



## TITLE

# **Evaluate the effectiveness of structured teaching program on Breast Self-Examination in prevention of Breast Cancer regarding knowledge and practice among first year Nursing students (18-19yrs) in KIMS College of Nursing, Amalapuram.**

### AFFILIATION DETAILS

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### ABSTRACT

A quasi experimental study was conducted “A study to evaluate the effectiveness of structured teaching program on Breast Self Examination in prevention of Breast Cancer regarding knowledge and practice among first year nursing students (18-19yrs) in KIMS College of Nursing, Amalapuram”. OBJECTIVES OF THE STUDY: 1. To assess the knowledge and practices among nursing students regarding Breast self examination. 2. To assess the effectiveness of structured teaching program on knowledge and practices on Breast self examination. 3. To correlate the knowledge and practices on Breast self examination among nursing students. 4. To associate the post test knowledge and practices on Breast self examination among nursing students with their selected demographic variables. The reason approach used for this study was quasi approach and the design selected Pre Experimental study with one group pre test- post test design. A total of 60 nursing students were participated in the study. The data was entered in the master sheet for analysis and interpretation. Descriptive and inferential statistical procedures such as frequencies, percentages, mean, standard deviation, paired t-test and chi square tests were used

### KEYWORDS

**SD – Standard Deviation**

**f - frequency**

**df – degree of freedom**

**% - percentage**

**STP – Structured Teaching Programme**

**BSE - Breast Self Examination**

## INTRODUCTION

### 1.1 BACKGROUND OF THE STUDY

“You can forget a lot of things but you cannot forget a women’s name and claim to love her” Every year we celebrate women’s International Day, inspiring the women of today to stride a head in life. While women have made progress in most off the field but still her tends to in inexplicably neglect her own health. Women are the basic foundation of a society and its wealth. So it is very important to take care of a women’s health. If we will train a man and we train an individual, if we train a woman and we can build a nation. The global commission on women’s health established in 1992 under the auspicious of the WHO emphasized “Health security for women throughout the life span” in mainly concerned with the reproductive and sexual life of the women. During the period of reproductive life many changes occurs in a women’s body as a results of hormonal influences and adaptation to the physiological process. Cancer as a dreadful disease has a relentless, very painful and debilitating curse and if not treated properly in time, results in death. Breast cancer is the second commonest cancer in women in India, next to cancer cervix. In India women with breast cancer suffer more due to illiteracy, poverty, orthodox culture, pessimism, belief in “Karma” “Sin” and acceptance of suffering as a punishment and perpetual negligence by male dominated society. The women contribute further to family health, where she seeks guidance thought out the reproductive life and follows the advice of experienced personnel to overcome or prevent the breast cancer.

The primary health care which is a key to achieve the goal of health for all 2000 A.D included indigenous system of medicine as an important element. The national health plan have consistently emphasized on the importance of maternal and child health. There is a need for developing new or improved method through systematic investigations of traditional system of medicine in order to optimize the use of available resources. More over India is developing country, 60% are women are considering to the low and middle class family. Now a day’s cost of care is high. So “Prevention is better than cure”. One ounce prevention is better than tones of cure. BLACK (1997) defines breast cancer as a group of malignant disease that commonly occurs in the female breast and infrequently in the male breast. The cause of breast cancer is unknown. The risk factors are obesity, null parity, high intake of fatty diet, and hormonal drugs, genetics, early menarche below the age of 11 years and late menopause. The mean age of occurrence of cancer in India women in 42 years as cared to 53 years in white women and it is leading cause of death among middle aged when (Draskshyani devi,1994).

Breast cancer is the most common cancer that women may face in their lifetime (except for skin cancer). It can occur at any age, but its much more likely after age 40, and the risk goes up as women get older. Because of certain factors, some women may have a greater chance of having breast cancer than others. But every woman should know about breast cancer and what can be done about. The best way to find breast lumps is to do 3 things have regular mammograms (usually every 1-2 years starting around age 40), have your doctor check your breasts and check your breasts yourself every month. A mammogram is the most effective way to find breast cancer early, up to 2 years before the lump is even large enough to feel. A mammogram is a special kind of X-ray towards breast. The amount of radiation used in the X-ray is very small and not harmful<sup>15</sup>. Breast cancer is always caused by a genetic abnormality (a “mistake” in the genetic material). However, only 5-10% of cancers are due to an abnormality inherited from your mother or father. About 90% of breast cancers are due to genetic abnormalities that happen as a result of the aging process and the “wear and tear” of life in general. Screening methods such as mammography, clinical breast examination, and breast self examination (BSE) are described as health improvement activities and play important roles in the early diagnosis of breast cancer. Breast self-examination is recommended to be performed routinely on a monthly basis in all the women aged above 20 years and the importance of raising awareness on breast cancer via Breast self-examination is noted. Breast self examination, is an easy-to-apply, economical, safe, non-invasive procedure with no special material/tool requirements; and it is an effective diagnostic method for breast cancer which only takes five minutes

