

# A study to assess the effectiveness of Structured Teaching Programme on Knowledge and Attitude among the Adolescent girl regarding Breast Self Examination in selected college of Pune city

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## ABSTRACT

**Introduction:** Breast self Examination (BSE) is a screening strategy used trying to identify early breast malignancy. The strategy includes the women herself feeling each breast for potential lumps, distortions or swelling was once promoted heavily as a means of finding cancer at a more curable stage, however some studies found that it was not effective preventing death, and actually caused harm through needless biopsies and surgery. The aim of this study was to assess the effectiveness of structured teaching programme (STP) on knowledge and attitude among adolescent girls regarding breast self examination in selected colleges of Pune district.

**Methods:** The quantitative research approach was used for present study. One group Pre-test post-test design was used to assess the effectiveness of the STP on Breast self examination. The study was conducted in selected colleges of Pune city. The sample composed of 60 adolescent girls studying in selected colleges of pune city. The non probability convenience sampling method was used to collect data. A structured questionnaire and Attitude scale on breast self examination was used for data collection. Permission was granted by concerned authority for data collection. The data collected was analyzed in terms of frequency, percentages, paired 't' test and presented in the form of table and graph.

**Results:** Majority 80% of the adolescent girls belongs to 16 – 20 years, highest percentage 88.33 % of samples belongs to Hindus and 91.67% of samples were living in urban region. 48.33 % of samples have previous knowledge. 48.33 % of samples were gain knowledge from mother. In pre test 63.33% of sample had average knowledge and 21.67% had good knowledge, where as in post test all the subjects had good knowledge scores. In pre-test 66.67% had average attitude and 21.66% had poor attitude towards BSE, where as in post test all the subjects had good attitude towards BSE.

The pre test the mean of the knowledge score in BSE obtained by the sample was 9.25. In the post test it rises to 18.34. The pre test the mean of the attitude score in BSE obtained by the sample was 22.25. In the post test it rises to 45.35. The knowledge and attitude score of the sample in BSE shows marked improvement after giving Structured Teaching.

**Conclusion:** The present study reveals that STP is the one of the effective teaching method in increasing the knowledge and Attitude of the adolescent girls on Breast Self Examination.

**Keywords:** BSE, Breast Self Examination, Knowledge, Attitude, STP, Structured Teaching Programme, Adolescent girls.

## 1 Introduction

Breast self exam is an inspection of the breasts by self. While BSE eyes used to see and hands to observe and feel the breast. Breast exams allow becoming more familiar with girls breasts. This may give a greater awareness of the condition of breasts. Breast exams, once thought essential for early breast cancer detection, are now considered optional. While other breast malignancy screening tests have been proved to save lives, there's no evidence that breast exams can do this. What's now stressed is breast awareness being familiar with the normal consistency of breasts and the underlying tissue, as well as inspecting the breasts for new changes.[1]

The best time to perform breast self examination is the.

Point at which the breasts are not delicate or swollen

Many of the females experience tenderness and lump in breast before menstrual cycle start. Hence BSE should be performing after menstrual cycle. Most of the physician advise females to do regular breast self examination in every month, on the day following their menstrual period.[2]

BSE may be a screening method utilized in an effort to detect early carcinoma. BSE involves the woman looking and feeling each breast for possible lumps, distortions or swelling. But many randomized controlled studies shows that BSE was not effective in preventing death and needless biopsies and surgery.[3] Breast self examination facilitate women to detect changes in breasts. The BSE should be done every month at the end of the menstrual period. This method of BSE is useful in the early detection of breast cancer.[4]

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In India women with breast cancer suffer more due to illiteracy, poverty, orthodox culture, advance ageing, stress, hormonal replacement therapy (HRT), Oral contraceptives, Obesity, Sedentary life style and so on.[5]

Breast cancer is the overall leading cancer in India with estimated 1.5 lakh new cases in 2016 and it is leading cause of cancer mortality and morbidity in both developed and developing countries. The incidence of death due to breast cancer varies. Mostly 50% of breast cancer cases and 58% of deaths due to breast cancer occur in developing countries, Survival rates due to breast cancer changes worldwide, range from 80% in North America, 60% in Japan and below 40% in low-income countries.[6]

Approximately one in eight women will be diagnosed with Breast Cancer in their lifetimes. Early detection is extremely important in preventing death by Breast Cancer the five year survival rate for localized stage breast cancer is 98%. In contrast, the same figure for advanced stage Breast Cancer is 22%. 5 year survival rate from Breast Cancer in US is 88.7%, UK 81.1% and Brazil 87.4%. In India it is 60.4%.[7]

Incidence rate of breast cancer in world is 19.3/ 1 lakh western Africa & 89.7 / 1 lakh in Europe. Incidence rate in India by ICMR – 1.5 lakh/year new cases, of 70,000 are succumb. In 2018, 1, 65,468 new cases are found, 87090 deaths are found. Incidence rate in Maharashtra is 1 in 8 women, Breast cancer is 2nd leading cause of death. Incidence rate in Pune is 31.4%.[8]

Thus investigators identify the need to conduct a descriptive study to assess the knowledge and attitude regarding breast self examination among adolescent girls.

