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Original Research Article

Knowledge regarding breast self examination among adolescent girls

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STP: Structured teaching Programme.
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ABSTRACT

Introduction: A breast exam is a self-inspection of the breasts. During a breast exam, eyes used to see and hands to observe the appearance and feel the breast. Breast exams allow becoming more familiar with girls breasts.

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 and inferential statistics.

Interpretation: The finding of the study showed that STP is an effective teaching strategy to increase knowledge of adolescent girls.

Results: The finding of the study proved that adolescent girls lacked knowledge about breast self examination. The STP given by the investigator helped the adolescent girls to improve their knowledge and the finding showed that it is statistically significant at 0.05 level of significance.

1. Introduction

The female breast has been regarded as a symbol of beauty, sexuality and motherhood. Any actual (or) suspected disease (or) injury affecting breast tends to reflect the prevailing societal view of the breast. The threat of mutilation (or) loss of a breast may be devastating for the women because of psychosocial, sexual and body image implications significance associated with it.[1] This may give a greater awareness of the condition of breasts. Breast exams may help identify potential breast problems. Breast exams, once thought essential for early breast cancer detection, are now considered optional. While other breast cancer 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.[2]

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.[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

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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, and actually caused harm through needless biopsies and surgery.[4]

2. Need For The Study

Breast self examination is easily detected by adolescent girl so that the priority is given to teaching all girls how and when to examine their breast. It is estimated that only 25% - 30% of women perform breast self examination proficiently and regularly each month. Breast cancer is a common cause of cancer morbidity and mortality in women. breast self examination (examination of the breasts by the individual) or clinical breast examination (examination of the breasts by a doctor or a nurse) have been promoted for many years as screening methods to diagnose breast cancer at an early stage in order to decrease the risk of dying from breast cancer.[5–8]

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. .there is no evidence that doing breast self exams saves lives from breast cancer. Even getting a yearly exam is controversial, but many women and their health care providers feel that this is still an important part of breast cancer screening.[9–12]

3. Objectives

1. To assess the knowledge of adolescent girls regarding breast self examination before and after the administration of structural teaching programme..
2. To find out the effectiveness of STP regarding Breast self examination on knowledge score.
3. To find out the correlation between knowledge score of adolescent girls regarding breast self examination
4. To determine the association between the demographic variables and knowledge of adolescent girls regarding breast self examination.

3.1. Hypothesis

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

3.2. Assumption

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

4. Research Methodology

The methodology of research indicates the general pattern for organizing the procedure for gathering valid and reliable data for an investigation. This chapter deals with methodology adopted for development and evaluating of knowledge and attitude regardingbreast self-examination among adolescent girls in selected schools of Indore (M.P.)". 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.

4.1. Research approach

The present study was aimed at developing the effectiveness of knowledge of adolescent girls regardingbreast self-examination. The research method adopted for the study was an evaluative approach.

4.2. Research design

For the present study a one group pretest posttest research design is used The design can be presented as:

Fig. 1: One group pre-test, post-test design

1. O_1: Pre-test of knowledge and attitude regarding selected breast self-examination
2. X_1: Intervention. (Structured teaching program)
3. O_2: Post test of knowledge and attitude regarding selected breast self-examination.

4.3. Variable under study

Variables are an attribute of a person or object that varies, that is takes on different values.

4.4. Independent variables

Independent variables are the presumed cause for resulting effect on the dependent variables. In this study the independent variables is the structured teaching programme regarding breast self examination.

4.5. Dependent variables

Dependent variables is the outcome variable.

In these study dependent variables is knowledge of adolescent girls regarding breast self -examination.

4.6. Extraneous variables

An uncontrolled variable that greatly influence the result of the study is called as extraneous variables.

In this study the variables such as education of adolescent girls and sources of information are treated as extraneous variables.

5. Setting of The Study

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

5.1. Population

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

5.2. Sample

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

5.3. Sample size

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

6. Sampling Technique

6.1. Purposive sampling technique

The written permission was taken from the Principal of Maharishi Vidhya Mandir, by the researcher to conduct the study. In this study adolescent girls who studying adolescent girls who studying in Maharishi Vidhya Mandir, Indore (M.P.).

