Effect Of Structured Teaching Programme On Knowledge Regarding Breast Self-Examination (Bse) Among B. Sc Nursing Students

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Abstract: Background: In India, breast cancer is the major reason for death in regenerative-age women. Early identification assumes a significant aspect in reducing breast cancer-related morbidity and mortality. BSE is the most practical strategies for early recognition of breast cancer. Nurses play a unique role in creating awareness among the people regarding BSE, and early detection of Breast Cancer, as they usually have the closest and effective connection with them. So, proper knowledge & practice regarding the BSE technique is required for nursing students to save themselves as well as the society from Breast cancer. Methodology: The research study was pre-experimental. Total sixty no. of students of B. Sc Nursing 2nd year were chosen as samples from SUM Nursing College, Bhubaneswar by using a purposive sampling technique. Socio-demographic data Performa, self-constructed knowledge questionnaires were used to achieve the purpose of this study. A structured teaching program was organized for 1hour 30minutes to enhance the knowledge of students regarding BSE. Results: The findings of the study revealed that the Structured teaching program enhanced the knowledge level of students regarding BSE (before intervention 11.58±3.56 & after intervention 18.05±2.57). The results revealed that there was a significant difference in knowledge scores after intervention as the calculated t-test value & p-value were 11.38 & 0.00001 respectively, (t_{59}=2.0009 p-value ≤0.05). Conclusion: The conclusion drawn from the study was: BSE related knowledge of students of B.Sc Nursing was upgraded after this structured teaching program.

Keywords: Structured teaching program, BSE, B.Sc Nursing students.

INTRODUCTION

Breasts are significant organs for every woman as these are the symbols of parenthood and womanhood. So any illnesses influencing Breasts especially breast cancer is significant. Breast cancer is an uncontrolled development of breast cells.\(^1\) Breast cancer was considered one of the most common cancers and one of the most significant reasons for death among women.\(^2\) Cancer in the breast is a significant people health concern that influences both developing and developed countries.\(^3\)

According to a report of World health organization on breast cancer 2018, it was assessed that more than 2.1 million of women affected every year by this, and the enormous number of deaths i. e. 627,000 no. of women died due to breast-related cancer, which equal to 15% of all cancer-related
This cancer accounts for 27.7% of all newly diagnosed cancer among women and about 23.5% of all cancer-related deaths among women in India, which indicates that one in four deaths occur due to breast cancer.  

Balekouzou A et al. (2016) conducted a retrospective study on Epidemiology of breast cancer in the Central African Republic. From pathological anatomy records, the data were collected from 2003 to 2015 and a structured questionnaire was developed for collecting information related to this cancer. The results revealed that the mean age of this cancer was 45.83±13.5 years. According to age, the maximum of the study population (29.3%) were within the age group of 45–54 years & 69.5% of the women were housewives. 15.27% was the prevalence of breast cancer. The breast cancer-related incidence and breast cancer-related death in the world were 11.19/100,000 population and 9.97/100,000 population respectively. Breast cancer is the more usual type and the duration between the appearance of first symptoms and consultation is >2 years. So, the results of the study showed that breast cancer is the usual type of cancer and largely affected by women. The study concluded that early detection is important to reduce the incidence of the disease & to decrease cancer-related death in the population.  

One of the key methods for prompt location of breast-related cancer is Breast self-assessment. Early identification and treatment yields good results & helps in survival. The main purpose of BSE is to develop self-awareness and to assist the woman in detecting any abnormality or any changes in the appearance of breast or feel of the breast. The best time to do a BSE is about 3 - 5 days after menstruation. If a woman has gone through menopause, the examination should be on the same day of every month.  

Haruna H et al. (2017) conducted a study to assess the knowledge and practice of Female Nursing Students regarding BSE in Maiduguri University, Borno, Nigeria. A simple random sampling technique was used to select a total of 109 no. of samples. The findings showed that based on knowledge score, 95.4% of the study sample heard regarding this cancer and also BSE whereas based on practice 76.1% of the students practiced BSE while 23.9% had not practiced BSE. Also, 52.3% had practiced it regularly every month, 15% had performed it once in a 4 months, 22% had performed it once in a year and 12% had forgotten the last time they performed BSE. Conclusion of the study was most of the study population have an adequate level of knowledge BSE and if they have adequate knowledge of BSE, then they can practice BSE effectively.  

