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Original Research Article

A study to assess the effectiveness of structured teaching programme on attitude regarding breast self-examination among adolescent girls in selected school of Indore M.P.

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ABSTRACT

Introduction: Breast self-examination enables a women or girls to detect changes in her breasts. The examination should be done each month soon after the menstrual period ends as normal physiological changes that they confuse results occur in the premenstrual period. This method of self-examination is useful in the early detection of breast cancer.

Materials and Methods: This study made use of an evaluative approach with one group pretest and post-test design. The sample for the study sample comprised of 60 adolescent girls. A disproportionate purposive sampling technique was used to select 60 adolescent girls. The tool and STP were validated by 7 experts. Pre testing and reliability of the tool was established prior to pilot study. Pilot study was conducted among ten adolescent girls. this gave basis for the invigilator to conduct the actual study .the actual study was conducted among 60 adolescent girls .following the pretest, STP Was administered and post test was conducted seven days after the administration of STP. The obtained data was analyzed in terms of the objectives and hypothesis using descriptive.

Inferential Statistics: The mean pretest knowledge score was 12.50 ± 3.26 , while in the posttest it was 23.20 ± 2.49 . The difference was found to be statistically significant ($p < 0.05$), showing a higher mean knowledge score in the posttest. Thus, the intervention was very helpful in improving the mean posttest knowledge score. The mean pretest attitude score was 52.78 ± 8.35 , while in the posttest it was 67.78 ± 4.36 . The difference was found to be statistically significant ($p < 0.05$), showing a higher mean attitude score in the posttest.

Summary: The finding of the present study were analyzed and discussed with the finding of the similar studies confirmed that STP was effective in attitude regarding breast self- examination among adolescent girls.

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1. Introduction

The best time to perform breast self-examination is when the breasts are not tender or swollen. Because many women experience tenderness and lumpiness in their breasts prior to menstruation, breasts self-examination should be performed after menses. Many health care providers advise women to

perform a breast self-examination regularly every month, on the day following their menstrual period.¹⁻³

Breast self-examination (BSE) is a screening method used in an attempt to detect early breast cancer. The method involves the woman herself looking at and feeling each breast for possible lumps, distortions or swelling. BSE was once promoted heavily as a means of finding cancer at a more curable stage, but large randomized controlled studies found that it was not effective in preventing death,

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and actually caused harm through needless biopsies and surgery.⁴⁻¹¹

Early diagnosis affords a better chance of survival and better prognosis in absence of an exact etiological agent for breast cancer, the most appropriate way of controlling it, will be early detection and treatment. Mammography is the method of choice but its use is limited due to high cost and unavailability. At present a simple inexpensive and early implant for the detection of breast cancer is breast self-examination. It is one of the simplest and most important health programmes to promote early detection. Regular breast self-examination can identify any abnormal changes in breast to establish good prognosis. If the young groups of women are targeted with accurate information and encouragement they will learn to examine themselves and detect every minute changes early in their later life.¹¹

Many women feel that doing a breast self-exam is an important part of their health care. It helps them learn how their breasts normally feel, so that if they find a lump they will know whether it is something to discuss with their health care provider. However, there is controversy about recommending breast self-exams.¹⁰⁻¹⁹

2. Objectives

1. To assess the attitude of adolescent girls regarding breast self-examination before and after the administration of structured teaching programme.
2. To find out the effectiveness of STP regarding BSE on Attitude score.
3. To find out the correlation between attitudes score of adolescent girls regarding breast self-examination.
4. To determine the association between the demographic variables and attitude of adolescent girls regarding breast self-examination.

2.1. Hypothesis

1. **H₁**: There will be significant difference between mean pre test and post test attitude score on selected schools of adolescent girls on BSE at the level of $P < 0.05$
2. **H₂** : There will be significant correlation between knowledge score and attitude score of adolescent girls in selected schools of Indore.
3. **H₃** : There will be significant association between the attitude score and selected demographic variables of adolescent girls in selected schools of Indore.