6.2. Sampling criteria

6.2.1. 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

6.2.2. 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.

7. Plan For Data Analysis

A master data sheet was prepared to complete the data by the investigator Demographic data containing selected sample characteristics was analyzed using frequency and percentage distribution. Mean and standard deviation of pre-test and posttest knowledge score. Chi square test for association would be to find out the significant association between the pre-test scores knowledge of adolescent girls and selected demographic variables. Paired t test to determine the significant difference between mean pretest score and mean post test score of knowledge and attitude regarding adolescent girls regarding breast self examination.

8. Result

8.1. Distribution of adolescent girlsaccording to demographic variables

The above table shows the distribution of Adolescent Girls according to demographic variables.

The above table shows the distribution of Adolescent girls according to pretest and posttest knowledge grading.

The knowledge questionnaire had 28 questions. Only option was correct. For each correct answer 1 mark was given and for each wrong answer 0 mark was given. Thus, a adolescent girls can obtain a minimum of 0 marks and a maximum of 28 marks. These 28 marks were further graded as Poor (0-09 marks); Fair (10-18 marks) and Good (19-28 marks). In the pretest, 13 (21.7%) adolescent girls obtained poor knowledge grade, 47 (78.3%) obtained fair knowledge grade.

Then the adolescent girls were given intervention and then the same set of knowledge questionnaire was re-administered. In the post test, none of the adolescent girls obtained poor knowledge grade, 4 (6.7%) obtained fair knowledge grade and majority of them 56 (93.3%) adolescent girlsobtained good grade. Thus, the intervention was very helpful in improving the knowledge grade of the adolescent girls.,

In Figure 2 the pre test post test knowledge score before intervention, there were 21.7 % adolescent girlswho had obtained poor knowledge grade, 78.3 % adolescent girlswho had obtained fair knowledge grade , and after intervention post test grade of adolescent girls (6.7%) had obtained fair knowledge and (93.3%) had obtained good knowledge grade and thus, the intervention was very helpful in upgrading the knowledge score of these adolescent girls.

Table 1: Distribution of adolescent girls according to demographic variables (N=60)

S. No.	Demographic Variable	Number	Percentage
1.	Age		
	a. >15 year	48	80.0
	b. 16-18 year	12	20.0
	c. 19–20 year	0	0.0
	c. <20 year	0	0.0
2.	Type Of Family		
	a. Nuclear	25	41.7
	b. Joint	35	58.3
	c. Separate	0	0.0
3.	Occupation of earning member		
	a. Govt. Job	14	23.4
	b. Private Job	20	33.3
	c. Farmer	06	10.0
	d. Labour	20	33.3
4.	Family income per month		
	a. >5000	18	30.0
	b. 5000-10000	39	65.0
	c. 8000-11000	1	1.7
	d. 11000 above	2	3.3
5.	Educational Status		
	a. illiterate	10	16.7
	b. Primary education	20	33.3
	c. Higher secondary	15	25.0
	d. Graduation	15	25.0
6.	Age of Menstrual cycle		
	a. 10-12 year	0	0.0
	b. 12-14 year	40	66.7
	c. 14-16 year	20	33.3
	d. 16-18 year	0	0.0
7.	Religion		
	a. Hindu	10	16.7
	b. Muslim	22	36.7
	c. Christian	18	30.0
	d. Others	10	16.7
8.	Do you have previous knowledge about breast self -examination		
	a. Yes	13	21.7
	b. No	47	78.3

Table 2: Section 4.2: Distribution of adolescent girls according to pretest and posttest knowledge score (N=60)

S. No.	Knowledge Score		Pretest		Posttest	
			Number	Percentage	Number	Percentage
1.	Poor	(0-09)	13	21.7	0	0.0
2.	Fair	(10-18)	47	78.3	4	6.7
3.	Good	(19-28)	0	0.0	56	93.3
	Total		60	100.0	60	100.0

