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A Study Evaluate the Effectiveness of Self-Instructional Module (SIM) on knowledge regarding Breast Cancer among B.Sc Nursing students of selected Nursing College, Tumkur

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ABSTRACT

A Study to Evaluate the Effectiveness of Self-Instructional Module (SIM) on knowledge regarding Breast Cancer among B.Sc Nursing students of selected Nursing College, Tumkur.

The study was conducted at Ashwini college of nursing, Tumkur. The study was conducted from 11/03/2025 to 17/03/2025. Pre-experimental one group pre-test and post-test design was used in this study. The total period of data collection was 1 week. 60 samples were selected using Probability Simple Random sampling technique. Oral consent was obtained. During the first week, assessment of the level of knowledge on Breast cancer was done. The Self-Instructional Module (SIM) was provided. After 15 Days the level of knowledge among B.Sc Nursing students were assessed by using Structured Knowledge Questionnaire based on Breast cancer. The descriptive statistics was used for categorical data, mean and standard deviation, inferential statistics, Paired‘t’ test was used to evaluate the effectiveness of Self-Instructional Module (SIM) regarding Breast cancer among B.Sc nursing students and Chi square was used to find out association between the level of knowledge regarding Breast cancer among B.Sc Nursing students and their demographic variables.

The calculated paired ‘t’ value **(t_{cal} = 46.4*)** was greater than the tabulated paired ‘t’ value (t_{tab}= 2.000) at 0.05 level of significance. This indicates that the gain in knowledge score mean score on level of knowledge regarding Breast cancer among B.Sc Nursing students. There was no significant association on demographic variables. The finding of the study shows that Self-Instructional Module (SIM) is effective to improve the level of knowledge regarding Breast cancer among B.Sc nursing students.

Keywords: Self-Instructional Module (SIM) , Breast Cancer, B.Sc nursing students

INTRODUCTION:

It is important for women to understand the normal anatomy and function of their breast so that any abnormalities can be detected and treated early. There are many different types of breast abnormalities, the most common ones are mastitis, cysts, benign lumps and breast cancer, which may be benign or malignant.[1]

The term “Breast cancer” refers to a malignant tumor that has developed from cells in the breast due to

their uncontrolled growth. Breast cancer occurs almost entirely in women, men can get breast cancer too but rare. Breast cancer is the most commonly occurring cancer in women and the second most common cancer overall.[2]

According to health ministry of India, breast cancer ranks as the number one cancer among Indian females with rate as high as 25.8 per 1,00,000 women and mortality of 12.7 per 100,000 women. India continues to have a low survival rate of 66.1% whereas US and Australia had survival rates of 90%, according to the study.[2]

According to GLOBOCAN, cancer mortality and morbidity are increasing worldwide, with an estimated 13.1 million deaths in 2030. Cancer prevalence in India is established to be around 2.5 million with over 8, 00,000 new cases and 55,000 deaths occurring each year.[3]

Risk factors for developing breast cancer include being female, obesity, lack of physical exercise, alcohol consumption, and hormone replacement therapy during menopause, ionizing radiation, having children late or not at all, older age, prior history of Breast cancer and family history. About 5–10% of cases are due to genes inherited from a person's parents, including BRCA1 and BRCA2 among others. Breast cancer most commonly develops in cells from the lining of milk ducts and the lobules that supply the ducts with milk.[4]

Signs of breast cancer may include a lump in the breast, a change in breast shape, dimpling of the skin, and fluid coming from the nipple, a newly-inverted nipple or a red or scaly patch of skin.[4]

A number of screening tests have been employed including Clinical and Self-Breast Examination, mammography, genetic screening, ultrasound and magnetic resonance imaging. A multidisciplinary approach is preferable for treatment of cancer including surgery, radiation therapy, chemotherapy, hormonal therapy and targeted therapy.[4]

A comparative study found that there was about 52.3%. gain in knowledge scores after administration of Self-Instructional Module (SIM) on knowledge regarding Breast Cancer among B.Ed students of hubballi-Dharwad.[5]

Breast cancer is one such disease, where advancements have now resulted in almost normal life post completion of treatment. In advanced countries focus in breast cancer is slowly shifted from total survival of the patient to disease free survival to now reducing Breast cancer related morbidity and mutilation. This paradigm shift is also being observed in certain higher centers in India but majority of the population is unaware.[6] But above all these, it is better to focus on the prevention of Breast cancer.

Breast cancer patients do not tend to survive for a longer time if the cancer is detected at late stage causing an impact on survival rate even with effective treatment, as the reason for late detection includes low awareness, presence of stigma, fear about pain during screening, fear about the disease, gender inequality, lack of screening test, low literacy rate and low income.[7]

One of the research studies reports that about 91% of the women were not aware about the risk factors of Breast cancer. As well as 89.5% were not aware about the symptoms of Breast cancer, 92.5% were not aware about the preventive measures of Breast cancer and none of them were aware of Breast Self-Examination. Comparing the educational status and the level of awareness on Breast cancer among the study subjects it was found that the educational status had significant influence on the level of awareness on breast cancer ($p<0.0001$). [8]

MATERIALS AND MEATHODS:

Approach:

Quantitative Evaluative Research approach was used for this study.

Study Design:

The research design used for the present study was Pre-experimental one group pre-test and post-test design.

O1 X O2

O1 : Pre-test to assess the level of knowledge regarding Breast Cancer among B.Sc nursing students.

