

Effectiveness of Knowledge Regarding Breast Self-Examination among Young Female Adults

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ABSTRACT

Breast cancer accounts for 19-34% of all cancer cases among women in India. There is high mortality due to late stage diagnosis. The Pre experimental one group pretest and posttest research design research was used among 50 young female adult from a selected Rabindranath Tagore University Bhopal, MP. Structured questionnaire consist of 30 items on knowledge regarding Breast self-Examination among young female adults were used to assess preexisting knowledge. Self-Instructional module was provided to the participants. Posttest knowledge was assessed after 7 days of provided Self Instructional module. The study revealed that majority 66% of young female adult were in the age group of 21-25 years, 48% were Graduates, 58% attained menarche between the age of 13-15 years. 54% of them gained knowledge from family and friends. In the pre-test the overall level of knowledge 74% had an average score, 24% of them had poor knowledge whereas 2% had good knowledge. In the pre-test the total knowledge score was 46% with mean±SD 17.54±4.61. In post-test the average knowledge was 68% and good knowledge was 32%. In post-test the total knowledge score was 68% with mean±SD 25.86.92±2.76. Findings indicated that there was a highly significant difference ($t=15.97, P<0.05$). The study revealed that Young female adults had inadequate knowledge regarding breast self-examination. Before STP this indicates the necessity of an effective teaching programme regarding breast self-examination. After STP the knowledge was increased.

Key words: Breast Feeding, Young Female Adults, Structured Teaching Programme, Knowledge

I INTRODUCTION

Indian women suffer more due to any disease because of illiteracy, ignorance, poverty, orthodox cultural behavior and firm belief in past deeds or karma. The ignorance breeds unwarranted fear regarding the disease and delays in its detection, treatment, and its prognosis.¹

The commonest disease that shortens the life of a woman and that threatens the happiness and peace of home is Breast Cancer. Not only in the industrialized countries, in countries like India the incidences of Breast Cancer are increasing steadily since past two decades and it surely will go up further because the life expectancy is rising speedily and with that the risk of breast cancer too is rising.¹

Breast cancer accounts for 19-34% of all cancer cases among women in India. There is high mortality due to late stage diagnosis as patients usually present at an advanced stage because of lack of awareness and nonexistent breast cancer screening programs. Early detection and prompt treatment offer the greatest chance of long-term survival and breast self-examination (BSE) seems to be a important viable optional substitute for early detection of cancer.²

Awareness programmes, screening camps, motivating young people and possibly incentives may help in following preventive measures, early detection and prolonging the lifespan of possible clients of breast cancer.

II NEED FOR THE STUDY

Today, cancer is one of the leading causes of mortality and morbidity in the developed and developing countries. In females, breast cancer is the most common form of cancer. There were 1.7 million breast cancer cases diagnosed worldwide and 4, 65,000 women died due to breast cancer.³ It is estimated that in India there are approximately 2-2.5 million cases of cancer at any given time with around 70,000 new cases being detected each year. In the absence of an exact etiological agent for breast cancer, the most appropriate way of controlling it is by early detection and treatment. Mammography is the method of choice, but its use is limited due to the high cost and unavailability. Considering this, breast self-examination is an ideal method which can be performed by every woman at her leisure time.⁴

II OBJECTIVES OF THE STUDY

- (a) To assess the level of knowledge of young female adult on BSE in selected institute.
- (b) To determine the effectiveness of planned teaching program among young female adult on BSE in selected institute.
- (c) To find the association between pretest knowledge and selected demographic variables.

III RESEARCH HYPOTHESES

- (a) **H₁**: The mean post-test knowledge scores on breast self-examination will be significantly higher than the pre-test knowledge scores.
- (b) **H₂**: There will be a significant association of mean pre-test knowledge scores with selected demographic variables.

IV REVIEW OF LITERATURE

Shiza S. 2020, A study was conducted to assess the effectiveness of a Self-Instructional Module on Breast Cancer and Breast Self- Examination of students from selected urban and rural colleges at Bangalore. Findings revealed that the overall mean percentage of the post-test skills of urban (57.2%) and rural (59.4%) college students increased from a pre-test baseline score of zero and is found that SIM was an effective material.⁸

V MATERIAL AND METHODS

A quantitative research approach is used in this study. **One group pre-test-post-test pre-experimental research design** was adopted for the study. In one group pre-test and post-test design (O₁ X O₂) the investigator introduces a base measure before and after a self-instructional module which is depicted as O₁ and O₂ respectively. In this study, the base measure was the knowledge and the independent variable was self-instructional module depicted as X. The schematic representation of the study design is presented in table 1.