## 2 Objectives

1. To assess the knowledge of adolescent girls regarding breast self examination.
2. To assess the attitude of adolescent girls regarding breast self examination.
3. To evaluate the effectiveness of structured teaching programme regarding breast self examination.
4. To associate the finding with selected demographic variables..

### 2.1Hypothesis

**H<sub>1</sub>:** The post test knowledge and attitude scores of Adolescent girls regarding BSE will be significantly higher than the pre test knowledge and attitude scores at 0.05 level of significance.

### 2.2 Methodology

The quantitative research approach was used for present study. One group pre-test post-test research design used to assess the effectiveness of the STP on Breast self examination. The study was conducted in selected ACS colleges in Pune region. The sample composed of sixty adolescent girls studying in selected colleges of pune city. The non probability convenience

sampling method was used to collect data. A structured questionnaire and Attitude scale on breast self examination was used for data collection.

The investigators developed Structured Teaching Programme on “Breast Self Examination”. The content validity of the research tool was established by experts. Reliability of the tool was tested by using split half method. The questionnaire and rating scale was found to be reliable. A pilot study was conducted on a small sample of five Adolescent girls.

In data collection procedure, a pre-test was administered first to assess knowledge and attitude of the samples. On first day STP was implemented. On the seventh day post-test was administered using the same questionnaire and attitude scale to assess knowledge and attitude after Structured Teaching Programme. Collected data was organized and analyzed in terms of frequency, percentages, paired‘t’ test and presented in the form of table and graph.

## 3 Result

**Table 1: Frequency and percentage distribution of subjects according to socio demographic variables**  
N = 60

Demographic variables	Frequency(f)	Percentage (%)
<b>Age</b>		
16-20	48	80%
21-24	12	20%
<b>Religion</b>		
Hindu	53	88.33%
Muslim	2	3.34%
Buddhist	4	6.67%
Christian	-	-
Other	1	1.66%
<b>Area of living</b>		
Urban	55	91.67%
Rural	5	8.33%
<b>Previous knowledge about breast self examination</b>		
Yes	29	48.33%
No	31	51.67%
<b>Source of information</b>		
Mother	29	48.33%
Friend	6	10%
News paper	4	6.67%
Social media	17	28.33%
Magazines	4	6.67%

The table no.1 depicts that the majority 80 % of the samples were 16 – 20 years of age group. Highest percentage 88.33 % of samples belong to Hindus and 6.67 % of samples belongs to Buddhist. Majority 91.67% of samples were living in urban region. 48.33 % of samples have previous knowledge. 48.33 % of samples were gain knowledge from mother and 28.33 % of samples gain knowledge from social media.

**Table 2: Mean, Median, Mode, Standard deviation and range of knowledge scores of Adolescent girls regarding Breast Self Examination. N = 60**

Test	Mean	Median	Mode	Standard deviation	Range
Pre-test	9.25	9	9	2.30	8
Post- test	18.34	18	18	2.29	11

The above table 2 reveals that mean knowledge scores were 9.25 in pre-test and standard deviation was 2.30, where as in post-test mean knowledge score was 18.34 and standard deviation was 2.29.

**Table 3: Mean, Median, Mode, Standard deviation and range of Attitude scores of Adolescent girls regarding Breast Self Examination. N = 60**

Test	Mean	Median	Mode	Standard deviation	Range
Pre- test	22.25	21	21	3.64	19
Post- test	45.35	44	44	4.65	35

The above table 3 reveals that pre-test mean attitude scores were 22.25 and standard deviation was 3.64, where as in post-test mean knowledge score was 45.35 standard deviation was 4.65.

**Table 4: Frequency and percentage distribution of knowledge scores of adolescents girls regarding Breast Self Examination N = 60**

Level of Knowledge	Pre-test		Post-Test	
	Frequency	Percentage	Frequency	Percentage
Good	13	21.67	60	100
Average	38	63.33	00	00
Poor	09	15	00	00

The above table 4 shows that the level of knowledge on Breast Self Examination pre test and post test. Most of the subjects 63.33% had average knowledge, 21.67% had good knowledge and 15% had poor knowledge, where as in post test all the subjects 100% had good knowledge scores.