## METHODOLOGY

3.1 RESEARCH APPROACH Research approach indicates the basic procedure for the conducting research. The investigator selected “Evaluate approach” as research approach on the basis of problem and objectives to be accomplished. In this study knowledge regarding Breast self-examination in prevention of breast cancer is assessed before and after administration of a structured teaching programme among first year nursing students 18-19yrs in KIMS College of Nursing, Amalapuram.

**3.2 RESEARCH DESIGN:** The research design is concerned with overall framework for conducting the study. Pre experimental study with one group pretest- posttest design was adopted for the present study.

**3.3 SETTING OF THE STUDY:** Based on the availability of the samples the present study was conducted in KIMS College of Nursing, Amalapuram.

**3.4 SAMPLE SIZE:** The sample size of the present study consists of first year B.Sc nursing 60 students in KIMS College of Nursing.

**3.5 CRITERIA FOR SELECTING THE SAMPLE:** The sample of this study includes all the first year B.Sc Nursing students those who are in KIMS College of Nursing, Amalapuram.

Inclusive criteria:

- First year B,Sc nursing students who are willing to participate in this study.
- First year B.Sc nursing students who are available at the time of data collection. Exclusive criteria: → Those who are not co-operative
- Those who are not available at the time of data collection.

**3.6 SAMPLE TECHNIQUE:** The simple random technique sampling was used in this study.

**3.7 VARIABLES OF THE STUDY:** Variable is a measurable or potentially measurable component of an object or event that may fluctuate in quality or quantity or that may be different in quality and quantity from one individual object or event to another individual object or event of the same general class.

♣ Independent variable: The most independent variable in this study is the structured teaching programme regarding breast self-examination in prevention of breast cancer.

♣ Dependent variable: In this study, dependent variable is knowledge of breast self-examination in prevention of breast cancer.

**3.8 DEVELOPMENT AND DESCRIPTION OF THE TOOL:** Tool development is the complex and time consuming process. It consists of defining the construct to be measured, formulating the items, assessing the items for content validity, estimating the reliability and conducting the pilot study. The tool use for research study was self- administered structured knowledge questionnaire which was prepared to assess the knowledge of Breast self -examination in prevention of breast cancer. The structured questionnaire was developed with the help of selected literature from various textbooks and journals with experts in the field of nursing and obstetrics.

**3.9 METHOD OF DATA COLLECTION:** TOOL TOLBERT (1995) States data collection tool is the instrument that measures the variables of the study accurately and sensitively. The selfadministered questionnaire consisted of Section A, Section B, Section C.

**PART-A** The first part of the tool consisted of 10 items for obtaining information about the selected background factors such as age, course and education of mother and father, occupation of mother and father, type of family, source of information, previous knowledge on Breast cancer.

**PART- B** It consists of 20 questions assessing knowledge, regarding breast selfexamination in prevention of breast cancer.

**PART –C** It consists of 10 questions assessing practice regarding Breast self - examination in prevention of breast cancer.

**SCORING KEY:** The knowledge and practice on Breast self-examination in prevention of breast cancer was measured in terms of knowledge scores. Each correct answer was given a score of one and a wrong answer given a score of zero. The total score was 30.

**3.9 DEVELOPMENT OF STRUCTURED TEACHING PROGRAMME:** The structured teaching programme was developed based on the objectives of knowledge variables. The first draft of structured teaching program was developed after an in-depth review of literature from various text books, journals and given to experts along with objectives and checks list. Based on their suggestion Structured teaching programme was prepared. The title of the program: "STRUCTURED



TEACHING PROGRAMME ON BREAST SELF EXAMINATION IN PREVENTION OF BREAST CANCER'' The structured teaching programme consists of objectives, introduction to the topic age, risk factors, signs and symptoms, diagnostic evaluation, treatment, summary conclusion bibliography and review questions and answers.

