



“A STUDY TO ASSESS THE EFFECTIVENESS OF A STRUCTURED TEACHING PROGRAM ON KNOWLEDGE REGARDING BREAST CANCER AMONG 1ST YEAR B.SC. NURSING STUDENTS AT ASRAM COLLEGE OF NURSING, ELURU.”

Nursing

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ABSTRACT

Background: Breast cancer is a leading cause of morbidity and mortality among women worldwide. Despite its prevalence, awareness regarding its risk factors, early detection, and self-examination practices remains inadequate among nursing students. Structured Teaching Programs (STP) can play a crucial role in bridging this knowledge gap. **Objectives:** (1) To assess the pre-existing knowledge of first-year B.Sc. Nursing students regarding breast cancer, (2) To evaluate the effectiveness of a Structured Teaching Program (STP) on breast cancer awareness, and (3) To assess the association between post-test knowledge and demographic variables. **Methods:** A quantitative research approach with a pre-experimental, one-group pre-test and post-test design was employed. The study involved 50 first-year B.Sc. Nursing students at ASRAM College of Nursing, Eluru. Data were collected using a structured questionnaire before and after administering an STP on breast cancer. **Results:** The pre-test results showed that 10% of students had inadequate knowledge, while 90% had moderately adequate knowledge. Post-test findings indicated that 92% of students achieved adequate knowledge, and 8% had moderately adequate knowledge. The mean pre-test score was 9.44, while the post-test score increased to 16.38. A paired t-test value of 24.9 indicated a highly significant difference ($p < 0.001$) between pre-test and post-test scores. There was no significant association between demographic variables and post-test knowledge levels. **Conclusion:** The Structured Teaching Program was highly effective in enhancing the knowledge of nursing students regarding breast cancer. The study highlights the importance of incorporating breast cancer education into the nursing curriculum to improve early detection and preventive practices.

KEYWORDS

Breast cancer, Nursing education, Structured Teaching Program, Knowledge, B.Sc. Nursing.

INTRODUCTION:

Breast cancer remains one of the most common cancers among women, contributing significantly to global cancer-related deaths. Early detection through regular screening and self-examinations is key to improving survival rates. However, awareness regarding these preventive measures is often low among nursing students, who are future healthcare providers. This study aims to evaluate the effectiveness of a Structured Teaching Program in improving knowledge levels among first-year B.Sc. Nursing students at ASRAM College of Nursing.

Breast cancer typically originates in the cells of the milk ducts or milk-producing glands (lobules) of the breast. It can be categorized into two main types: benign and malignant. While benign tumors are non-cancerous and do not spread, malignant tumors are cancerous and have the potential to invade nearby tissues or metastasize to other parts of the body through the lymphatic system. If left untreated, breast cancer may spread to other organs, making early detection and treatment essential in improving survival rates.

Statement Of The Problem:

“A study to assess the effectiveness of a structured teaching program on knowledge regarding breast cancer among 1st year B.Sc. Nursing students at ASRAM College of Nursing, Eluru.”

Objectives Of The Study:

1. To assess the pre-existing knowledge of 1st year B.Sc. Nursing students regarding breast cancer.
2. To evaluate the effectiveness of a structured teaching program (STP) on improving their knowledge regarding breast cancer.
3. To assess the association between demographic variables (age, family income, etc.) and post test knowledge regarding breast cancer.

Hypothesis:

- **H1:-** There is a significant difference between pre-test and post-test knowledge scores regarding breast cancer among 1st year B.Sc. Nursing students.
- **H2:-** There is a significant association between demographic variables and the level of knowledge regarding breast cancer.

MATERIAL AND METHODS:

Research Approach

A quantitative research approach was used for this study.

Research Design

A pre experimental, one group pre and post test design was adopted for this study.

O1 x O2

Keys

O1 = Pre test.

x = Structured Teaching Programme on breast cancer among 1st year BSc nursing students.

O2 = Post test.

Variables

Dependent Variables

Knowledge on breast cancer among 1st year BSc nursing students.