**Table 5: Frequency and percentage distribution of attitude scores of adolescents girls regarding Breast Self Examination N = 60**

Level of Attitude	Pre test		Post Test	
	Frequency	Percentage	Frequency	Percentage
Good	7	11.67	60	100
Average	40	66.67	00	00
Poor	13	21.66	00	00

The above table 5 depicts that the level of attitude on Breast Self Examination pre test and post test. Most of the subjects 66.67% had average attitude, 21.66% had poor attitude and 11.67% had good attitude towards BSE, where as in post test all the subjects 100% had good attitude towards BSE.

**Table 6: Significance of knowledge score regarding Breast self examination among adolescent girls before and after structured Teaching. N = 60**

Knowledge	Maximum score	Mean	Standard deviation	t-value	p-value
Pre-Test	10	9.25	2.300	17.39	0.000 S,p<0.05
Post-Test	15	18.34	2.293		

The above table 6 depicts that in the pre test the mean of the knowledge score in BSE obtained by the sample was 9.25. In the post test it rises to 18.34. The knowledge score of the sample in BSE shows marked improvement after giving Structured Teaching. From the above table, it is evident that the calculated 't' value is greater than the table value of 't' at 0.05 level. Thus **H1 is accepted.**

**Table 7: Significance of Attitude score regarding Breast self examination among adolescent girls before and after structured Teaching. N=60**

Knowledge	Maximum score	Mean	Standard deviation	t-value	p-value
Pre-Test	21	22.25	3.64	27.51	0.000 S,p<0.05
Post-Test	45	45.35	4.65		

The above table 7 depicts that in the pre test the mean of the attitude score in BSE obtained by the sample was 22.25. In the post test it rises to 45.35. The attitude score of the sample in BSE shows marked improvement after giving Structured Teaching. From the above table, it is evident that the calculated 't' value is greater than the table value of 't' at 0.05 levels. Thus **H1 is accepted.**

## 4 Discussion

The present study shows that, 80 % of the samples were 16 – 20 years, highest percentage 88.33 % of samples belongs to Hindus and 91.67% of samples were living in urban region. 48.33 % of samples were gain knowledge from mother. Most of the subjects 38(63.33%) had average knowledge, where as in post test all the subjects 60(100%) had good knowledge scores. Most of the subjects 38 (66.67%) had average attitude towards BSE, where as in post test all the subjects 60(100%) had good attitude towards BSE. The pre test the mean of the knowledge score in BSE obtained by the sample was 9.25. In the post test it rises to 18.34. The pre test the mean of the attitude score in BSE obtained by the sample was 22.25. In the post test it rises to 45.35. The knowledge and attitude score of the sample in BSE shows marked improvement after giving Structured Teaching.

A present study supported by a pre-experimental study was conducted to assess the

awareness and impact of education on breast self examination among 40 graduate female students in selected college at Udupi district, Karnataka. The results revealed that in pre-test 5% had good knowledge, 72.2% had average knowledge, 22.5% had poor knowledge, total mean score was 27,  $t=24.46$ . In post-test 85% had good knowledge, 15% had average knowledge, total mean post test score was 50, the paired 't' test computed to test the effectiveness of Planned Teaching Programme on breast self examination was ( $t=12.46$ ). It showed awareness programme on breast self examination was very effective. The study concluded that awareness programme regarding BSE among young generation was useful and it was most important viable tool for early detection of Breast cancer.[9]

## 5 Recommendations

Keeping in view the findings of the present study, the following recommendations were made:

1. A similar study that can be done on large and wider sample size and for a longer period of time would be more pertinent in making broad generalizations.
2. A comparative study can be done between Student Nurses regarding Breast Self Examination (BSE).
3. A descriptive study can be conducted to assess the knowledge, attitude and practices regarding Breast Self Examination (BSE).
4. An experimental study regarding Breast Self Examination (BSE) can be undertaken among the women's.
5. A comparative study can be conducted regarding Structure Teaching programmer and self instructional module on Breast Self Examination (BSE).

## 6 Conclusion

The overall study is to evaluate the effectiveness of structure teaching programme on knowledge and attitude regarding Breast Self Examination (BSE) among adolescent girls, enhancing in nursing education, practice, administration and research. Structure teaching programme was effective in enhancing and upgrading the knowledge and improving attitude of adolescent girls. This study will help the nurse to develop appropriate teaching material to improve knowledge and attitude of adolescent girls regarding BSE.

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