized into good and poor scores based on 70% cut-off point out of the total expected score for each. P-value of <0.05 was considered statistically significant.

Results: This study involved a cohort of 203 female nursing students. Overall, the total mean knowledge score was 14.22 ± 8.04 with the fourth year students having the maximum mean score (18.98 ± 3.62). The mean attitude score was 26.42 ± 5.96 . For the practice score, the overall mean score was 12.64 ± 5.92 with the highest mean score noted for third year 13.94 ± 5.31 students. KAP scores upon correlation revealed a significant correlation between knowledge and attitude scores only ($P < 0.05$).

Conclusion: The study highlights the need for educational programs to create awareness regarding regular breast cancer screening behaviour.

Key Words: Breast self-examination, Nursing students, India, Knowledge, Practice.

About Authors:



Author, Mr. Ashok Kumar Dhanwal is a Ph. D. Scholar in Himalayan University, Itanagar, Arunachal Pradesh, India.



Author, Dr. Virendra Singh Choudhary is currently working as Principal, Sheedling Nursing College, Jaipur, Rajasthan, India. He has various National and International publications in his name.

INTRODUCTION

Breast cancer is a global health issue and a leading cause of death among women internationally. [1], [2], [3] In India, it accounts for the second most common cancer in women. Around 80,000 cases are estimated to occur annually. The age-standardized incidence rate of breast cancer among Indian women is 22.9 and the mortality rate is 11.19. [4] In the present scenario, roughly 1 in 26 women are expected to be diagnosed with breast cancer in their lifetime. [5]

Breast cancer is distinguished from other types of cancer by the fact that it occurs in a visible organ and be detected and treated at an early stage. [6]. the 5-year survival rate reached to 85% with early detection whereas later detection decreased the survival rate to 56%. [7] The low survival rates in less developed countries can be attributed to the lack of early detection as well as inadequate diagnosis and treatment facilities.

Recommended preventive techniques to reduce breast cancer mortality and morbidity include breast self-examination (BSE), clinical breast examination (CBE), and mammography. [8] CBE and mammography require hospital visit and specialized equipment and expertise whereas BSE is an inexpensive tool that can be carried out by women themselves. [9] BSE benefits women in two ways: women become familiar with both the appearance and the feel of their breast and detect any changes in their breasts as early as possible. [10] In the literature, it is stated that 90% of the times breast cancer is first noticed by the person herself. [11] Also, several studies have shown that barriers to diagnosis and treatment can be addressed by increasing women's awareness of breast cancer. [12], [13]

Even though BSE is a simple, quick, and cost-free procedure, the practice of BSE is low and varies in different countries; like in England, a study by Philip et al. [14] reported that only 54% of the study population practiced BSE. Furthermore, in Nigeria, the practice of BSE ranged from 19% to 43.2%, [9], [15] and in India, it varied from 0 to 52%. [16],[17] Several reasons like lack of time, lack of self-confidence in their ability to perform the technique correctly, fear of possible discovery of a lump, and embarrassment associated with manipulation of the breast have been cited as reasons for not practicing BSE. [18], [19]

With this background, the present study was designed to determine the knowledge, attitude, and practice (KAP) regarding BSE in a cohort of Indian female nursing students.

MATERIALS AND METHODS

A cross-sectional descriptive study was conducted on nursing students, India, among female nursing students regarding their knowledge, attitude and practice of BSE.

Participation was on voluntary basis. Anonymity and confidentiality of the responses was assured. Ethical committee clearance from the institutional data review board was obtained.

Data were collected by a self-administered pretested close-ended questionnaire. The questionnaire comprised 35 items (15 items on knowledge, 13 items on attitude, and 7 items on practice). For knowledge items, categorical responses (true/false/don't know) were applied, for attitude items, 5-point Likert scale (strongly agree/agree/neutral/not agree/strongly disagree) was used, and for practice, similar ordinals (never/seldom/neutral, frequent/always) was applied.

For positive knowledge, item score "2" was used for correct responses, "1" for don't know, and "0" for incorrect response. For a positive attitude item, a score of "4," "3," "2," "1," and "0" was used for strongly disagree, agree, neutral, disagree, and strongly disagree respectively. For practice, an item score of "0," "1," "2," "3," and "4" was given for never, seldom, neutral, frequently, and always, respectively. Overall, the score was reversed for all the negative items.

Data were analyzed using SPSS software (version 12). Categorical variables were described using frequency distribution and percentages. Continuous variables were expressed by means and standard deviations. Multiple group analysis was done by ANOVA and Newman-Keuls multiple post-hoc tests. Chi-square test was used for analysis of categorical variables. Correlation was analyzed using Pearson's correlation coefficient. The total scores

for KAP were categorized into good or poor based on 70% cut-off point out of the total expected score for each. P-value of <0.05 was considered statistically significant.

