A STUDY TO ACCESS THE EFFECTIVENESS OF STRUCTURED TEACHING PROGRAMME ON KNOWLEDGE REGARDING BREAST SELF EXAMINATION AMONG FEMALE COLLEGE STUDENTS IN SELECTED COLLEGES, AGARTALA, WEST TRIPURA

Author's name: Mrs Sanhita Roy

Affiliation: Department of Medical Surgical Nursing

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Abstract

*A pre-experimental study was conducted to assess the effectiveness of structured teaching programme on knowledge regarding breast self- examination among female college students in selected colleges, Agartala .To assess the pre- test and post- test knowledge score regarding breast self- examination among female college students. To assess the effectiveness of structured teaching program regarding breast self- examination among female college students. To find out the association between the pre -test knowledge score with their selected demographic variables. One group pre- test post- test design was adopted with the sample size of 100. In this study non probability purposive sampling technique were selected and sample were female college students studying in 1st year in Rabindranath Thakur college The data was collected by validated structured knowledge questionnaires and reliability of the tool (r=0.83) which was calculated by using split half Spearman coefficient correlation formula. The findings of the study found that in pre-test 34% had inadequate knowledge and 66% had moderate knowledge. In post- test 32% had adequate knowledge and 68% had moderate knowledge. The findings of the study revealed that the mean post- test knowledge score of the female college students was significantly higher than the mean pre- test knowledge. The mean difference was 10.35 and SD difference was 0.50 and **paired t test** value was 39.13 which was significant at 0.05 level after structured teaching programme. There was a significant difference between pre- test and post- test knowledge score.*

Keywords: self-examination, pre-test, post-test, sample, paired t test.

INTRODUCTION

Every year we are celebrating the Women's Day and inspiring the women to stride ahead of life. In India , women are becoming more and more aware of their health status as a result of modern education, media and health agencies. Women have made progress in most of the field but still she trends to inexplicably neglect her own health. Women have made progress in most of the field but still she trends to inexplicably neglect her own health.

PURPOSE OF THE STUDY

To evaluate the effectiveness of structured teaching programme regarding breast self examination among female college students.

SPECIFIC OBJECTIVES OF THE STUDY

1. To assess the pre- test and post- test knowledge score regarding breast self -examination among female college students.

2. To assess the effectiveness of structured teaching programme regarding breast self examination.
3. To find out the association between the pre- test knowledge score with their selected demographic variables.

ASSUMPTIONS
1. Students may have inadequate knowledge regarding the breast self- examination.
2. Structured teaching programme may help to promote knowledge regarding breast self-examination the female college students.

HYPOTHESIS
$H0_1$: There is a significant difference between the mean pre- test score and mean post test score on knowledge regarding breast self- examination among female college students at 0.05 level of significance.
$H0_2$: There is a significant association between the pre test knowledge score with their selected demographic variables regarding breast self- examination at 0.05 level of significance.

CONCEPTUAL FRAMEWORK
The conceptual framework for the present study is based on modified Imogene King's goal attainment theory. So basic concept of this theory is that the nurse and the patient communicate and interact information, set goals together and then take actions to achieve those goals. The theory of goal attainment states that " Nursing is a process of action, reaction and interaction by which nurse and client share information about their perception in a nursing situation" and a process of human interaction between the nurse and client whereby each perceives the other and the situation, and through communication, they set goals, explore means and agree on means to achieve goal.

DELIMITATIONS
The study is delimited to :-
1. B.A 1st semester female college students.
2. Students those who are interested to participate in the study

METHODOLOGY
Research approach
Quantitative evaluative research approach was used for the study and it aims to assess the knowledge regarding breast self- examination among female college students.

Research design
As the present study aims to assess the effectiveness of structured teaching programme regarding breast self -examination among female college students in selected college. The research design adopted was pre- experimental one group pre- test post- test design.

Variable
Variables are the attribute of an object of the study it has a quality and quantity that varies. It represents the measurable traits that can change over the course of scientific experiment.

Independent variables: Structured teaching programme.
Dependent variable: Knowledge regarding breast self examination.

Setting
Pilot study was conducted in the Ramthakur college,Agartala, West Tripura and the main study was conducted in the Rabindranath Thakur Mahavidyalaya, Bishalgarh.

Population
According to "Polit and Beck" , "Population means the entire aggregation of cases that meet a designed set of criteria." The target population is the entire population in which the researcher is interested and to which he or she would like to generalize the result of the study.

The target population in this study were female college students studying in B.A 1st semester.

SAMPLE
Sample refers to a subject of population selected to participate in research study. In this study sample were female college students.

SAMPLE SIZE
The sample size refers to the population that were selected for this study.
In this study, sample size were 100 B.A first semester female college students.

SAMPLING TECHNIQUE
In this study, the sampling technique adopted was non probability purposive sampling technique.

SAMPLE CRITERIA
Inclusion criteria:
- Female college students those who were studying in B.A 1st semester.
- Female college students those who were willing to participate in research study.
- Female college students those who were available at the time data collection.

