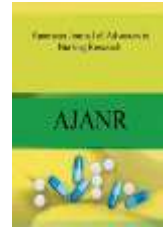




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EFFECTIVENESS OF A STRUCTURED TEACHING PROGRAM ON KNOWLEDGE OF STUDENTS REGARDING BREAST SELF- EXAMINATION IN A SELECTED COLLEGE, BANGLORE

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ABSTRACT

Introduction: - Breast self-examination is a screening method used in an attempt to detect early breast cancer. The method involves the women herself looking at the mirror and feeling each breast for possible lumps, distortions or swelling. Breast self-examination (BSE) was once promoted heavily as a means of finding cancer at a more curable stage. It's a simple, feasible way for breast cancer early detection in a low middle income country. The women should be advised to perform monthly breast self-examinations to check for any changes in the breast. The examination should be done every month and at the end of every menses in all menstruating women.¹ The general awareness about one's breasts is more important than monthly self-exams and those women who detect their own breast cancers. Breast self-examination included inspection and palpation of breast in both standing and lying down positions. It's an inexpensive, risk free, private and relatively simple examination to detect breast cancer or breast abnormalities. **2 Objectives:** - 1. To assess the level of pre-test knowledge regarding breast self-examination among female students in a selected college, Bengaluru. 2. To assess the level of post-test knowledge regarding breast self-examination among female students in a selected college, Bengaluru. 3. To evaluate the effectiveness of structured teaching programmes regarding the breast self-examination among female students in a selected college, Bengaluru. 4. To find out the association between post-test knowledge scores regarding breast self-examination with selected demographic variables. **Design:** - Evaluative research approach was used for the study. Forty, 2nd & 3rd semester engineering students of ACS College of Engineering were recruited by non-probability purposive sampling method. Necessary administrative permission was obtained from concerned authority. Written informed consent was obtained from all subjects. Then the investigator collected the data pertaining to the demographic variables by using structured interview schedule. Ethical clearance was obtained from Institutional ethical committee. Content validity of the tool was established by split of method. The obtained score was 0.96 & it was found to be reliable. Pre-testing of the tools was done. **Setting:** - The study was conducted in ACS College of Engineering, Bangalore, Karnataka. **Result:** - The findings of the study was revealed that the mean score of knowledge regarding BSE was 13.6 in pre-test and 22.4 in post-test out of maximum score of 28. The mean score percentage was 34.4 in pre-test and 60.1 in post-test, which proved that structured teaching programme was effective in increasing the knowledge level of



Engineering students regarding breast self examination. The paired 't' test found be statistically significance at 0.05 levels. Conclusion: - The present study attempted to assess the effectiveness of structured teaching programme on knowledge of engineering students regarding breast self examination and it was found that the structured teaching programme was effective in improving the knowledge of engineering students.

INTRODUCTION

Breast self-examination is a check-up that a woman does at home to look for changes or health problems in the breast tissue. Many women feel that performing this exam is important to their health, as breast cancer is a leading cause for the mortality and morbidity among women.

Breast cancer is a major public health issue and the most commonly diagnosed cancer for women worldwide. Breast cancer accounts for 12.9 of all cancers in women. It is estimated more than 287,850 new cases of breast cancer occurred among women worldwide in 2022. [3]

Lewis states that breast cancer is a group of malignant diseases that commonly occur in the female breast. Breast cancer is one of the commonest causes of death in many developed countries in the middle age women and is becoming frequent in the developing countries too.

National cancer institute reported that 55% of women in US will develop breast cancer. Breast cancers is a growing problem in India with estimates as high as 1 in 22 women predicted to develop the disease, while the breast cancer rate much higher in us 1 in 8 women. Environment health stated that Canadian researchers found that certain jobs especially those that bring the human body into contact with possible carcinogens and endocrine disruptors are linked to a higher risk of developing breast cancer. [4]

The knowledge and health seeking attitude for breast cancer management are low in Africa, such that majority of the affected patients presents late to the hospital when little or nothing can be done in terms of treatment. It has been reported that most patients with breast cancer in developing countries present for the first at advanced stages. This is possibly due to lack of early detection of the disease. The diagnosis of breast cancer during the early stages has been linked to a reduction in mortality, morbidity and cost of management of the illness. This indicated a need for increased community awareness of methods for the early detection of the disease. [5]