2.2. Assumption

1. Adolescent girl have less knowledge about breast self-examination
2. Adolescent girl have negative attitude towards breast self-examination

2.3. Delimitations

1. This study is limited to adolescent girls in L.G. Acedemy and Mharshi Vidhya Mandir school of Indore M.P.
2. In This study the age limit of adolescent girls is from 16-19 yrs.

3. Research Methodology

It included the research approach, research design, sample size, sampling technique development of tool, pilot study data collection procedure, plan for data analysis for determining the effectiveness of intervention.

3.1. Research approach

The research method adopted for the study was an evaluative approach.

3.2. Research design

For the present study a one group pretest posttest research design is used

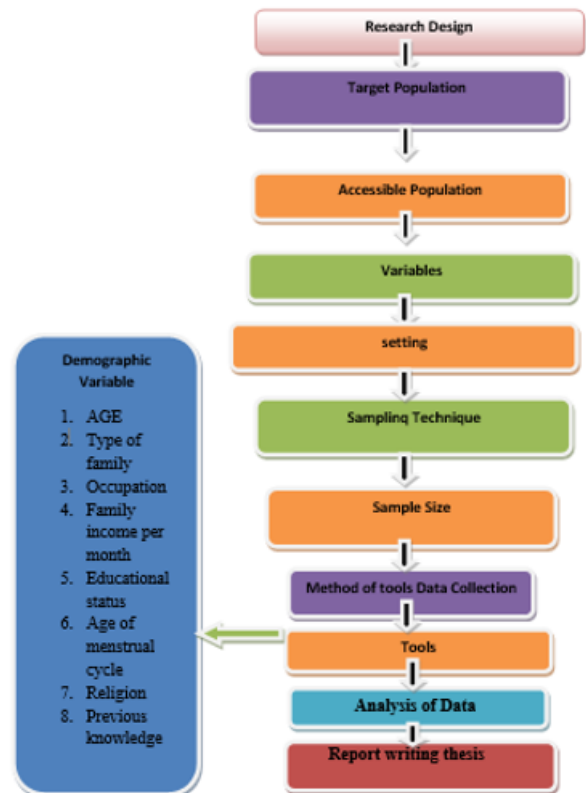


Fig. 1: Research design

4. Setting of The Study

The study was conducted in Maharishi Vidhya Mandir, Indore (M.P.).

4.1. Population

The population of present study comprised of all adolescent girls who studying in Maharishi Vidhya Mandir, Indore (M.P.).

4.2. Sample

The sample of the present comprised of study comprised of all adolescent girls who studying in Maharishi Vidhya Mandir, Indore (M.P.).

4.3. Sample size

The sample size consisted of 60 adolescent girls who studying in Maharishi Vidhya Mandir, Indore (M.P.).

4.4. Sampling technique

Purposive Sampling Technique

5. Sampling Criteria

5.1. Inclusion criteria for sampling

1. The girls who are 16 to 19 years
2. The girls who are willing to participate
3. The girls who are available at the time of data collection
4. The girls who can understand English

5.2. Exclusion criteria for sampling

1. The girls who are above and below 19 years of age.
2. The girls who are not available during the data collection.

5.3. Attitude checklist

Use of 5 point likert scale consisted of 12 items .the criteria was prepared with five strongly disagree (1), disagree (2), uncertain (3), agree (4), strongly agree (5) It consist of 12items of to assess the attitude of adolescent girls regarding breast self-examination.

The reliability of the tool was established by administering the tool to 10 subjects. The reliability was calculated by Split half and Karl Pearsons correlation coefficient formula .the reliability of tool was calculated and 'r' found to be 0.8 for knowledge assessment and 0.92 for attitude scale which is statistically reliable for the present study .the purpose was to determine the clarity of items, presence of ambiguous items and to ensure the reliability and feasibility of the tool.²⁰

6. Result

Distribution of adolescent girls according to pretest and posttest attitude score grading.

The above table shows the distribution adolescent girls according to pretest and posttest attitude grading.