SELECTION AND DEVELOPMENT RESEARCH TOOLS
After an extensive review of literature and discussion with experts socio demographic performa was prepared to collect the background information. A structured knowledge questionnaire was prepared to assess pre- test and post- test knowledge regarding breast self- examination among female college students from selected colleges. Lesson plan was prepared regarding breast self examination to educate the students. Tools were prepared on the basis of the objectives of the study. The tools were prepared by the researcher based on her personal and professional experience. Following steps are carried out in the development of the tool.

DESCRIPTION OF TOOL
The tools of the study had two sections. They are

Section I Socio demographic performa

Socio demographic performa consists of 7 items- 1. Age, 2. Religion , 3.Marital status, 4. Types of family, 5. Sources of information, 6. Any history of breast health problem, 7. Any family history of breast cancer.

Section II Structured questionnaire
Thirty four structured knowledge questionnaire were developed to assess the knowledge regarding breast self examination. The items of the questionnaire was developed as per the blue print.

DATA COLLECTION PROCEDUR
Formal permission was obtained for the ethical clearance from committee and principal. The main study was conducted from 21/ 06/2021- 28/06/2021.
The step used for data collection were:

1) The investigator obtained formal permission from Principal of Rabindranath Thakur college to conduct the study.
2) Subject who met the inclusion criteria and willing to participate were explained about the study.
3) Non probability purposive sampling technique were used to select sample and 100 subjects were enrolled for the study after obtaining informed written consent.
4) The socio demographic data was obtained through socio demographic performa and pre- test was done on through structured knowledge questionnaire. 15 minutes time were given to subjects to complete these. After that structured teaching programme was given to the students for 45 minutes regarding breast self- examination.
5) Post- test was carried out after 7 days to assess the knowledge of the student regarding breast self- examination .
6) Collected data was tabulated and analyzed by using descriptive and inferential statistics.

PLAN OF DATA ANALYSIS
The plan Of data analysis was worked out the experts in the field of statistics and nursing.
- Organizing data on master sheet.
- Tabulation of data in items of frequency and percentage.
- Inferential statistics –a. correlation of coefficient b. yate's chi-square test c. t test
- Descriptive statistics (frequency, mean, mean deviation and standard deviation).
- Inferential statistics (paired t test and chi square test).

Section 1 Description of socio demographic variables of female college students.
Section 2 Assessment of knowledge regarding breast self -examination among female college students before and after administration of structured teaching programme.
Section 3 Effectiveness of structured teaching programme regarding breast self -examination .
Section 4 Association between the pre- test knowledge score with their selected demographic variables of female college students .

SECTION 1
Description of socio demographic variables of female college students.
Table 1: Frequency and percentage distribution of female college students according to age,

religion, marital status, types of family, sources of information, any family history of breast cancer, any personal history of breast health problem.

Sl. No	Demography Variables	Categories	Frequency	Percentage (%)
1.	Age	18-20 21-23 Above 23	77 23 00	77% 23% 00%
2.	Religion	Hindu Muslim Christian Others	85 15 00 00	85% 15% 00% 00%
3.	Marital status	Married Unmarried	30 70	30% 70%
4.	Types of family	Joint Nuclear Extended	14 86 00	14% 86% 00%
5.	Sources of information	Television Health professionals Information booklet	26 18 29 27	26% 18% 29% 27%
6.	Any family history of breast cancer	Yes No	00 100	00% 100%
7.	Any personal history of breast health problem	Yes No	00 100	00% 100%

SECTION 2

Assessment of knowledge regarding breast self- examination among female college students before and after administration of structured teaching programme.

Table 2: Frequency and percentage distribution of female college students according to pre- test and post- test level of knowledge before and after the structured teaching programme.

n=100

Level of knowledge	Pre test		Post test	
	Frequency (f)	Percentage (%)	Frequency (f)	Percentage (%)
Inadequate (0-12)	34	34	00	00
Moderately (13-24)	66	66	68	68
Adequate (25-34)	00	00	32	32

The above table 2 presents the frequency and percentage distribution of female college students according to level of knowledge before and after the structured teaching programme. In pretest majority of the subject 34% (34) had inadequate knowledge and 66% (66) had moderate knowledge.

After the structured teaching programme majority of the subjects i.e. 68% (68) had moderate

Observation	Mean	Mean difference	Range	SD	SD difference	Mean percentage
Pre test Post test	13.3 23.65	10.35	10-19 20-31 32-40	1.98 2.48	0.50	70% 77%
Observation	**Mean**	**Mean difference**	**Range**	**SD**	**SD difference**	**Mean percentage**
Pre test Post test	13.3 23.65	10.35	10-19 20-31 32-40	1.98 2.48	0.50	70% 77%

knowledge and 32% (32) had adequate knowledge .

Table 3 : Mean, mean difference, maximum score, minimum score, SD, SD difference and mean percentage of pre test and post test level of knowledge regarding breas ⟨n=100⟩ ation.