3.10 CONTENT VALIDITY: When an instrument measures what it is supposed to be measuring it is valid. Content validity refers to the degree to which the items in an instrument adequately represent the universe of content. To obtain content validity of the tool, prepared tool with objectives, operational definition and criteria checklist was submitted to experts. The experts were requested to check for relevance adequacy and appropriateness of the tool, a few items were modified based on the suggestions of the experts and there by content validity were ascertained.

3.11 RELIABILITY: The reliability of the tool was tested by using split half technique employing spearman Brown's prophecy formula. The karl pearson coefficient correlation 42 was established by deviation method. The 'r' value is 0.89 and the tool was found to be reliable.

3.12 DATA COLLECTION PROCEDURE: A formal permission was obtained from Principal of KIMS College of Nursing. Data was collected 25-07-2020 to 25-08-2020 at KIMS College of Nursing, Amalapuram. Selected nursing students were selected by using non probability convenient technique. All the selected students are requested to assemble in the classroom; then the investigator given self-introduction, explained the purpose of data collection to the student's willingness to participate in the study was ascertained. The students were assured the anonymity and confidentiality of the information provided by them. Structured knowledge questionnaire was administered to the nursing students with the required information and the structured teaching programme was given on the same day and conducted by using the same structured knowledge questionnaire.

3.13 PLAN FOR DATA ANALYSIS: The data was edited, coded and entered in excels sheet. The data were analyzed, using SPSS version 10 and the probability of less than 0;05 was considered statistically significant. The data were analyzed as follows:

Section -1 Back ground factors of nursing students were analyzed by using frequency and percentage distribution.

Section -2 Pre and posttest knowledge of nursing students regarding Breast selfexamination in prevention of breast cancer were analyzes by using mean, standard deviation and percentage.

## ANALYSIS

Data analysis based on following hypothesis:

- H1:- There will be significant differences between pre and post-test of nursing students regarding Breast self examination.
- H2:- There will be a significant relationship between pre and post-test knowledge and practices of nursing students on Breast self examination.
- H3:- There will be significant association between pre test knowledge and practices of nursing students regarding Breast self examination

The data was entered in the master sheet for analysis and interpretation. Descriptive and inferential statistical procedures such as frequencies, percentages, mean, standard deviation, paired t-test and chi square tests were used.

PRESENTATION OF DATA: Data was presented in following headings.

Section A: Frequency and percentage distribution of Nursing students according to their selected demographic variables.

Section B: Frequency and percentage of knowledge and practice scores of Nursing students on Breast self examination according to the level of knowledge and practice scores in pre test and post test.

Section C: Paired t test of significance for knowledge and practice scores of Nursing students on Breast self examination in pre test and post test and comparing pre test and post test knowledge and practice scores.

Section D: Correlation between knowledge and practice scores of Nursing students on Breast self examination.

Section E: Association between pretest knowledge and practice scores of Nursing students on Breast self examination in accordance with selected demographic variables.