Singh A et al. (2017) conducted a pre-experimental study to find out the effect of planned teaching program on BSE related knowledge among women in the selected village at Moradabad. A total of 160 respondents were chosen by the technique of Simple random sampling. Structured questionnaires were used. The findings showed that a maximum of 58.75% of respondents had inadequate and 42.25% of respondents had a moderate level of knowledge on BSE in the pre-test whereas in the post-test, a maximum of 73.75% of respondents had adequate and 26.25% of respondents had a moderate level of knowledge regarding BSE. The results revealed that planned teaching program was productive to enhance the nursing students’ knowledge regarding BSE (before intervention 9.55±3.25 & after intervention 19.1±2.84) significantly as calculated “t” value is 53.21 & calculated p-value was less than 0.05 level of significance. Thus, the study concluded that early detection was essential to prevent breast cancer.  

Every woman should practice BSE. But adequate knowledge regarding BSE is essential for them to reduce the possibility of breast cancer. The nurse plays a significant role in BSE education. BSE is an inexpensive, painless & risk-free technique used for the early identification of breast cancer. The nurse should train the people about abnormal changes in breasts and early detection of any abnormality and decrease the risk of getting breast cancer. If women understand the significance of early identification and treatment, then they are more interested to do BSE, regular mammograms without any delay in seeking medical care when any abnormality is found.  

As nursing students are play important role in educating people in both hospital & community settings, they should have thorough and adequate knowledge regarding BSE to extend the knowledge.
of women and help them to practice BSE themselves. So this study has taken by the researcher to find out the effect of a structured teaching program to enhance the nursing students’ knowledge regarding breast self-examination.

METHODS AND MATERIAL

A quantitative approach with a pre-experimental one group pre-test-post-test design was used. The research setting was SUM Nursing College, Bhubaneswar. Population: It comprised of students of B. Sc nursing of different Nursing Colleges, Bhubaneswar. Sample: B. Sc Nursing 2nd year Students of selected Nursing College, Bhubaneswar were selected as samples. Sample size: A total of sixty nos. of B. Sc 2nd yr nursing Students were selected. Sampling technique: Non-probability purposive sampling technique was used.

Description of the tool

In the present study, socio-demographic questionnaires & self-structured knowledge questionnaire for assessing the knowledge regarding BSE was used to collect information.

Section- I: Socio-demographic questionnaires: This tool consists of 10 items like age, area of living, family type, educational qualification, education of father, education of mother, family history of breast cancer, previous knowledge on BSE, and source of previous knowledge of BSE & ever performed BSE.

Section- II: Self-constructed knowledge Questionnaire on BSE: This tool consists of a total of 22 no. of questions related to BSE. The total score was 22. Each question has four options with one correct answer. Each correct answer equals ‘1’ mark & each wrong answer equals ‘0’ mark. The reliability value of the tool was 0.74.

Scoring:

- 0-7: Poor knowledge
- 8-15: Average knowledge
- 16-22: Good knowledge.

PROCEDURE FOR COLLECTING DATA

Data collection was done after obtaining a formal prior written permission from the Dean of selected nursing college for conducting the study through proper channel. The researcher has first introduced herself & explained the purpose of gathering information. Based on inclusion & exclusion criteria, samples were selected. Then Pre-test was conducted for 60 students by using the tool. The tool consists of two sections, the first section consists of 12 socio-demographic questions and the second section consists of 22 multiple choice questions related to BSE. After that structured teaching program was given for 1hr 30 minutes regarding BSE and doubts were clarified. The method of teaching used in structured teaching program was lecture cum discussion, videos & slides were prepared to facilitate teaching. The structured teaching program consists of introduction, definition, purposes, Steps of BSE, benefits & barriers of BSE, and then post-test was done. The analysis of data was done by using statistics.

