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Pre-Experimental Studies to Assess the Effectiveness of Planned Teaching Programme Regarding Breast Self-Examination on Adolescent Girls in the Selected Colleges of Gurugram

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ABSTRACT
Breast cancer is the uncontrollable growth of the breast tissues which invades other parts of the body. Breast cancer is the most prevalent malignancy among Indian women, according to the Union Health Ministry, with a death rate of 12.7 per 100,000 women. Breast self-examination is an easy, economical, and non-invasive procedure, which can use to detect early breast cancer herself by looking at and assessing for any changes in their breast as early as possible. As advised, BSE should be practiced by all women above the age of 20. The objective of the study was to assess the effectiveness of planned teaching programme regarding breast self-examination on adolescent girls in the selected colleges of Gurugram. Total 60 adolescent girls were enrolled in study using convenient sampling technique. Pre-test data was collected with self-structured knowledge questionnaire and then video assisted teaching was provided to the girls after a week of pretest and the post test was conducted and data was analyzed. Results showed that during pre-test 78.3% of girls were having average knowledge and 21.7% were having good knowledge and after post-test 100% of girls were having good knowledge about breast self-examination.
Keywords: *Breast Cancer, Breast Self-Examination, Planned teaching programme, Adolescent Girls*

INTRODUCTION

Cancer is caused by the mutations of genes responsible for cell growth. The cells' mutations enable uncontrolled cell division and proliferation. Breast cancer deaths account for 19 to 34% of all annual deaths in India, where the incidence of the disease is continuously rising by 3% per year. There is no specific cause of breast cancer however, some risk factors can raise the likelihood of developing the disease. Risk factors include Genetics or family history of breast cancer, increasing age mostly above 40 years, early menarche, late menopause, no or late childbearing, absence of breastfeeding, hormonal replacement therapy for prolonged period of time, tobacco consumption, increased breast density, alcohol abuse, obesity, diet containing more fatty food, overuse of contraceptive pills [1-3].

Breast cancer is thought to account for 25% of all new cancer diagnoses among women worldwide, according to the American Cancer Society (ACS). Around the world, 1.7 million new cases were diagnosed in 2012. Worldwide, survival rates vary, although they are generally rising. For people with a first-stage diagnosis, the rate is 80 to 90 percent, and for those with a later-stage diagnostic, it is 24 percent.

The prognosis for breast cancer can be significantly improved by a timely diagnosis. The best strategy for lowering the chance of dying from breast cancer is early disease identification through breast self-examination and clinical breast exams like mammography, which are cost – effective [4-9].

Women can check their breasts step-by-step with a breast self-exam. Breast self-examination entails feeling one's breast in a particular way at the same time every month to distinguish suspicious masses from typical masses and lumps. Breast self-examination is crucial for maintaining and promoting health.

Breast self-examination is not widely practiced worldwide. In survey the results showed that 178 of the women (89 percent) were mostly aware of the disease. Only 26% of the women knew what BSE was. Only 18% of the ladies had ever checked their breasts, and only 5% did so on a regular basis. Age and educational level were shown to be substantially correlated with awareness of BSE [11.

Lack of knowledge is the biggest obstacle to practicing BSE. Therefore, it's crucial to inform and encourage women to undergo BSE for breast cancer early detection. In an experimental study conducted in selected areas of the Kasaragod district, it was discovered that, of 50 samples, 40% had good knowledge and 32% had poor knowledge regarding the significance of breast self-examination. The study discovered a

substantial correlation between women of reproductive age's understanding of the value of breast self-examination and a few demographic factors, including age, education, occupation, religion, and marital status [12].

Endorsement of self-care, a strategy embraced early in life, may offer lasting benefits. Adolescence is a time of rapid development, and giving adolescents the right information can influence their health habits as adults. Training in self-care could promote good habits like completing breast self-examinations and getting frequent professional breast exams. women's BSE awareness and observation form the foundation for clinical breast examinations and mammography screenings. Learning what is typical and what is not is always important, regardless of age. BSE can alert people to changes that can indicate problems [13].

Nurses play a significant role in educating the public about health practice like BSE, which calls for educational programs to be conducted in schools. These programs give children the chance to ask questions and correct misconceptions. As a result, the teenagers will be prepared for adulthood with healthy lifestyles.

MATERIAL AND METHODS

A Pre- Experimental research study was conducted in 4 different colleges of SGT University. The study was aimed assess the effectiveness of planned teaching programme regarding breast self-examination on adolescent girls. A total of 60 adolescent girls were selected with Convenient sampling technique (15 girls from each college). Data collection tool consisted two sections: (a) Socio- Demographic profile (b) Self Structured knowledge questionnaire to assess the knowledge of adolescent girls regarding breast self-examination. The knowledge questionnaire consists of 25 questions related to breast cancer and breast self-examination. Pre-test data was collected with self-structured knowledge questionnaire and then video assisted teaching was provided. Post-test was done after 1 week of intervention. Data was analyzed using descriptive statistics with software SPSS.