RESULT

When mean percent scores were considered, the highest mean percent for knowledge was among fourth year students (66.69 ± 12.26) and this difference was statistically significant when compared to other years ($P = 0.000$). The mean percent of attitude score was maximum for second year students, 53.44 ± 11.55 . However, on comparison, no significant difference was noted among various years ($P = 0.21$). Similarly, even the mean percent of practice score did not reveal any significant difference among various years (mean Percent, 45.13 ± 21.16 ; $P = 0.52$;

On the whole, when good score (i.e., a score of 70% or more of the total) was regarded, a good knowledge and practice score was observed among fourth year students (50% and 19.1%, respectively); for attitude, it was seen among second year students (9.7%). Majority of the population had poor KAP scores. Good knowledge and attitude toward BSE only had a statistically significant difference

KAP scores upon correlation revealed a significant correlation between knowledge and attitude scores only ($P < 0.05$;

DISCUSSION

With the incidence of breast cancer rising, and also absence of any established national breast screening in India, it becomes important to assess the knowledge and practice of BSE in various age groups. The present study involved female dental students (aged 17-24 years) as it can motivate them and instill in them preventive health behavior of practicing BSE regularly. Besides, being a part of a health-care-providing team, they can disseminate information to patients as well as family and friends.

Due to the lack of an international standardized questionnaire on KAP of BSE, we employed the questionnaire utilized in the study by Rosmawati; [20] nevertheless, the questionnaire was pretested on this group and the reliability was found to be good (0.8).

The overall knowledge of BSE in this population was rather very poor. This finding was consistent with the study done by Yadav and Jaroli [17] among Indian college-going students in Rajasthan wherein 28% examined their breasts rarely or never. This poor knowledge reflects on the fact that adequate public education is essential to facilitate early detection of breast cancer.

When the attitude toward BSE was analyzed, it was noted that the majority of the population felt that "all women should do BSE" (mean, 3.19 ± 0.91) suggesting the importance of self-examination in early diagnosis of breast cancer. Though only 20.6% of the population had a good attitude score, the overall mean percent scores for attitude component was the highest indicating that there is an urge among this group to inculcate positive health behavior. Moreover, the finding of this study reveals that the present study population is more enthusiastic to gain information and interested in doing BSE, which contrasts with the findings of previous studies wherein unpleasantness and fear were potential barriers for practicing BSE. [21],[22]

The practicing of BSE in this group of nursing students was also quite alarmingly low (mean score, 12.64 ± 5.92). The mean percent of population practicing BSE was 45.13 ± 21.16 . Though only 53% of them had a good BSE practice score, this was a much better finding as compared to teenagers (3.4%) and 17-30 year olds (14.8%) in Europe. [20] Also, contrasting results were noted when comparisons were made with various populations like 28.3% of Pakistani [23] females practiced BSE and 32.1% of Nigerian females performed BSE. [15] Among the health-care providers, around 90.3% performed BSE in Sao Paulo, [24] and in Turkey, [25] 28% of the nurses and 32% of physicians did not practise BSE. Likewise, in a study by Haji-Mahmoodi et al., [26] it was determined that most health-care practitioners (63-72%) did not practice BSE.

Our study revealed a positive correlation between knowledge and practice (correlation coefficient, 0.2129; $P < 0.05$) illustrating the desire among this population to acquire correct knowledge regarding BSE. Also, this finding

brings to light that if awareness and health education programs are conducted, it might result in negative behaviors changing to positive healthy practices.

The present study points out to a number of conclusions. Though, this study was carried out on a health-care-providing team of nursing students, the knowledge and practice of BSE was quite low. The study also highlights the need for educational programs to create awareness regarding regular breast cancer screening behavior. In this present population, most of them obtained information in the dental school; therefore, it is vital to update them with important health issues that are not often a part of their course.

Our study also has several limitations. The sample of the study population includes female nursing students; hence, the results of the study cannot be generalized to a larger population in India. Likewise, the survey was conducted on a health-care-providing team; hence, the study group might be better informed. Even though the questionnaire utilized in the study was pretested, it may limit the comparability of our results with other studies. Furthermore, the data were collected by self-report, which may be a source of bias. Also, since this study was limited to only female nursing students of a nursing college, the sample size is relatively small and may not be representative of all females of that age group; hence, it is recommended to conduct further studies using larger samples at various institutions in India.

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