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Effectiveness of Structured Teaching Programme on Breast Self-Examination Among Adolescent Girls in Selected College, Guwahati, Assam

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ABSTRACT

BACKGROUND: Breast cancer is the most common malignancy in Indian women second only to cancer cervix. It is the most frequent cancer among women, impacting 2.1 million women each year. It is a group of diseases in which the cells in breast tissue changes and divide uncontrolled, typically resulting in a lump or mass. Breast self-examination is an important screening measure for detecting breast cancer.

OBJECTIVES: The purpose of the study is to assess the effectiveness of structured teaching programme on breast self-examination among adolescent girls in selected College, Guwahati, Assam.

MATERIALS AND METHODS: Pre-experimental one group pre-test post-test design was adopted for the study. In this study, 60 adolescent girls of 11th standard Arts Stream, Handique Girls' College were selected by using simple random sampling technique. The tools used for the study were demographic variables, knowledge questionnaire on breast self-examination. The analysis was done by using descriptive and inferential statistics in terms of frequency distribution, percentage, mean, standard deviation, paired 't' test and chi square.

RESULTS: The findings of the study revealed that the post-test knowledge score (18.36) was significantly higher than the pre-test mean knowledge score(10.65) as evidenced by t=16.31 ($p<0.001$) and tabulated value of t_{59} was 2.00 at 0.001 level of significance, which represents the effectiveness of structured teaching programme on breast self-examination. It also revealed that there was significant association between pre-test knowledge score and selected demographic variables of educational level of father and educational level of mother.

CONCLUSION: The present study demonstrated that the structured teaching program was effective in enhancing the knowledge of adolescent girls on breast self-examination.

Keywords: Effectiveness, structured teaching program, breast self-examination, knowledge, adolescent girls

INTRODUCTION

Breast cancer is the second leading cause of cancer related death in women. The efficacy of breast self-examination will decrease the cancer mortality. In the absence of an exact aetiological agent for breast cancer, the most appropriate way of controlling it is by early detection and treatment. The nurse plays an important role in breast self-examination education. Breast self- examination is a modality used for the early detection of breast cancer. Nurse The GLOBOCAN 2020 indicates that there were 19.3 million new cases of cancer and almost 10 million deaths from cancer in 2020. The estimated number of cancer cases in the Northeast for 2020 was 50,317 (27,503 in males and 22,814 in females). In North Eastern region incidence of breast cancer is highest in Aizawl with 30 per lakh population followed by Kamrup District (Metro) 23 per lakh population. Cases of breast cancer patient at B Borooah Cancer Institute during the last few years were: 224 in 2008, 296 in 2009, 308 in 2010, 345 in 2011, and 311 in 2012 and 335 cases in 2013. Thus, the researcher felt the need to conduct the study in order to educate adolescent girls about breast self-examination to detect any abnormal changes at the earliest.

STATEMENT OF THE PROBLEM

"Effectiveness of structured teaching programme on breast self-examination among adolescent girls in selected College, Guwahati, Assam"

OBJECTIVES: The objectives of the study are:

1. To assess the pre-test knowledge score on breast self-examination among adolescent girls in selected College, Guwahati, Assam.
2. To assess the post-test knowledge score on breast self-examination among adolescent girls in selected College, Guwahati, Assam.
3. To evaluate the effectiveness of structured teaching programme on breast self-examination among adolescent girls.
4. To find out the association between the pre-test knowledge score of breast self-examination among selected adolescent girls with their selected demographic variables (age, educational level of father, educational level of mother, family history of breast cancer and previous source of information).

HYPOTHESES

- **H_1:** There is significant mean difference between the pre-test and post-test knowledge score on breast self-examination among adolescent girls.
- **H_2:** There is significant association between the pre-test knowledge score with their selected demographic variables (age, educational level of father, educational level of mother, family history of breast cancer and previous source of information).

MATERIALS AND METHODS:

An evaluative research approach was considered most suitable for the present study. Pre-experimental one group pre-test post-test design was adopted for the study. In this study, 60 adolescent girls of 11 th standard Arts Stream, Handique Girls' College were selected by using simple random sampling technique. The tools used for the study were demographic variables, knowledge questionnaire on breast self-examination. The analysis was done by using descriptive and inferential statistics in terms of frequency distribution, percentage, mean, standard deviation, paired 't' test and chi square.