Early detection is usually done through screening and screening methods including breast self-examination. Due to less number of experts and lack of advanced

diagnostic techniques in developing countries, promoting regular breast self-examination has been said to be the feasible screening option for early detection of breast cancer. Breast self-examination involves visualization and palpation of the breast by oneself for lumps, shape, texture size and contour. The purpose of breast self-examination is for a woman to be able to identify changes in her breast should they exist, it is carried out once monthly between day 7 and 10 of the menstrual Cycle. BSE has a positive effect on early detection of breast cancer. About 80% of a systematic regular self-examination but as a part of daily activities such a showering and dressing. [6]

BSE is regarded as a valuable screening tool for breast cancer when used as an adjunct to CBE and mammography. Furthermore, it can be utilized in enhancing breast cancer awareness among women. Breast self-examination is recommended because it is inexpensive, private painless, easy, safe and does not require any special equipment. Breast self-examination is a safe, effective, easy, private and economic screening methods involves no cost on require any specific equipment in the early detection of breast cancer. Women of age 20 and above are recommended to perform breast self-examination. Proper BSE techniques have clearly been shown to be related to lump detection ability and remains useful part of breast cancer screening. It's better to prevent the occurrence of the disease rather than cure. Since 90% of breast cancer are discovered by breast self-examination. BSE is a cost-free health practice and it can be practiced by both young and old women. Breast symptoms are common accounting for >15 million physicians visit a year. The maturity of breast cancers is found by women themselves; self-examinations optimize the chances of women finding abnormal changes in their body. [7]

The practice of breast self-examination has been seen to empower women taking responsibility for their own health. Therefore, BSE is recommended for training awareness among woman at risk. It is important to encourage women to become aware of the feel and shape of their breast. The principles of examination are similar for physician and patient. Breasts are inspected for asymmetric in shape, nipples, inversion, bulging and dimpling. Scientists produced dismal news about mammograms. After tracking 90,000 women for 25 years, researchers in Canada found that those who received regular mammograms did not experience fewer deaths from breast cancer or from all causes compared with those who did not. But buried was a nugget of hope. The women

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who did not receive regular mammograms were instead monitored with physical breast exams that proven effective. All of the participants were taught to examine their own breast once in a month, and specially trained nurses examined woman who were in their 30's. This low-tech approach, the researchers found appeared to be as good as or better than regular mammograms at locating the serious cancer that needed treatment. [8]

OBJECTIVES

1. To assess the level of pre-test knowledge regarding breast self-examination among female students in a selected college, Bengaluru.
2. To assess the level of post-test knowledge regarding breast self-examination among female students in a selected college, Bengaluru.
3. To evaluate the effectiveness of structured teaching programmes regarding the breast self-examination among female students in a selected college, Bengaluru.
4. To find out the association between post-test knowledge scores regarding breast self-examination with selected demographic variables.

HYPOTHESES

H₁ – There's a significant difference in a pre-test and post-test level of knowledge regarding breast self-examination among students in selected college, Bangalore.

H₂– There's a significant association of post-test level of knowledge regarding breast self-examination among students with their selected demographic variables.

MATERIAL AND METHODS

Evaluative research approach was used for the study. Forty students were recruited by non- probability purposive sampling method. Necessary administrative permission was obtained from concerned authority. Written informed consent was obtained from all subjects. Later the investigator collected the data pertaining to the

demographic variables by using structured interview schedule in the following three phases.

Phase I: Assess the pre-test knowledge of students regarding breast self examination by using structured questionnaire.

Phase II: A STP was administered on knowledge regarding breast self examination.

Phase II: Assess the post-test knowledge after a period of week within the group followed by same procedure.

Ethical clearance was obtained from Institutional ethical committee. Content validity of the tool was established by split of method. The obtained score was 0.96 & it was found to reliable. Pre-testing of the tools was done. A pilot study was conducted to see the feasibility. The obtained data were analyzed based on the objectives and hypothesis by using descriptive and inferential statistics.

The above table-1 represents the frequency and percentage distribution of demographic variables of female students, were majority of the students(100%) were under the age group of 18-19, most of the students(87.5%) doesn't have previous knowledge regarding BSE, and among the students who knew about BSE gained their knowledge mostly through educational institutions(57.5%), 92.5% students doesn't have family history of breast cancer, and a majority of 70% students have never practiced BSE and finally a majority of (70%) students has not visited a gynecologist previously.

The above table 2 shows the distribution of female students according to the level of knowledge regarding breast self examination before and after structured teaching programme. It revealed that in pre-test, majority of the respondents 25 (62.5%) had inadequate knowledge, 15 (37.5%) had moderate knowledge and none of them had adequate knowledge regarding breast self examination. And in post-test most of the respondents 30 (75%) had adequate knowledge and 10 (25%) had moderate knowledge regarding breast self examination.