Ethical Consideration

Ethical permission was taken from the ethical committee SGT University. An Informed consent was taken from study subjects and assurance was given to the subjects that the anonymity of each individual will be maintained and the information obtained from them will be kept confidential.

RESULTS

Table 1: Distribution of subjects according to demographic variables N=60

Variables	Frequency (f)	Percentage (%)
Age		
17-18	12	20
18-19	17	28.3
19-20	31	51.7
Education status		
Medical	60	100
Education of parents		
Graduate or post graduate	38	63.3
Intermediate	14	23.3
Matric	08	13.3
Religion		
Hindu	49	81.7
Muslim	5	8.3
Sikh	6	10.8
Area of residence		
Urban	48	80
Rural	12	20
Previous knowledge		
Yes	6	10
No	54	90
Source of information		
Newspaper	1	1.7
Television	1	1.7
Internet	39	65
Magazine	1	1.7
Health Personal	3	5
Family and Friends	15	25

Table 1 depicts that majority of the girls (51.7%) were from the age group 19-20 years, whereas 28.3% were from age group 18-19 years and 20% were in the age group 17-18 years, 100% of them were from medical field, parents of 63.3% girls are graduate or post graduate and others were intermediate and matric, 85% of girls were from urban area while 15% belong to rural area, 90% of girls were not having any previous knowledge regarding the topic and 65% got the information through internet.

Table 2: Comparison of mean pre-test score with post-test score [N=60]

Pre-test score mean	Post-test score mean	t value df p value
14.55	18.82	-13.692 59 0.000*

*Significant difference as per p value ≤ 0.05

Table 2 depicts the comparison between the mean score of pre-test and post-test score which were found to be 14.55 and 18.82 respectively. Pair t-test was used to assess the difference between pre and posttest scores. Significant difference was found between the pre and post test score as the **p value ≤ 0.05.**

Figure 1: - Percentage Distribution of subjects according to Pre-test level of knowledge [N=60]
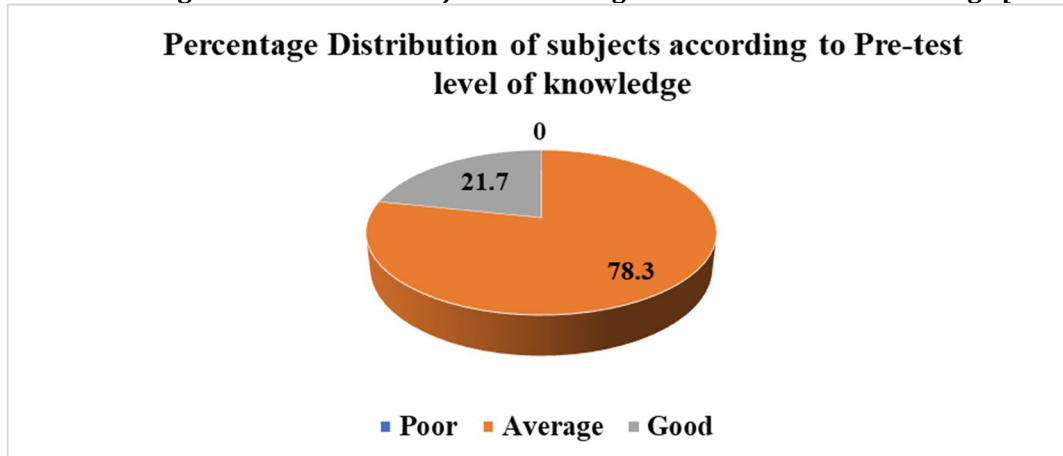

Figure 1 shows the pretest level of knowledge. Knowledge level was divided into three categories Poor Knowledge (0-8), Average Knowledge (9-17) and Good Knowledge (18-25) based on score during pre-test. Results showed that 47(78.3%) girls were having average knowledge about BSE and (21.7%) girls were having good knowledge about the Breast Self-Examination.

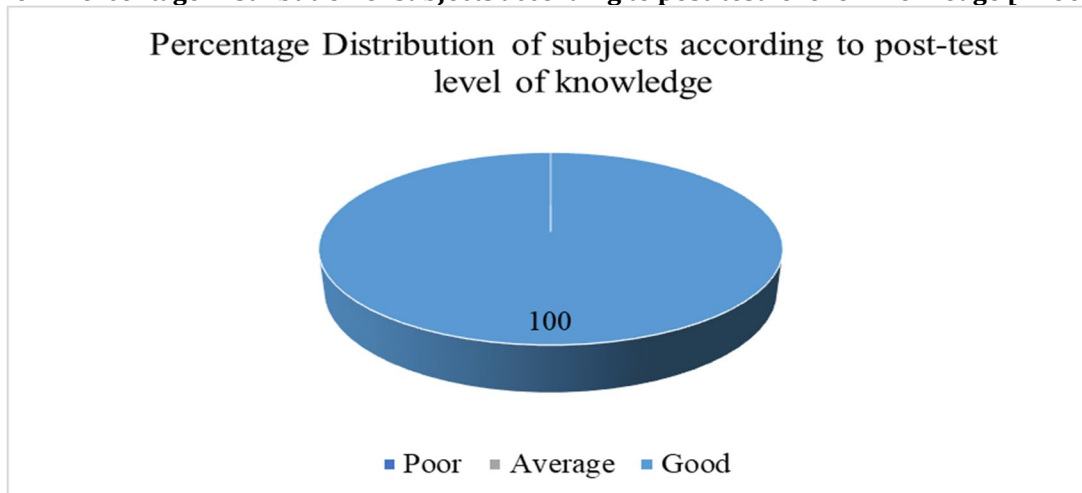**Figure 2: Percentage Distribution of subjects according to post-test level of knowledge [N=60]**