RESULTS:

Findings Related To Demographic Data

Table 1: Frequency and Percentage distribution of selected demographic variables of adolescent girls on breast self-examination. n= 60

Sl No	Demographic variables	Frequency (f)	Percentage (%)
1	Age (in years)		
	a) 16	9	15.0
	b) 17	**37**	**61.7**
	c) 18	12	20.0
	d) 19	2	3.3
2	Educational level of father		
	a) Primary	3	5.0
	b) High school	5	8.3
	c) Higher secondary	24	40.0
	d) Graduation and above	**27**	**45.0**
	e) No formal education	1	1.7
3.	Educational level of mother		
	a) Primary	6	10.0
	b) High school	**19**	**31.7**
	c) Higher secondary	17	28.3
	d) Graduation and above	16	26.6
	e) No formal education	2	3.4
4.	Family history of breast cancer		
	a) Yes	1	1.7
	b) No	**59**	**98.3**
5.	Previous source of information on the topic		
	a) Yes	24	40.0
	b) No	**36**	**60.0**
	If yes,		
	Mass media	**10**	**16.6**
	Peer group	5	8.3
	Family	4	6.7
	Health care personnel	4	6.7
	Others	1	1.7

The data in Table 1 shows the frequency and percentage distribution of selected demographic variables of the adolescent students. Majority 37 (61.7%) of the adolescent girls belongs to age group 17 years and 27 (45%) of the educational level of fathers were graduation and above. Majority 19 (31.7%) of the

education level of the mothers were high school. Majority 59 (98.3%) were not having family history of breast cancer and 36 (60%) were not having any previous information on the topic,

Findings related to pre-test and post-test knowledge of breast self examination among adolescent girls.

The knowledge on breast self-examination of adolescent girls was assessed using knowledge questionnaire on breast self-examination. Based on the score obtained, adolescent girls were arbitrarily categorized as adequate, moderate and inadequate knowledge. The frequency and percentage distribution of pre-test and post-test knowledge is presented on Fig 1.

n=60

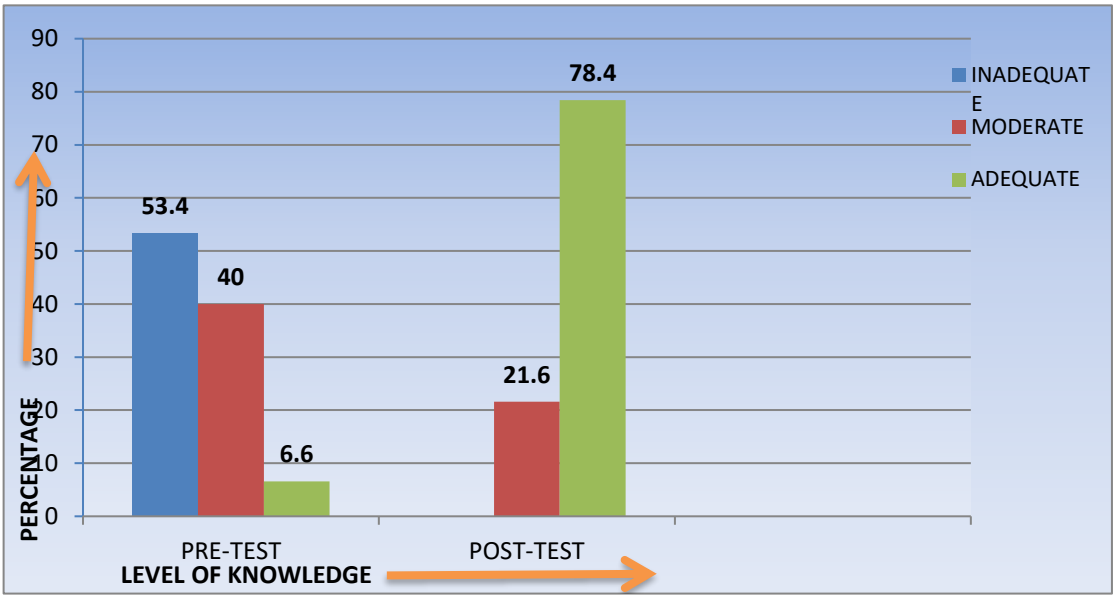

Fig 1:Bar graph showing percentage distribution of pre-test and post-test knowledge score on breast self-examination among adolescent girls.

The data presented in Fig 1 showed that, in the pre-test, 4 (6.6%) of the adolescent girls had adequate knowledge, 24 (40%) had moderate knowledge and 32 (53.4%) had inadequate knowledge. In post-test, 47 (78.4%) of the adolescent girls have adequate knowledge 13 (21.6%) had moderate knowledge.