The attitude questionnaire had 12 questions with Likert of 5. Strongly disagree carries 1 and Strongly agrees carries 5. Thus, a staff nurse can obtain a minimum of 12 marks and a maximum of 100 marks. These 100 marks were further graded as Poor (01-03 marks); Fair (04-06 marks), Good (07-09 marks) and Excellent (10-12). In the pretest, none of the adolescent girls obtained poor attitude grade, 22 (36.7%) obtained fair attitude grade, 36 (60.0%) obtained good attitude grade and 2 (3.3%) obtained excellent attitude grade. Then the adolescent girls were given intervention and then the same set of attitude questionnaire was re-administered. In the posttest, none of the adolescent girls obtained poor and fair attitude grades, 41 (68.3%) obtained good attitude grade and 19 (31.7%) adolescent girls obtained excellent attitude grade. Thus, the intervention was very helpful in improving the attitude grade of the adolescent girls.

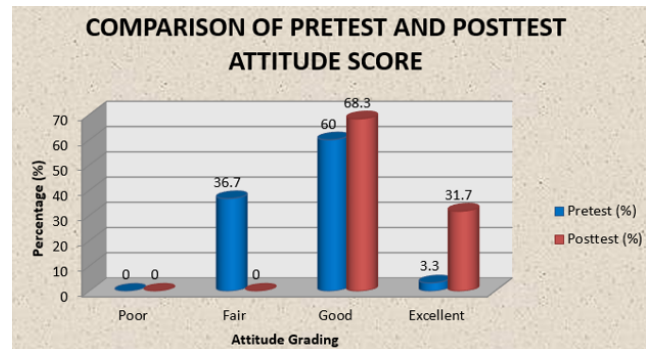


Fig. 2: Bar diagram showing comparison of pretest and posttest attitude score.

The above fig 15 shows the distribution of adolescent girls according to pretest and posttest attitude grading. In the pretest, none of the adolescent girl obtained poor attitude grade, 22 (36.7%) obtained fair attitude grade, 36 (60.0%) obtained good attitude grade and 2 (3.3%) obtained excellent attitude grade.

In the posttest, none of the adolescent girls obtained poor and fair attitude grades, 41 (68.3%) obtained good attitude grade and 19 (31.7%) adolescent girls obtained excellent attitude grade. Thus, the intervention was very helpful in improving the attitude grade of the adolescent girls.

The above table shows the comparison of mean pretest and posttest attitude score. The mean pretest attitude score was 52.78 ± 8.35 , while in the posttest it was 67.78 ± 4.36 . The difference was found to be statistically significant ($p < 0.05$), showing a higher mean attitude score in the posttest. Thus, the intervention was very helpful in

Table 1: Distribution of adolescent girls according to pretest and posttest attitude score (n=60)

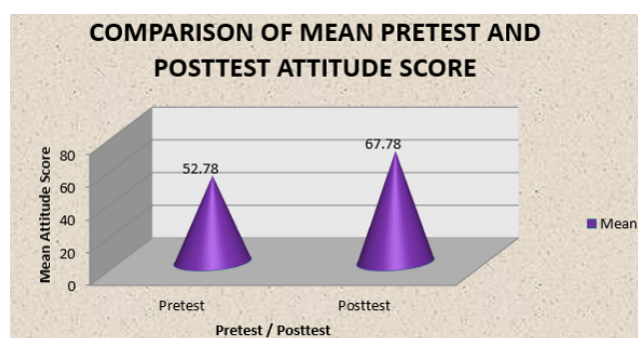
S. No.	Attitude score	Pretest		Posttest	
		Number	Percentage	Number	Percentage
1.	Poor (01-03)	0	0.0	0	0.0
2.	Fair (04-06)	22	36.7	0	0.0
3.	Good (07-09)	36	60.0	41	68.3
4.	Excellent (10-12)	2	3.3	19	31.7
	Total	60	100.0	60	100.0

Table 2: Comparison of pretest and posttest attitude score (N=60)

Attitude Score	Mean	SD	't' Value	P value
Pretest	52.78	8.24	-10.065, df=59	0.000*
Posttest	67.78	4.36		

Paired 't' test applied. p value = 0.000, significant

improving the mean posttest attitude score.