X : Self-Instructional Module (SIM)

O2 : Post-test to assess the level of knowledge regarding Breast Cancer among B.Sc nursing students

Variables:

- Independent variable: Self-Instructional Module (SIM)
- Dependent variable: Knowledge regarding Breast Cancer

Population:

- The Population of the study comprises of 60 B.Sc Nursing students.

Setting and Sample:

In present study, 60 B.Sc Nursing Students were selected from Nursing Colleges of Tumkur.

Measurement:

The subjects were given Socio-demographic sheet and the structured knowledge questionnaire. Each correct answer carries 1 mark and incorrect answer carries 0 mark. The tool was validated by experts in the field of obstetrics and Gynecological Nursing. The tool was tested reliability by using Split half Method and applying Karl Pearson's Coeffient formula. The reliability of Structured knowledge questionnaire was **r=0.90.**

Data Collection:

The research investigator had taken formal permission from the Nursing College. The investigator introduced herself and explained the purpose of the study written consent was obtained from the participants. The collected data was tabulated and analysed.

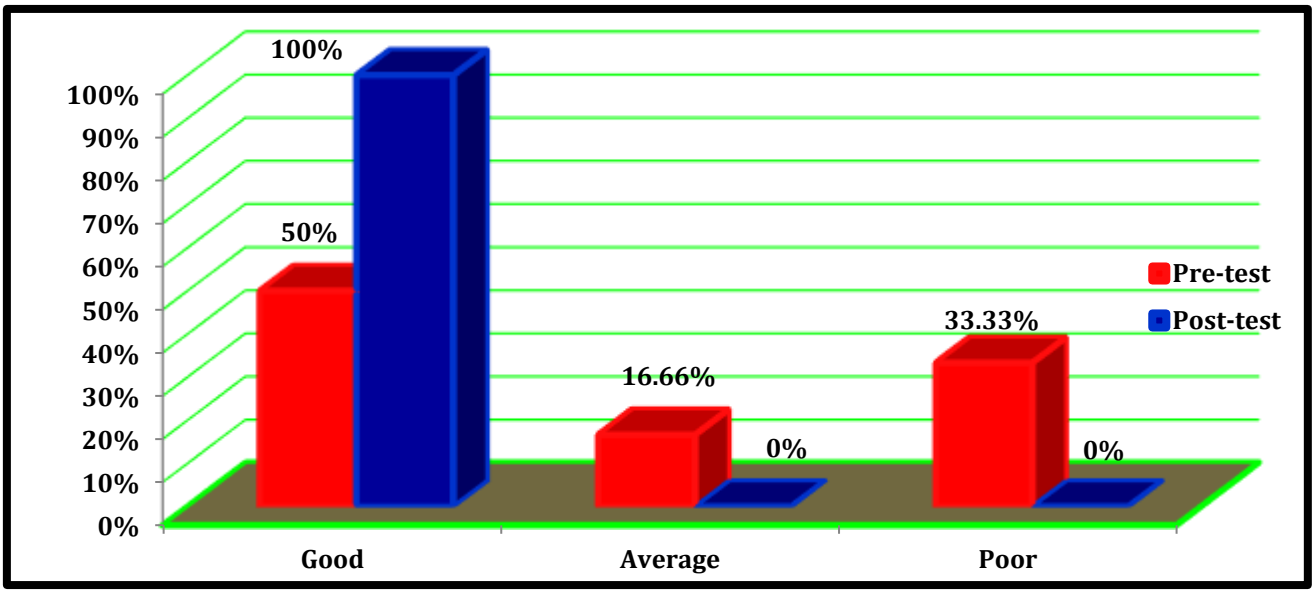
Data Analysis:

The data obtained ware analysed in terms of the objectives of the study using descriptive and inferential statistics. Tabulation of data in terms of frequency, percentage, mean, median, mode, standard deviation and range to describe the data. Classification of knowledge scores (level of knowledge) were as follows:

- Good Knowledge = $(\bar{X} + SD)$ and above
- Average knowledge = $(\bar{X} - SD)$ to $(\bar{X} + SD)$
- Poor knowledge =$(\bar{X} - SD)$and below [Note: $\bar{X}$=Mean, SD= Standard deviation]

Results

Level of Knowledge score n=60



Graph 1: The cone graph represents percentage distribution of subjects according to their level of knowledge scores regarding Breast cancer among B.Sc nursing students

Graph 1 shows that, In pre-test, Majority of subjects 35(58%) had average knowledge, 14(23.33%) had poor knowledge and 11(18.33%) had good knowledge in the pre-test, whereas in post-test 60(100%) of them had good knowledge.

Discussion:

The present study has been undertaken with the aim to assess the knowledge regarding Breast cancer before and after Self-Instructional Module (SIM) among B.Sc nursing students.

Conclusion:

Based on the findings of the study, the following conclusions were drawn:

1. The overall knowledge scores of B.Sc Nursing students regarding Breast cancer was High.
2. The study reveals that fact that Self-Instructional Module (SIM) significantly increases knowledge among B.Sc nursing students Breast cancer.

RECOMMENDATIONS:

Keeping in the view the findings of the present study, the following recommendations were made:

1. This study can be replicated to a larger sample to generalize the findings.
2. A comparative study can be conducted.
3. A different intervention can be used.
4. Periodic awareness programme should be conducted regarding self breast examination

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