Findings related to effectiveness of structured teaching programme on knowledge regarding breast self- examination.

Table 2: Comparison of pre-test and post-test knowledge score **n=60**

Knowledge score	Mean	Mean difference	Standard deviation	t value	df	p value	Inference
Pre test	10.65	7.71	3.86	16.31*	59	0.0001	S*
Post test	18.36		2.21				

S*= significant at p<0.001, (t_{59} =2.00)

The data presented in Table 2 shows that the mean post-test knowledge score (18.36) was higher than the mean pre-test knowledge score (10.65). The calculated t-value was 16.31 and tabulated value of df

59 at 0.001 level of significance was 2.00. Thus, the calculated value is greater than the tabulated value and hence null hypothesis (H_{01}) was rejected and accepted the research hypothesis i.e. the post-test knowledge score is significantly higher than the pre-test knowledge regarding breast self-examination.. This indicates that structured teaching programme regarding breast self-examination was effective in improving the knowledge of adolescent girls.

Table 3: Association between the pre-test knowledge of breast self-examination among adolescent girls with the selected demographic variables. n=60

Demographic variables	Pretest knowledge			χ^2	Table value	df	p value	Inference
	Inadequate	Moderate	Adequate					
1. Age (in years) a) 16 b) 17 c) 18 d) 19	 3 19 8 2	 5 15 4 -	 1 3 - -	4.72	12.59	6	0.580	NS
2. Educational level of father a) Primary b) High school c) Higher secondary d) Graduation and above e) No formal education	 2 4 12 14 -	 1 1 10 12 -	 - - 2 1 1	16.64	15.51	8	0.034	S*
3.Educational level of mother a) Primary b) High school c) Higher secondary d) Graduation and above e) No formal education	 5 10 12 5 -	 - 7 5 11 1	 1 2 - - 1	19.94	15.51	8	0.010	S*
4.Family history of breast cancer a) Yes b) No	 - 32	 1 27	 - -	1.16	5.99	2	0.559	NS
5. Previous source of information	14	9	1					

a) Yes b) No	18	18	-					
If yes,	5	4	1					
Mass media	4	1	-	9.42	18.3	10	0.492	NS
Peer group	3	1	-		1			
Family	2	2	-					
Health care personnel	-	1	-					
Others	18	18	-					
No information on the topic								

S*= Significant at p< 0.05 NS= Not significant

The analysis presented in Table 3 showed that there was a significant association found between the pre-test knowledge with educational level of father and educational level of mother regarding breast self-examination among adolescent girls. Hence the null hypotheses was rejected and research hypotheses was accepted in terms of educational level of father and educational level of mother. But no association was found between pre-test knowledge and other demographic variables such as age, family history of breast cancer and previous source of information.

CONCLUSION

The present study was conducted to assess the effectiveness of structured teaching programme on breast self-examination among adolescent girls in a selected College, Guwahati. Assam. The findings of the study revealed that there was marked increased in post-test knowledge score. Post-test mean was 18.36 and the pre-test mean was 10.65, calculated t- value was found to be 16.31 and tabulated value of df 59 was 2.00 at 0.001 level of significance, which represents the effectiveness of structured teaching programme.

Thus the study was found to be effective in improving the knowledge of breast self-examination among the adolescent girls. On the basis of findings, the researcher concluded that the structured teaching programme was very effective.

RECOMMENDATIONS

On the basis of the findings of the study the following recommendations are offered for future research.

- A similar study can be undertaken on a large scale.
- A similar study can be undertaken by using different teaching methods.
- A similar study can be undertaken at any age group without limiting the age group.

REFERENCES

1. World Health Organization (WHO). Breast Cancer- WHO, 2015 [cited 2020 Jan 17] Available from: https://www.who.int/news-room/fact-sheets/detail/breast-cancer
2. American Cancer Society. Cancer Facts & Figures 2019-20. [cited 2020 Jan 21] Available from:https://www.cancer.org/content/dam/cancer-org/research/cancer-facts-and-statistics/breast-cancer-facts-and-figures/breast-cancer-facts-and-figures-2019-2020.pdf.

3. National Cancer Institute. Introduction to Breast Cancer, 2005 [cited 2020 Jan 17] Availablefrom:https://training.seer.cancer.gov/breast/intro/#:~:text=The%20incidence%20of%20breast%20cancer,occur%20among%20women%20during%202005.
4. Jacob Annamma. A comprehensive textbook of Midwifery and Gynecological Nursing. 5th edition. New Delhi. Jaypee Brothers Medical Publishers, 2019. Page No:682