RESULTS

Section-i: Study sample description according to demographic variables: -

The data shows that out of 60 students, 13 (21.7%) belonged to the age group of 17-19yrs while 46 (76.7%) belonged to the age group of 20-22yrs, and 1 (1.6%) belong to 23yrs & above. According to the area of living 46 (76.7%) of students are from an urban area and 14 (23.3%) are from a rural area. According to the type of family 54 (90%) of students are from nuclear family and 6 (10%) are from joint families. According to the educational qualification, 40 (66.7%) of students...
came after their higher secondary while 20 (33.3%) came after Graduation. According to the education of father, 1 (1.6%) of student’s father was educated up to the primary, 9 (15%) are secondary, 8 (13.4%) are higher secondary, 42 (70%) has done Graduation & above. According to the education of mother, 1 (1.6%) of student’s mother was educated up to the primary, 16 (26.7%) are secondary, 8 (13.4%) are higher secondary, 35 (58.3%) has done Graduation & above. 4 (6.7%) of students have a family history of cancer & 56 (93.3%) of students do not have a family history of cancer. 26 (43.3%) of students were having previous knowledge of BSE and 34(56.7%) students do not have. 11 (18.3%) students got the information of BSE from Family, friends & relatives, 8 (13.3%) from health personnel, and 41 (68.4%) from media. 8 (13.3%) students have performed BSE, whereas 52 (86.7%) have never performed BSE.

Section-ii:  Pre-test and post-test knowledge scores of students regarding breast self-examination.

![Fig-1](image)

Fig- 1, bar diagram showing the distribution of the percentage of BSE related knowledge score in pre-test & post-test

Fig- 1 reveals that according to the level of knowledge, pre-test shows that maximum of study samples (65%) had average knowledge, whereas 15% samples had good knowledge & 20% had a poor level of knowledge regarding BSE, whereas the majority of study samples (85%) had good knowledge, whereas 15% samples had an average level of knowledge regarding BSE in post-test.

Section-iii:  Effect of Structured teaching program regarding BSE

Table-1 Knowledge scores (before the intervention and after intervention) regarding BSE by using t-test

<table>
<thead>
<tr>
<th>Knowledge score</th>
<th>mean (n=60)</th>
<th>Standard deviation</th>
<th>t value</th>
<th>Df</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre test</td>
<td>11.58</td>
<td>3.56</td>
<td>11.38</td>
<td>59</td>
<td>&lt;0.00001</td>
</tr>
<tr>
<td>Post-test</td>
<td>18.05</td>
<td>2.57</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table-1, reveals that there was an extremely statistically remarkable relation of knowledge scores in before intervention and after the intervention, as calculated paired t (11.38) value was more than the table t value (t59=2.0009) & calculated p-value, was (<0.00001) being less than 0. 05 levels of significance. Hence the research hypothesis was accepted.

DISCUSSION

The present study reveals that the overall pre-test knowledge was 11.58 ± 3.56 whereas post-test knowledge was 18.05 ± 2.57. The paired t value & p-value was 11.38 & <0.0001 respectively. So,
the research hypothesis was accepted whereas the null hypothesis was rejected. Thus, the intervention was effective in enriching nursing students’ knowledge of BSE.

This present study was contributed by Fernandes P. (2017) as the data showed that before intervention knowledge score was 8.79±2.10 whereas after the intervention the knowledge score was 17.54±1.98 and the calculated t value & p-value was 32.250 & <0.05 respectively. So, It indicates that intervention was effective.\textsuperscript{10}

Also, this present study was supported by Rai K & Kaur S. (2015) as the result showed that the mean post-test score was 30.98 whereas the mean pre-test score was 15.66 & t value was -43.572. So it concluded that the planned teaching program was useful in developing nursing students’ knowledge regarding BSE.\textsuperscript{1}

Also, this present study was supported by Avachat SS et al. (2016) as the result showed that the mean post-test score was 12.48 whereas the mean pre-test score was 8.55. Majority of the samples (73%) had poor or average knowledge about BSE before training but after training the knowledge level improved.\textsuperscript{7}

**CONCLUSION**

The teaching program was a productive strategy to improve nursing students’ knowledge regarding breast self-examination. It is not only beneficial for them but also for the women of the society to identify breast cancer at its earliest stages as they are rare in the front line of health care delivery system to provide care in different settings like hospitals & community.

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**DECLARATIONS**

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**Conflict of interest:** Not declared

**REFERENCE:**