Independent Variables

Structured teaching program aimed at improving the theoretical knowledge of Breast cancer.

Setting Of The Study

The selection of the setting is important for a study because it can influence the subject variables. The present study was conducted at ASRAM College of Nursing, Eluru, West Godavari district.

Population

Target Population

The target population in this study includes 1st year B.Sc. Nursing students at ASRAM College of Nursing, Eluru.

Sample

The sample used in this study represents the population and is intended to make inferences about it. The sample consists of 1st year B.Sc. Nursing students from the Asram college who met the inclusion criteria. The technique used was "non-probability convenience sampling,

Sample Size

Sample size for this study was 50 samples who fulfil the inclusion criteria.

Sampling Technique

Sampling is the process of selecting a sample from the target population. The technique used was "Non- Probability Convenient Sampling" depending upon the availability of samples in Asram college at Eluru, based on inclusion criteria.

Inclusion Criteria:

- 1st year B.Sc. Nursing students at ASRAM College of Nursing, Eluru.
- Students willing to participate in the study.

Exclusion Criteria:

- Students who are absent on the day of data collection.
- Students who are unwilling to participate.

Tools And Techniques

Part – I:- Demographic variables included age, family, occupational status of father, occupational status of mother, income, hobby, Heard about breast cancer, Know about BSE .

Part- II :- It consists of Structured Multiple Choice Questionnaires related to the assessment of the level of knowledge regarding breast cancer among 1st year BSc nursing students during pre and posttest.

Data Collection Procedure

Formal permission was obtained from the principal of ASRAM College of Nursing. Consent from the subjects was obtained, and confidentiality was maintained throughout the study. The pre-test was conducted to assess knowledge regarding breast cancer. The planned teaching was administered, and the post-test was conducted. The total duration of data collection was two weeks.

Data Analysis

Descriptive statistics like frequency, mean, SD, mean percentage was used for description of demographic characteristics and assessment of knowledge. Inferential statistics like paired t test was used to evaluate the effectiveness of STP and chi-square test was used to find out the association between knowledge with demographic variables.

RESULTS AND DISCUSSION:

Section-A

Description of socio demographic variables.

Table 1: Frequency And Percentage Distribution Of Demographic Variables Among 1st Year BSc Nursing Students.

Demographic Variable	Frequency (n)	Percentage (%)
Age (Years)		
18-19	32	64
20-21	18	36
22-23	0	0
Above 23	0	0
Family		
Nuclear Family	37	74
Joint Family	13	26
Both	0	0
Others	0	0
Father occupation		
Unemployed	0	0
Unskilled Worker	0	0
Semiskilled Worker	0	0
Skilled Worker	50	100
Mother Occupation		
Unemployed	32	64
Unskilled Worker	0	0
Semiskilled Worker	15	30
Skilled Worker	3	6
Income		
>Rs.2091	1	2
Rs.2092-6213	0	0
Rs.6214-10356	0	0
Rs.10357-15535	49	98
Hobby		
Outdoor Games	27	54
Indoor Games	13	26
Internet Chatting	4	8
Others	6	12
Heard about Breast cancer		
Yes	50	100
No	0	0
Know about BSE		
Yes	34	68
No	16	32

The above table shows that With regards to the age: 32 members (64%) were 18-19 years, 18 members (36%) were 20-21 years, 0 members (0%) were 22-23 years, and 0 members (0%) were above 23