**Fig. 3:** Cone diagram showing comparison of mean pretest and posttest attitude score.

The mean pretest knowledge score was 12.50 ± 3.26 , while in the posttest it was 23.20 ± 2.49 . The difference was found to be statistically significant ($p < 0.05$), showing a higher mean knowledge score in the posttest. Thus, the intervention was very helpful in improving the mean posttest knowledge score. The mean pretest attitude score was 52.78 ± 8.35 , while in the posttest it was 67.78 ± 4.36 . The difference was found to be statistically significant ($p < 0.05$), showing a higher mean attitude score in the posttest. Thus, the intervention was very helpful in improving the mean posttest attitude score.

6.1. Association between demographic variables and attitude score grading

The above table shows the association between pretest attitude score and age. There was no statistically significant association seen between pretest attitude score and age ($c^2 = 0.878$, $df=4$, p value = 0.928, Not significant) showing that the pretest attitude grade is independent of the age of the adolescent girls.

The above table shows the association between pretest attitude score and type of family. There was no statistically

significant association seen between pretest attitude score and type of family ($c^2 = 1.548$, $df=2$, p value = 0.461, Not significant) showing that the pretest attitude grade is independent of the type of family of the adolescent girls.

The above table shows the association between pretest attitude score and occupation of earning member. There was no statistically significant association seen between pretest attitude score and occupation of earning member ($c^2 = 0.282$, $df=2$, p value = 0.844, Not significant) showing that the pretest attitude grade is independent of the occupation of earning member.

The above table shows the association between pretest attitude grade and Family income per month. There was no statistically significant association seen between pretest attitude grade and Family income per month ($c^2 = 2.346$, $df=6$, p value = 0.664, Not significant) showing that the pretest attitude grade is independent of the Family income per month of the adolescent girls.

The above table shows the association between pretest attitude score and educational status. There was no statistically significant association seen between pretest attitude score and educational status ($c^2 = 2.181$, $df=2$, p value = 0.336, Not significant) showing that the pretest attitude grade is independent of the educational status of the adolescent girls.

The above table shows the association between pretest attitude score and Age of strual Cycle.

There was no statistically significant association seen between pretest attitude score and Age of Menstrual Cycle ($c^2 = 4.132$, $df=6$, p value = 0.604, Not significant) showing that the pretest attitude grade is independent of the Age of Menstrual Cycle of the adolescent girls.

The above table shows the association between pretest attitude score and Religion. There was no statistically significant association seen between pretest attitude score and Religion ($c^2 = 7.637$, $df=6$, p value = 0.185, Not significant) showing that the pretest attitude grade is independent of the Religion of the adolescent girls. The above table shows the association between pretest

Table 3: Comparing the correlation of knowledge and attitude score

Knowledge Score	Mean	SD	't' Value	P value	Attitude Score	Mean	SD	't' Value	P value
Pretest	12.50	3.26	18.634,	0.000*	Pretest	52.78	8.24	-10.065,	0.000*
Posttest	23.20	2.49	df=57		Posttest	67.78	4.36	df=59	

Table 4: a: Association of pretest attitude score with age (N=60)

S. No.	Age	Pretest Attitude score				c2 value	P value
		Poor	Fair	Good	Excellent		
1.	Age						
	a. >15 year	0	17	27	2	0.878, df=4	0.928, NS
	b. 16-18 year	0	4	8	0		
	c. 19-20 year	0	1	1	0		
	c. <20 year	0	0	0	0		
	Total	0	22	36	2		

Pearson Chi-square test applied.

* < 0.05 – Significant, ** < 0.01 – Highly significant

Table 4(b) Association of pretest attitude score with type of family (N=60)

S. No.	Type of family	Pretest Attitude score				c2 value	P value
		Poor	Fair	Good	Excellent		
2.	Type of family						
	a. Nuclear	0	9	16	0	1.548, df=2	0.461, NS
	b. Joint	0	13	20	2		
	c. Separate	0	0	0	0		
	Total	0	22	36	2		

Pearson Chi-square test applied.