The above table showed that in the pre test mean was 13.3, SD was 1.98 and mean percentage was 70%. In the post test mean was 23.65, SD was 2.48 and mean percentage was 77%. Pre test and post test mean difference was 10.35 and SD difference was 0.50. Range was 10-19, 20-31 and 32-40.

SECTION 3
Effectiveness of structured teaching programme regarding breast self -examination .
Table 4 : Description of mean difference, SD difference, paired 't' value.

n=100

Paired "t" test

Mean difference	Standard deviation	t_{cal} **value**	df	t_{tab} **value**
10.35	0.50	39.13	99	1.98

Note*- denotes significant at 0.05 level (i.e. $p \leq 0.05$).

The above table revealed that the mean difference is 10.30, SD is 0.50, calculated "t" value is 39.13

which is higher than the tabulated 't' value 1.98 at df 99.

Thus the findings proved that the structured teaching programme was effective in improving the knowledge regarding breast self examination among female college students.

Therefore, the paired "t" test is found to be highly significant at 0.05 level of significance. Hence, H_1 is accepted and reject H_0.

SECTION 4
Association between the pre test knowledge score with their selected demographic variables of female college students.
Table 5: Association between the pre test knowledge score with their selected demographic variables such as age, religion, marital status, types of family and sources of information.

Data in the table 5 showed that the calculated chi-square value of demographic variables age, religion, marital status, types of family are 2.55, 0.42, 1.66, 0.02 respectively which is less than tabulated chi- square value i.e. 3.84 at 0.05 level of significance

So, the findings showed that there was no association between the pre- test knowledge score and selected demographic variables. Therefore, H_0 is accepted and H_2 is rejected.

The calculated chi square value of source of information is 24.12 > 7.82. So there is significant association between source of information and their knowledge level at 0.05 level of significance. Hence, H_2 is accepted and null hypothesis is rejected.

DISCUSSION
The study was based on following hypothesis:
$H0_1$: There is a significant difference between the mean pre- test score and mean post test score on knowledge regarding breast self- examination among female college students at 0.05 level of significance.

$H0_2$: There is a significant association between the pre- test knowledge score with their selected demographic variables regarding breast self-examination at 0.05 level of significance.

SECTION 1 Findings related to the socio demographic variables of female college students.
The study results found that majority of the subject i.e. 77% belonged to 18-20 years of age group and 23% were 21-23 years of age group. Majority of the subjects i.e. 85% were Hindu religion and 15% were Muslim and no one was there from other religion. 70% were unmarried and 30% were married. Majority of the subjects i.e. 86% belonged to nuclear family and 14% were from joint family. 29% of the subject got information from newspaper, 26% from television and 18% of the subject got information through health professionals. There was no family and personal history of breast health problem among the subjects.

SECTION 2 Findings related to assessment of knowledge regarding breast self examination among female college students before and after administration of structured teaching

programme.

The findings revealed that in pretest majority of the subject 66% (66) had moderate knowledge, 34% (34) of the them had inadequate knowledge and none of them had adequate knowledge. On post test 32% (32) of the students had adequate knowledge, 68% (68) had moderate knowledge and none of them had inadequate knowledge.

SECTION 3 Findings related to effectiveness of structured teaching programme regarding breast self examination .

The results of the study found that the mean difference was 10.30, SD was 0.50, calculated 't' value was 39.13 which was higher than the tabulated "t" value 1.98 with df 99. Thus the findings proved that the structured teaching programme was effective in improving the knowledge regarding breast self examination among female college students. at 0.05 level of significance. Hence, research hypothesis is accepted and null hypothesis is rejected.

SECTION 4 Findings related to association between the pre test knowledge score with their selected demographic variables of female college students.

The findings showed that calculated chi square value of source of information is 24.12 > 7.82. So there is significant association between source of information and their knowledge level at 0.05 level of significance. Hence, $H0_2$ is accepted and null hypothesis is rejected.

The calculated chi-sqaure value of demographic variables age, religion, marital status, types of family are 2.55, 0.42, 1.66, 0.02 respectively which is less than tabulated chi- square value i.e. 3.84 at 0.05 level of significance. So, there was no association between the pre test knowledge score and selected demographic variables. Therefore, H_0 is accepted and $H0_2$ is rejected.

CONCLUSION

The present study assessed the effectiveness of structured teaching programme regarding breast self -examination among female college students in Rabindranath Thakur Mahavidyalaya, Bishalgarh and total female college students was 100. On assessment of level of knowledge , in the pre-test 34% (34) female college students had inadequate knowledge, 66% (66) had moderate knowledge and none of them had adequate knowledge in pre- test whereas in the post test, 68% (68)female college students had moderate knowledge and 32%(32) have adequate knowledge. The paired t test was carried out and it was found to be significant at p<0.05 level. Hence null hypothesis is rejected and research hypothesis is accepted. This study concluded that structured teaching programme is significantly effective on improving the knowledge regarding breast self-examination among female college students. The chi-square test was carried out and it was found that sources of information was only significant and other demographic variables i.e. age ,religion, types family, marital status are not significant.

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