years. With regards to the family type of the students: 37 members (74%) were from nuclear families, 13 members (26%) were from joint families, 0 members (0%) had both family types, and 0 members (0%) belonged to other family structures. With regards to the occupation of the fathers: 0 members (0%) had unemployed fathers, 0 members (0%) had fathers who were unskilled workers, 0 members (0%) had fathers who were semiskilled workers, and 50 members (100%) had fathers who were skilled workers. With regards to the occupation of the mothers: 32 members (64%) had mothers who were unemployed, 0 members (0%) had mothers who were unskilled workers, 15 members (30%) had mothers who were semiskilled workers, and 3 members (6%) had mothers who were skilled workers. With regards to the family income: 1 member (2%) had an income of > 2091 Rs, 0 members (0%) had an income between Rs 2092 - 6213, 0 members (0%) had an income between Rs 6214 – 10356, and 49 members (98%) had an income between Rs 10357 - 15535. With regards to the hobby of the students: 27 members (54%) preferred outdoor games, 13 members (26%) preferred indoor games, 4 members (8%) preferred internet chatting, and 6 members (12%) had other hobbies. With regards to whether the students had heard about breast cancer: 50 members (100%) responded "Yes," and 0 members (0%) responded "No." With regards to the knowledge of Breast Self-Examination (BSE): 34 members (68%) knew about BSE, and 16 members (32%) did not know about BSE.

Section B

Level of knowledge on Breast cancer among 1st year BSc nursing students, in pre and post test.

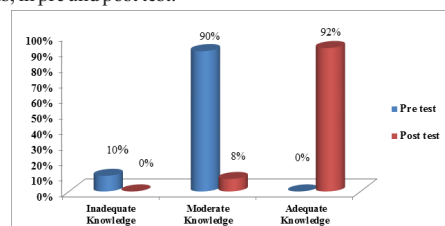


Figure:-1-Frequency and percentage distribution of level of knowledge on breast cancer among 1st year B.Sc Nursing students, in pre and post test.

Figure 1 shows that 5(10%) study participants had inadequate knowledge whereas 45 (90%) had moderately adequate knowledge in pre-test. But in post-test 46(92%) study participants had adequate knowledge, and 4(8%) had moderately adequate knowledge.

Section C

Table 2: Effectiveness of structured teaching programme on knowledge regarding Breast cancer. N=50

S.no	Observation	Mean	SD	Mean Difference	Paired't' value
1	Pre test	9.44	1.65	6.94	24.9
2	Posttest	16.38	1.46		

Df=49, $p < 0.001$, extremely significant

The above table depicts that there is a statistically extremely significant difference at $p < 0.001$ between pre and post-test knowledge score on breast cancer among 1st year BSc nursing students.

Section D

Association between post test level of knowledge on Breast cancer among the 1st year BSc Nursing students with selected demographic variables.

Chi square test was used to find out the association between demographic variable and level of knowledge of Breast cancer. It reveals that there is no statistically significant association between demographic variables and the level of knowledge on Breast cancer among the 1st year B.Sc Nursing students at the level of $p < 0.05$.

DISCUSSION:

This study aimed to evaluate the effectiveness of a Structured Teaching Program (STP) in enhancing the knowledge of first-year B.Sc. Nursing students regarding breast cancer. The results demonstrated a significant improvement in knowledge post-intervention, emphasizing the importance of educational programs in nursing curricula. The pre-test results revealed that 10% of students had inadequate knowledge,

while 90% had moderately adequate knowledge. None of the students demonstrated an adequate understanding of breast cancer before the intervention. The post-test results showed a dramatic improvement, with 92% of students achieving adequate knowledge, and only 8% remaining at a moderately adequate level. The mean knowledge score increased from 9.44 in the pre-test to 16.38 in the post-test, with a statistically significant t-value of 24.9 ($p < 0.001$), indicating a highly effective STP. No significant association was found between demographic variables (age, family type, parental occupation) and post-test knowledge scores, suggesting that the STP benefitted students across all backgrounds equally.

The study highlights the need for structured educational interventions in nursing training programs. As future healthcare providers, nursing students must be well-informed about breast cancer, including risk factors, early detection methods, and preventive strategies. Integrating STPs into the curriculum can ensure that students are adequately prepared to educate patients and promote breast cancer awareness in clinical and community settings.

CONCLUSION:

The findings of this study highlight the effectiveness of structured teaching programs in enhancing breast cancer knowledge among nursing students. Given the increasing prevalence of breast cancer, integrating such educational interventions into nursing curricula can significantly improve awareness and early detection practices.

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