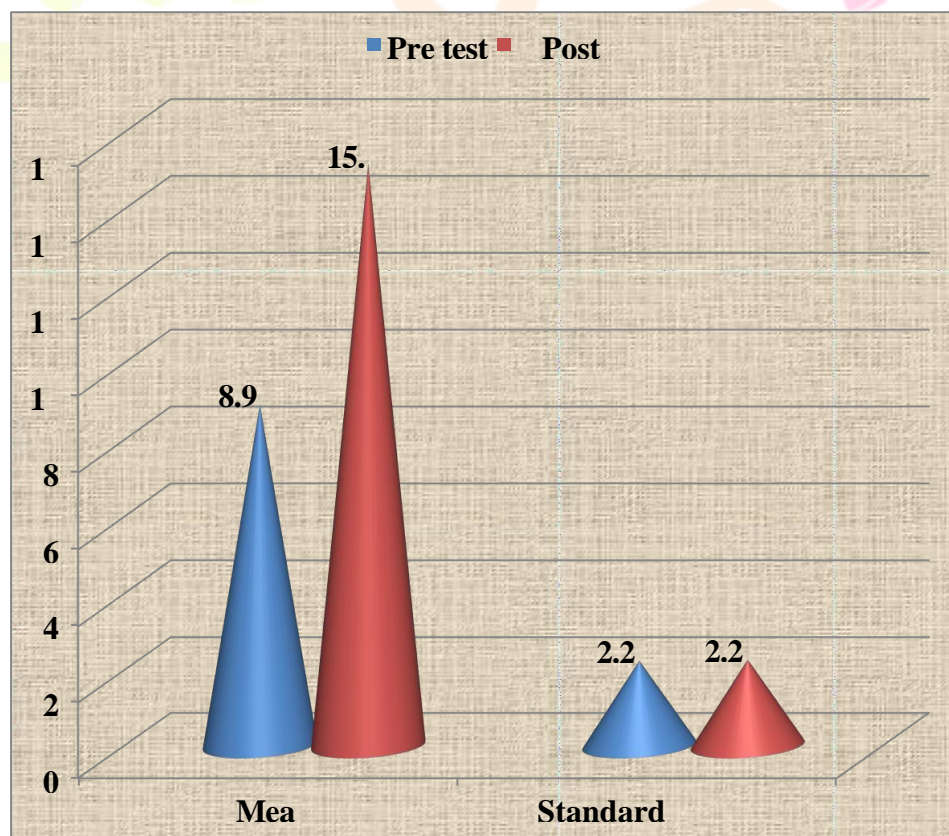
**TABLE-1**

**Frequency and percentage distribution of nursing students according to demographic variable.**

**(N=60)**

S. NO.	Demographic Variable		Frequency(f)	Percentage(%)
1	Age in years	18 years	33	55%
		19 years	27	45%
2	Religion	Hindu	25	41.6%
		Muslim	10	16.6%
		Christian	20	33.3%
		Others	5	8.3%
3	Education of mother	Primary education	20	33.3%
		Secondary education	28	46.7%
		Higher secondary	7	11.6%
		Graduation and above	5	8.3%
4	Education of father	Primary education	15	25%
		Secondary education	19	31.7%
		Higher secondary	20	33.3%
		Graduation and above	6	10%
5	Occupation of father	Govt. employee	1	1.6%
		Laborer	30	50%
		Business	15	25%
		Private employee	14	23.3%
6	Occupation of mother	Govt. employee	0	0%
		House wife	45	75%
		Business	5	8.3%
		Private employee	10	16.7%
7	Type of family	Nuclear family	35	58.3%
		Joint family	15	25%
		Extended family	10	16.6%
8	Previous knowledge	Yes	13	21.7%
		No	47	78.3%
9	Source of information	Health personnel	5	8.3%
		News paper	5	8.3%
		Family members	3	5%
		None	47	78.3%

The above table shows that out of 60 subjects, majority 33 (55%) were with the age of 18 years and 27 (45%) were in the age of 19 years. Regarding religion, majority 25 (41.7%) were Hindus, 20 (23.3%) were Christians, 10 (16.7%) were Muslims and 5 (8.3%) were belongs to other religions. In regard to education of mother, majority 28 (46.7%) were with secondary education, 20 (33.3%) of mothers were with primary education, 7 (11.7%) were with higher secondary education and 5 (8.3%) of mothers were with graduation and above education. 49 In respect of fathers' education, majority 19 (31.7%) were with secondary education, 20 (33.3%) were with higher secondary education, 15 (25%) were with primary education and 6 (10%) were with graduation and above education. In view of occupation of father, majority 30 (50%) of nursing students fathers were laborers, 15 (25%) were doing business, 14 (23.3%) were private employed and only 1 (1.7%) were government employed. Pertaining to occupation of mother, majority 45 (75%) were house wives, 10 (16.7%) were private employed and 5 (8.3%) were doing business. Regarding type of family among nursing students, majority 35 (58.3%) were from nuclear family, 15 (25%) were from joint family and 10 (16.7%) were from extended family. In view of previous knowledge among nursing students, majority 47 (78.3%) were not had previous knowledge on breast self examination, only 13 (11.7%) had previous knowledge among them 5 (8.3%) had information from health personnel and newspapers respectively and only 3 (5%) had information from family members.



The above figure shows that the pre test mean was 8.93 with 2.25 standard deviation and that of post test was 15.20 with 2.28 standard deviation. The calculated 't' value was 21.08, which is higher than the table 't' value 3.46 at 59df with 0.001 level of significance. It shows that there is significant difference ( $p < 0.001$ ) in pre test and post test knowledge scores.