* < 0.05 – Significant, ** < 0.01 – Highly significant

Table 4 (c) Association of pretest attitude score with occupation of earning member (N=60)

S. No.	Occupation of earning member	Pretest Attitude score				c2 value	P value
		Poor	Fair	Good	Excellent		
3.	Occupation of earning member					0.282, df=2	0.844, NS
	a. Govt. Job	0	20	32	2		
	b. Private Job	0	2	4	0		
	c. Farmer	0	0	0	0		
	d Labour	0	0	0	0		
	Total	0	22	36	2		

Pearson Chi-square test applied.

* < 0.05 – Significant, ** < 0.01 – Highly significant

Table 4(d) Association of pretest attitude score with family income per month (N=60)

S. No.	Family Income per Month	Pretest Attitude score				c2 value	P value
		Poor	Fair	Good	Excellent		
4.	Family Income per Month						
	a. >5000	0	8	10	0	2.346, df=6	0.664, NS
	b. 5000-10000	0	14	23	2		
	c. 8000-11000	0	0	1	0		
	d. 11000 above	0	0	2	0		
	Total	0	22	36	2		

Pearson Chi-square test applied.

* < 0.05 – Significant, ** < 0.01 – Highly significant

Table 4(e) Association of pretest attitude score with educational status (N=60)

S. No.	Educational Status	Pretest Attitude score				c2 value	P value
		Poor	Fair	Good	Excellent		
5.	Educational Status						
	a. Illiterate	0	3	10	0	2.181, df=2	0.336, NS
	b. Primary Education	0	19	26	2		
	c. Higher Secondary	0	0	0	0		
	d. Graduation	0	0	0	0		
	Total	0	22	36	2		

Pearson Chi-square test applied.

* < 0.05 – Significant, ** < 0.01 – Highly significant

Table 4(f) Association of pretest attitude score with age of menstrual cycle (N=60)

S. No.	Age of Menstrual Cycle	Pretest Attitude score				c2 value	P value
		Poor	Fair	Good	Excellent		
6.	Age of Menstrual Cycle						
	a. 10-12 year	0	7	12	2	4.132, df=6	0.604, NS
	b. 12-14 years	0	11	17	0		
	c. 14-16 years	0	3	4	0		
	d. 16-18 years	0	1	3	0		
	Total	0	22	36	2		

Pearson Chi-square test applied.

* < 0.05 – Significant, ** < 0.01 – Highly significant

Table 4 (g) Association of pretest attitude score with religion (N=60)

S. No.	Religion	Pretest Attitude score				c2 value	P value
		Poor	Fair	Good	Excellent		
7.	Religion						
	a. Hindu	0	6	4	0	7.637, df=6	0.185, NS
	b. Muslim	0	4	16	2		
	c. Christian	0	8	10	0		
	d. Other	0	4	6	0		
	Total	0	22	36	2		

Pearson Chi-square test applied.

* < 0.05 – Significant, ** < 0.01 – Highly significant

Table 4 (h) Association of pretest attitude score with previous knowledge about breast self –examination (N=60)

S. No.	Previous knowledge about breast-self-examination	Pretest Attitude score				c2 value	P value
		Poor	Fair	Good	Excellent		
8.	Previous knowledge about breast self -examination					4.636, df=2	0.098, NS
	a. Yes	0	8	5	2		
	b. No	0	14	31	0		
	Total	0	22	36	2		

Pearson Chi-square test applied.

* < 0.05 – Significant, ** < 0.01 – Highly significant

attitude score and previous knowledge about breast self-examination.

There was no statistically significant association seen between pretest attitude score and previous knowledge about breast self-examination ($c2 = 4.636$, $df=2$, p value = 0.098, Not significant) showing that the pretest attitude grade is independent of the previous knowledge about breast self-examination of the adolescent girls.

7. Conclusion

From the observations, we can conclude that there was a statistically significant improvement seen in both the knowledge score and attitude score after intervention. Thus intervention was very helpful in improving the knowledge score and attitude score of the adolescent girls. We find partial association between majority of the demographic variables and the knowledge. But no association was seen between demographic variables and the attitude score. To conclude intervention was very helpful in improving both the knowledge and attitude score of the breast self-examination among adolescent girls.

8. Source of Funding

None.

9. Conflict of Interest

None.

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