Table 3: Comparison of pretest and posttest mean knowledge score (N=60)

Knowledge Score	Mean	SD	't' Value	P value
Pretest	12.50	3.26	18.634, df=57	0.000*
Posttest	23.20	2.49		

Paired 't' test applied. P value = 0.000, Significant

Table 4: Association ofpretest knowledge score with age of menstrual cycle (N=60)

S. No.	Age of Menstrual Cycle	Pretest Knowledge score			c2 value	P value
		Poor (0-09)	Fair (10-18)	Good (19-28)		
	Age of Menstrual Cycle				1.42, df=1	0.04, S
	a. 10-12 year	0	0	0		
	b. 12-14 years	18	22	0		
	c. 14-16 years	18	2	0		
	d. 16-18 years	0	0	0		
	Total	36	24	0		

Pearson Chi-square test applied.
* < 0.05 – Significant, ** < 0.01 – Highly significant

Table 5: Association of pretest knowledge score with previous knowledge (N=60)

S. No.	Previous Knowledge	Pretest Knowledge score			c2 value	P value
		Poor (0-09)	Fair (10-18)	Good (19-28)		
8.	Pevious knowledge about breast self –examination a. Yes b. No	6 7	7 40	0 0	5.863, df=1	0.015*
	Total	13	47	0		

Pearson Chi-square test applied.
* < 0.05 – Significant, ** < 0.01 – Highly significant

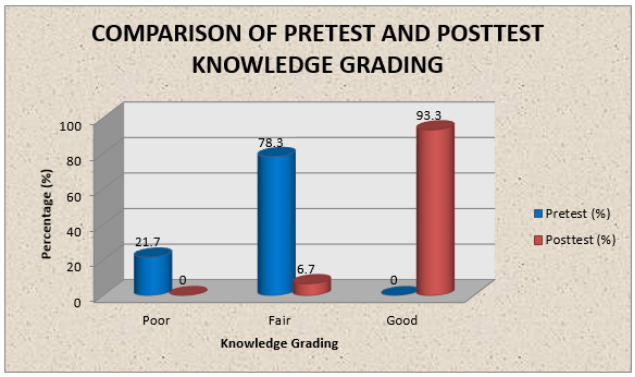

Fig. 2: Bar diagram showing comparison of pretest and posttest knowledge score

8.2. Section 4.3: Comparison of pretest and posttest knowledge score

The above table shows the comparison of mean pretest and posttest knowledge 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.

In Table 3 the mean knowledge score before intervention was 12.5 and after intervention 23.2 paired ' t' test was applied to find out the statistical difference in the mean knowledge scores. The 't' value obtained was -18.634 with a degree of freedom of 57. P value obtained was <0.000 which is statistically significant.

8.3. Association between demographic variables and knowledge score

There was no statistically significant association seen between pretest knowledge grade and Family Income per month (c2 = 1.936, df=3, p value = 0.586, Not significant) showing that the pretest knowledge score is independent of the Family Income per month.

The above table shows the association between pretest knowledge score and Age of Menstrual Cycle.

There was no statistically significant association seen between pretest knowledge score and Age of Menstrual Cycle (c2 = 1.42, df=1, p value = 0.04, significant) showing that the pretest knowledge grade is independent of Age of Menstrual Cycle of the Adolescent girls.

The above table shows the association between pretest knowledge score and previous knowledge about breast self -examination.

There was o statistically significant association seen between pretest knowledge score and previous knowledge about breast self- examination (c2 = 5.863, df=1, p value = 0.015, Significant) showing that the pretest knowledge grade is dependent on the previous knowledge about the breast self- examinationof the Adolescent girls.

9. Conclusion

On the whole, carrying out the present study was really an enriching experience to the investigator. It also helped a great deal to explore and improve the knowledge of the researcher and respondents. the constant encouragement and guidance by the guide ,personnel cooperation ,support and respondent interest in participating in the study contributed

to the fruitful completion of the study.

10. Source of Funding

None.

11. Conflict of Interest

None.

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