Hence it concluded after Structured teaching programme on Breast self examination the



knowledge scores of the Nursing students have been increased. The positive result gives a clear indication of effectiveness of Structured teaching programme on Breast self examination. Hence H<sub>1</sub> was accepted.

## DISCUSSION

An Quasi experimental study was conducted to assess the effectiveness of structured teaching programme on Breast self-examination in prevention of Breast Cancer regarding knowledge and practice among first year nursing students (18-19yrs) in KIMS college of nursing, Amalapuram." The sample size was 50 nursing students. Data was collected by using structured Questionnaire from. The discussion of the study is based on findings obtained from the statistical analysis. The findings were discussed in relation to the objective of the study. Frequency and percentage distribution of nursing students according to their selected demographic variables. Related to out of 60 nursing students majority of the students were in the age group of 17years (55%) and 45% were in the age group of 18 years Frequency and percentage distribution of Knowledge scores of nursing students according to level of pretest and posttest on Breast self examination in prevention of Breast Cancer It shows that frequency and percentage based on knowledge Nursing students about Breast self examination. Below average (0-49.9%) indicates the scores in between 0 to 9, Average (50-74.9%) indicates the score between 10-14 and Above average (75-100%) indicates the scores between 15- 20. 34 (56.7%) were under below average knowledge level in pre test whereas in post test were found nil, 26 (43.3%) were under average knowledge level in pre test whereas 12 (20%) were average knowledge level in post test, above average knowledge level in pre-test were found nil whereas 48 (80%) were under above average knowledge level in post test. These differences indicate that structured teaching programme was highly effected the Nursing students. 72 Frequency and percentage distribution of Practice scores of nursing students according to level of pretest and post test on Breast self examination in prevention of Breast Cancer It shows that frequency and percentage based on knowledge on practice scores of the Nursing students about Breast self examination. Inadequate practices indicates the scores in between 0 to 3, moderately adequate practices indicates the score between 4-6 and Adequate practices indicates the scores between 7-10. 24 (40%) were with inadequate knowledge on practices level in pre test whereas in post test were found nil, 36 (60%) were with moderately adequate knowledge on practices level in pre test whereas 22 (36.7%) were moderately adequate knowledge on practices level in post test, Adequate knowledge on practice level in pre test were found nil whereas 38 (63.3%) were under adequate knowledge on practice level in post test. These differences indicate that structured teaching programme was highly effected the Nursing students. Pre test and post test mean knowledge scores and paired t-test of significance on Breast self examination among Nursing students. It shows that the pre test mean was 8.93 with 2.25 standard deviation and that of post test was 15.20 with 2.28 standard deviation. The calculated 't' value was 21.08, which is higher than the table 't' value 3.46 at 59df with 0.001 level of significance.

## CONCLUSION

Out of 60 subjects, majority 33 (55%) were with the age of 18 years and 27 (45%) were in the age of 19 years. Regarding religion, majority 25 (41.7%) were Hindus, 20 (23.3%) were Christians, 10 (16.7%) were Muslims and 5 (8.3%) were belongs to other religions . In regard to education of mother, majority 28 (46.7%) were with secondary education, 20 (33.3%) of mothers were with primary education, 7 (11.7%) were with higher secondary education and 5 (8.3%) of mothers were with graduation and above education. In respect of fathers' education, majority 19 (31.7%) were with secondary education, 20 (33.3%) were with higher secondary education, 15 (25%) were with primary education and 6 (10%) were with graduation and above education. In view of occupation of father, majority 30 (50%) of nursing students fathers were laborers, 15 (25%) were doing business, 14 (23.3%) were private employed and only 1 (1.7%) were government employed. Pertaining to occupation of mother, majority 45 (75%) were house wives, 10 (16.7%) were private employed and 5 (8.3%) were doing business. Regarding type of family among nursing students, majority 35 (58.3%) were from nuclear family, 15 (25%) were from joint family and 10 (16.7%) were from extended family. In view of previous knowledge among nursing students, majority 47 (78.3%) were not had previous knowledge on breast self examination, only 13 (11.7%) had previous knowledge among them 5 (8.3%) had information from health personnel and news papers respectively and only 3 (5%) had information from family members. • It shows that the pre test mean was 8.93 with 2.25 standard deviation and that of post test was 15.20 with 2.28 standard deviation.

The calculated 't' value was 78 21.08, which is higher than the table 't' value 3.46 at 59df with 0.001 level of significance. It shows that there is significant difference (p

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