The tool had two sections:

- (a) Section A: Baseline Performa
- (b) Section B: Structured knowledge questionnaire
- (c) Preparation of Self-Instructional Module

VI RESULT

The major or findings of the study are discussed under four section:

Section A: Description of demographic variables of.

Section B: Analysis of pre-test knowledge of young adult women regarding breastself-examination.

Section C: Evaluation of the effectiveness of the self-instructional module.

Section D: Association of mean pre-test knowledge scores with the selected demographic variables regarding breast self-examination.

Section A: Description of demographic variables of among young female

- (i) Out of 50 among young female, 66% of them were in the age group of 21-25 years, 32% were in the age group of 26-30 years, and only 2% of them were in the age group of 16-20 years.
- (ii) About 48% of them had graduate education, 24% had diploma education, whereas 18% had higher secondary and 10% of them had post graduate education.
- (iii) About 52% of them were nursing department, 36% were management & Law department, 10% were Physiotherapy and 2% were technical department.
- (iv) About 58% attained menarche between the age of 13-15, 26% of them attained after 16 years,10% attained between 10-12 and 6% of them were not remembering the monarchial age.
- (v) About 74% of them does not had family history of breast cancer,24% of them had a family history of breast cancer, whereas 2% were unaware about the family history.
- (vi) All subjects had some knowledge about breast self-examination. Out of these 54% got information from friends and family members 34% from mass media, 12% from health professionals.

Section B: Analysis of pre-test knowledge of among young female adult regarding breast self-examination. Part I: Determine the level of pre-test knowledge of among young female adult regarding breast self-examination.

Table 1
Level of knowledge of young adult women regarding breast self-examination.
N = 50

Level of knowledge	Range of scores	Percentage of score	Number of response	Percentage of response
Poor	0-13	0-34	12	24
Average	14-26	34-68	37	74
Good	27-38	68-100	1	2
		Total	50	100

The above table shows that the highest percentage (74%) of the sample had an average level of knowledge whose score ranged between 14-26. 24% of the sample had poor knowledge whose score ranged between 0-13 and 2% of the sample had good

knowledge whose score ranged between 0-13.

Part II: Area-wise analysis of post-test knowledge scores of among young female adult regarding breast self-examination.

Table 2
Distributions of area-wise mean standard deviation and meanpercentage of knowledge scores-pre-test
N=50

Meaning of breast self examination.	3	2.0400	0.78142	68
Risk factors	6	3.4000	1.10657	57
Clinical features	2	1.2800	0.67128	64
Methods of early detection	22	8.6200	3.06987	39
Prevention	5	2.2200	1.55563	44
Total	38	17.5400	4.61678	46

The above table shows that the highest mean percentage (68%) of knowledge score was in the area of “Meaning of breast self-examination.” which had a mean±standard deviation as 2.04±0.78. The mean percentage in the area of “Clinical Features” was 64% with mean±standard deviation as 1.28±0.67. The mean percentage in the area of “Risk Factors” was 57% with mean±standard deviation as 3.40±1.10. The mean percentage in the area of “prevention” was 44% with mean±standard deviation as 2.22±1.55. The mean percentage in the area of “method

of breast self-examination” was 39% with mean±standard deviation as 8.62±3.06. However, the mean percentage of total knowledge scores was 46% with mean±standard deviation of 17.54±4.61.

Section C: Evaluation of the effectiveness of the self-instructional module

Part I : Determine the level of post-test knowledge of young female adult regarding breast self-examination.

Table 3
Level of post-test knowledge of young adult women regarding breastself-examination

				N=50
Level of knowledge	Range of scores	Percentage of score	Number of response	Percentage of response
Poor	0-13	0-34	0	0
Average	14-26	34-66	34	68
Good	27-38	68-100	16	32
		Total	50	100

The above table shows that highest percentage (68%) of the sample had average level of knowledge whose score ranged between 14-26.(32%) of them had good knowledge regarding breast self-examination.

Part II: Area-wise analysis of post-test knowledge scores of among young female adult regarding breast self-examination.