Figure 2 shows the Percentage Distribution of subjects according to post test level of knowledge. Knowledge level was divided into three categories Poor Knowledge (0-8), Average Knowledge (9-17) and Good Knowledge (18-25) based on score during post-test. Results showed that during posttest 60 (100%) were having good knowledge about the Breast Self-Examination.

Figure 3: Bar graph showing comparison between pre and post test scores
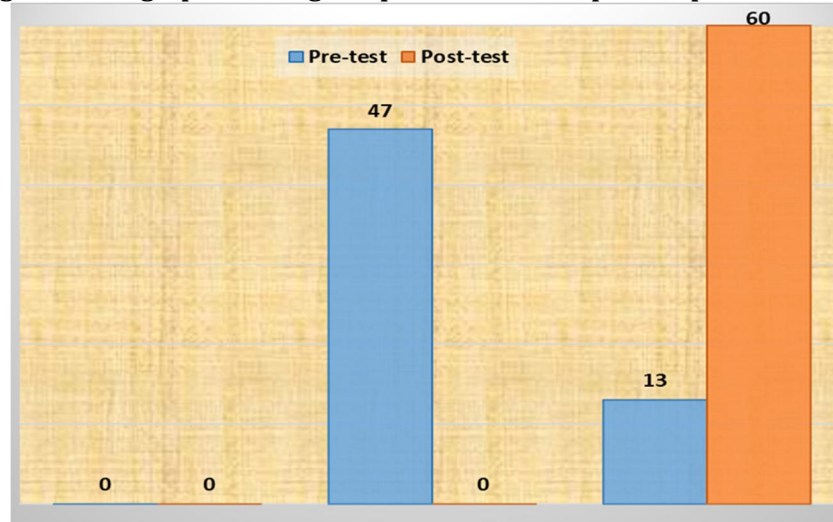

Figure 3 depicts that during pre-test 78.3% of girls were having average knowledge and 21.7% were having good knowledge and after post-test 100% of girls were having good knowledge about breast self-examination.

Table 3: Association of Post-test score with demographic variables [N=60]

Variables	Mean	F value	df	P value
Age 17-18 18-19 19-20	19.17 18.82 18.68	.465	2/57	.630 NS
Education of parents Graduation and post-graduation Intermediate Matric	19.05 18.36 18.50	1.360	2/57	.265 NS
Religion Hindu Muslim Sikh	18.73 18.80 18.50	.709	2/57	.496 NS
Area of Residence Urban Rural	18.85 18.67	.152	1/58	.698 NS
Previous knowledge Yes No	19.50 18.74	1.434	1/58	.236 NS
Source of information Newspaper Television Internet Magazine Health personal Family and friends	19.00 17.00 18.69 20.00 20.00 18.93	.882	5/54	.499 NS

Table 3 depicts the association between the post test score and selected demographic variables taking the p value <0.05 and results shows that there is no significant difference between the knowledge score and selected demographic variables

DISCUSSION

Breast self-examination (BSE) is a self-developed technique for finding breast cancer. Even though more people are aware of breast cancer, only a small proportion of women frequently and proficiently perform breast self-examination (BSE). In the present study mean pretest score was 14.55 which increased to 18.82 after the planned teaching programme. The results of the study were similar to a study conducted by [12-14], which shows that the mean pre-test score was 15.66 which increased to 30.98 after intervention.

In the present study during the pre-test 78.3% of girls were having average knowledge and 21.7% were having good knowledge and after intervention, 100% of girls were having good knowledge about breast self-examination.

The study results found no significant association between knowledge score and selected socio-demographic variables as the p-value was less than 0.05, the results were contrary to the study conducted by Anjana Tiwari, and Mamta Naik which showed significant association of knowledge score with age and area of residence [16].

The limitation of the present study, the size of sample was only 60 subjects. Hence it is difficult to make broad generalization. For results that can be broadly generalized, a same study can be carried out on a bigger sample and in a different setting.

CONCLUSION

The current study showed that a planned teaching program was very successful in improving adolescent girls' knowledge about BSE. Therefore, a suitable health education program should be created to increase girls' knowledge of breast self-examination in order to detect breast cancer at an early stage.

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