Table-1: Frequency and percentage distribution of demographic variables of female students

Sl.No	Demographic variables	Frequency (f)	Percentage (%)
1.	Age in years a) 18-19	40	100%
2.	Previous knowledge regarding breast self-examination a) No b) Yes	35 5	87.5% 12.5%



3.	Source of knowledge regarding breast self-examination a) Books b) Educational institution c) Health care professionals e) Internet	4 23 6 7	10% 57.5% 15% 17.5%
4.	Family history of breast cancer a) No b) Yes	37 3	92.5% 7.5%
5.	Previous practice of BSE a) Yes b) No	12 28	30% 70%
6.	Previous visit to a gynecologist a) Yes b) No	12 28	30% 70%

Table 2: Frequency and percentage distribution of female students according to the level of knowledge regarding breast self examination before and after structured teaching programme.

Sl.No	Level of Knowledge	Respondents Knowledge			
		Pre-test		Post-test	
		Frequency	Percentage	Frequency	Percentage
1.	Inadequate (< 50%)	25	62.5	-	-
2.	Moderate (50-75%)	15	37.5	10	25
3.	Adequate (> 75%)	-	-	30	75
OVERALL		40	100	40	100

Table 3: Mean, Standard Deviation and paired 't' test to determine the effectiveness of structured teaching programme regarding knowledge on breast self examination among students.

Max score	Mean	SD	Mean difference	paired "t" test	Significance
Pre-Test	17.81	4.27	4.75	16.05	0.05*
Post-Test	22.56	4.78			

The data presented in a table-3 shows that the obtained [t] value was 16.05, which was found statistically significant at 0.05 levels.

Table 4: Comparison of pre-test and post-test level of knowledge among students regarding breast self examination

Level of knowledge	Pre-test		Post-test		Chi square test
	No. of nursing students	%	No. of nursing students	%	
Adequate knowledge	0	0	30	75	$\chi^2 = 2.11$ Df=3 P=0.05**
Moderately adequate knowledge	25	62.5	10	25	
Inadequate knowledge	15	37.5	0	0	
Total	40	100	40	100	

IMPLICATION OF THE STUDY

The result of the study proceed that students had inadequate knowledge regarding breast self examination. The findings of the study have scope in the following areas,

Nursing Practice

1. Nurses working in the community field should have enough knowledge about breast self examination & able to find an opportunity to teach & improve

knowledge regarding breast self examination.

2. Nursing professionals can play a key role in the enhancement of knowledge of students regarding breast self examination, which could improve the knowledge of students.

Nursing Education

1. Nursing curriculum can be modified with increased emphasis on breast self examination.
2. Students can be also trained to work in care under



proper guidance.

Nursing Administration

1. Administrators can organize the educational programs in schools and community areas to provide knowledge regarding breast self examination.
2. The nurse administrator in the higher-level authority must hold discussions and meetings on breast self examination. Based on that, the knowledge of the students can be assessed and the program can be planned and implemented in school & community at various levels.

Nursing Research

Management & administration authorities give encouragement, motivation & also provide financial support to do research.

ASSUMPTIONS

- ✓ Students will have some knowledge regarding selected aspects breast self examination.
- ✓ Structured teaching programme may enhance the knowledge of students regarding selected aspects of breast self examination.

LIMITATIONS

1. The study was conducted in selected colleges.
2. Sample was selected only from one institution; hence generalization can only be made for the selected sample.
3. The study did not use control group. The investigator had no control over the events that took place between pre-test and post-test.

RECOMMENDATIONS

Based on the study findings the following recommendations have been made for further study:

1. Similar study can be carried out on larger samples for broader generalization.
2. A similar study can be conducted among staff nurses to assess the knowledge on selected aspects of breast self examination
3. A comparative study may be conducted to assess the knowledge, belief and practice on breast self examination among students.

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4. A comparative study could be conducted in different settings to find out the effectiveness of structured teaching programme.
5. An experimental study could be replicated with a control group.
6. A comparative study could be undertaken to evaluate different teaching strategies, self-instructional module (SIM), peer evaluation and education by students.

DISCUSSION

Structured teaching programme was found to be an effective educative method for improving the knowledge of students in the selected college regarding breast self examination. The findings were similar to other studies, which shown that students having good knowledge on breast self examination. In the present study results revealed that obtained [t] value was 16.05, which were found with statistically significant at 0.05 levels.

CONCLUSION

The study concluded that the structured teaching programme on knowledge regarding breast self examination of students in the selected college carried out was effective in improving the knowledge of students as evidenced by the significant change between pre-test and post-test knowledge score.

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