Table 4
Area-wise mean standard deviation and mean percentage of post-test knowledge scores.
N=50

Meaning of breast cancer	3
Risk factors	6
Clinical features	2
Methods of early detection	22
Prevention	5
Total	38

Part IV: Comparison of pre-test and post-test knowledge scores of young female adult

Table 5
Significance of the difference between pre-test and post-test knowledge scores of breast self-examination.

						N=50
Knowledge score	Mean	Standard deviation	t value	Table value at 5%	P value	Inference
Pre-test	17.54	4.61	15.97	1.6755	P<0.05	*
Post-test	25.86	2.76				

***significant Statistical hypothesis**

H₁: There will not be a significant difference between the mean post-test and pre- test knowledge scores of young adult women. The above table revealed that the mean post-test score of young adult women were significantly higher than their mean pre-test score. The calculated value (14.98) was greater than the table value (1.675) at 0.05 level of significance. Hence the null hypothesis was rejected and research hypothesis was accepted indicating that the gain in knowledge was not by chance. Therefore,

it is concluded that the gain in knowledge of young adult women through the self-instructional module on breast cancer was significant.

Section D: Association of the mean pre-test knowledge scores with selected demographic variables regarding breast self-examination.

Table 6
Chi-square value for selected demographic variables and mean pre-test knowledge scores.
N=50

Sl. No.	Demographic variables	X ² value	df	Table value	P value	Inference
1	Age	0.48	1	3.84	P>0.05	NS*
2	Education	5.346	1	3.84	P<0.05	S*
3	Occupation	0.57	1	3.84	P>0.05	NS*
4	Age of menarche	0.48	1	3.84	P>0.05	NS*
5	Family history	0.11	1	3.84	P>0.05	NS*
6	Source of information	0.1	1	3.84	P>0.05	NS*

NS*: Not significant S*: Significant

The association of pre-test knowledge score with selected demographic variable was found out using chi-square test. The data presented in table 11 shows there was a significant association of education with pretest knowledge score as calculated value ($\chi^2=5.346$) was more than table value at 0.05 level of significance. So research hypothesis was accepted for this variable. However no significant association was found between other demographic variables and pre-test knowledge scores.

VII NURSING IMPLICATIONS

The study also proved that SIM was an effective method in improving the knowledge of young female adult. Based on the findings of this study measures can be taken at various levels to improve the knowledge of the young female adult.

- (a) **Nursing Education** - Nursing education should focus attention on teaching the students regarding the definition, causes, signs and symptoms, prevention and management of the breast self-examination. The nurse should be well prepared with adequate knowledge to care for these patients with breast cancer.
- (b) **Nursing Administration** - Nursing administration may use the study findings to improve the quality of patient care that develop breast self-examination knowledge as well as its prevention.
- (c) **Nursing Practice** - The nurse has a key role in the healthcare delivery system with emphasis on primary prevention, that is, health promotion. One of the methods of health promotion is health education. In the clinical area as well as in the community the nurse will have direct contact with the patient and the family. This opportunity should be used by the health personnel to provide health education to the patient and the family.
- (d) **Nursing Research** - Breast self-examination among women's especially in nulliparous women. Review of literature shows that the young female adult, lack knowledge regarding breast self-examination, breast self-examination and therefore it is necessary to explore the knowledge of young female adult regarding breast self-examination. which will help in planning better education programmes.

VIII LIMITATIONS

- (a) Information collected from the young female adult was based only on written responses.
- (b) The study was confined to 50 subjects in the selected institute, which limits the generalization of the findings.

- (c) The study has made use of purposive sampling technique. Hence it limits the generalizability of the study findings to the selected population only.
- (d) The study did not use any control group. The investigator had no control over the events that took place between pre-test and post-test.

IX RECOMMENDATIONS

- (a) The study can be repeated on a larger sample to validate and generalize the findings.
- (b) A comparative study can be conducted with a control group.
- (c) A similar study can be conducted to compare the effectiveness of a video assisted teaching programme regarding the same topic.
- (d) A longitudinal study can be conducted using post-test after one month, six months, and one year to find out the retention of knowledge.

X CONCLUSION

By conducting this study the investigator came to realize that very few young female adult have knowledge regarding breast self-examination. SIM was highly effective in improving the knowledge of young female adult. There is an urgent need in taking up health related studies. The investigator is grateful for the experience gained through this study. This has helped her to improve her knowledge on Breast Self-Examination, as well as given a basis for research.

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