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Research Article

A Quasi-Experimental Study to Assess the Effect of Planned Teaching Programme on the Knowledge and Practice Regarding Breast Self-examination among Adolescent in Selected Rural Area

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Abstract

Introduction: Breast self-examination involves the woman herself looking at and feeling the breast for lumps or other abnormalities. There is evidence that woman who correctly practice breast self-examination monthly is more likely to detect a lump in the early stage with early diagnosis and treatment yielding better survival. When adolescents become aware of themselves, they get in touch with their inner-self, their basic truths that satisfy their needs and their own personal desires. Teaching breast self-examination as breast changes occur in the adolescent girl can influence positive behaviors such as performing breast self-examinations and seeking regular professional breast examinations.

Aim: The aim of study was to find out the effect of planned teaching on knowledge and practice regarding breast self-examination among adolescent in selected area.

Subjects and Methods: One group pre-test and post-test research design was adopted, where the group was assessed. A semi-structured questionnaire was administered to assess the knowledge and practice regarding breast self-examination. Non-probability purposive sampling was used to select samples that fulfilled the required criteria. A sample size of 60 adolescents was taken for the study.

Results: Findings revealed that in pre-test none of the adolescents was in the good or excellent range of knowledge and practice but in post-test there was significant shift of scores after administration of planned teaching. Therefore, heard about breast self-examination is dependent with pre-test knowledge and practice score while with other demographic variable such as age, education of mother, type of family, and source to receive information is independent.

Conclusion: This study reveals that is important to have knowledge and practice of breast self-examination to detect breast abnormalities like Fibroadenoma and to have healthy life. Planned teaching was effective measure to improve knowledge and practices regarding breast self-examination among adolescent in selected rural area.

Key words: Breast self-examination, adolescents, planned teaching.

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Introduction

Breast is a symbol of beauty, sexuality, and femininity of women. Any loss or deformity of the organ causes a considerable psychological strain on women and adolescents over and above the physical deformity. Breast problem is significant health concerned to women.[1] Intense felling of shock, fear, and denial often accompany the initial discovery of a lump or change in breast. Breast disorders in the adolescent

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female can cause significant anxiety for herself and also to her family, as well as minimizing trauma and injury to the developing breast. Brest problems are significant health concerned to women. In women's life time there is a one in 8th chance that she will be diagnosed with breast abnormalities such as lumps, fibroids, and cancer. The outstanding obstacles in early detection and treatment of fibro adenoma are fear shame and ignorance and which can lead to breast cancer. The potential loss of breast or a part of a breast may be devastating for many females because of the significant psychological, social, sexual, and body image implication associated with it.[2] Regularly examining her own breast allows adolescent to become familiar with own breast, it allows a women to become familiar with how her breasts normally look and feel and can help more readily detect any changes that may occur. Recent researchers estimate that screening by breast self-examination has a senility of about 54% and a specificity of about 94%. It was found that mortality had fall in by 31% after 6 years for women ages 40–70 at the beginning of the trail.[2]

The key to the breast self-exam is to learn how to find changes in the breasts that persists over time. Many women do not know how to perform breast self-examination properly. Performing breast self-examination incorrectly can be as bad as not doing examination at all since it can give women a sense of security.[3]

The present study aimed at identify the level of knowledge and practice of breast self-examination among adolescents girl who are the citizens of the future and they can teach their family members, neighbors, friends, and community to detect breast abnormalities.[4]

Subjects and Methods

Sixty adolescent girls who are available during the period of data collection as per inclusion criteria were selected through purposive sampling technique. One group pre- and post-test design was used. The adolescents who were included in study were age group between 12 and 17 years age, achieved menarche and was willing to participate the study. The subjects excluded were those adolescents girl who had history of fibroadenoma and already had planned teaching for same.[5]

Study tool

The study tool used for data collection was semi structured questionnaire consisted of three section; section was demographic variables of the subjects such as age educational status, education of mother, and knowing the terminology breast self-examination. Section II contained the questions regarding breast self-examination. Section III contained practice question regarding breast self-examination.

Data collection procedure

Before starting the study, researcher was obtained written permission from Principal from the school of rural area. Data collection was paper and pencil test. The investigator personally approached each subject and explained the purposes of the study and explained how it will be beneficial for them, and confirmed their willingness to participate in the study. Written consent was obtained from the study sample and from their guardians. The investigator collected a group of subjects, made them comfortable and oriented them to study and administered questionnaire to them, instructed them not to interact with each other and their doubts were clarified. After the pre-test, the same day planned teaching was conducted on the same day to enhance their knowledge. Post-test was conducted on the 7th day with same questionnaire. The score obtained was calculated and considered as pre- and post-test score.

Statistical analysis

Data were presented as frequency, percentage, mean, and standard deviation. Paired *t* test was used to compare means within the group. ANOVA was used to measure association between demographic variables $P < 0.05$ was considered significant.[5]

Results

Demographic variables

Table 1 represents the data related to age of adolescent girls. Maximum adolescent's girls that are 34 (56.7%) were from the age group of 14–15 years. Very few adolescents, that is, 5 (8%) were from the age group of 16.1–17.

Table 2 shows the educational qualification of mother, maximum number 33 (55%) completed their secondary education 17 (28%) mothers of adolescents girls completed their primary education only 9 (15%) mothers were illiterate.

Table 3 shows the data related to type of family of adolescents, maximum number of adolescents that are 39 (65%) was from joint family only 21 (33%) adolescents were from nuclear family.

Table 4 indicates data related to heard information about breast self-examination. Maximum adolescents that are 34 (56.7%) were aware about breast self-examination and 26 (43%) were not aware about breast self-examination.

Table 5 denotes that maximum adolescents received information about BSE were from internet 17 (50%) some received from family members, that is, 11 (32.4%) few received from newspaper, that is, 4 (11.8%).

Table 6 shows comparison of pre- and post-mean scores of overall knowledge. The calculated *t*-value is found to be 31.90 for overall knowledge. As the calculated *t* value is greater than the table value 2.00 at 0.05 level of significance with the degree of freedom being 59 so null hypothesis is rejected. This shows that there is statistical significance difference in the mean of pre- and post-test knowledge of sample at 0.05 level.

The result support that planned teaching program was effective in the improvement of overall knowledge regarding breast self-examination among adolescents from selected rural school.

Table 7 shows comparison of pre- and post-mean scores of overall practice. The calculated *t*-value is found to be 22.02

Table 1: Distribution of sample in relation to their age

Age	Frequency	Percentage
12.1–13 years	0	0
13.1–14 years	9	15.0
14.1–15 years	34	56.7
15.1–16 years	12	20.0
16.1–17 years	5	8.3
Total	60	100

Table 2: Distribution of adolescent's girls according to the education of mother

Education mother	Frequency	Percentage
Illiterate	9	15
Primary education	17	28.3
Secondary education	33	55
Higher secondary	1	1.7
Total	60	100

Table 3: Distribution of samples as per types of family

Types of family	Frequency	Percentage
Joint family	39	65
Nuclear family	21	35
Total	60	100

Table 4: Distribution of samples according to information heard about breast self-examination

Heard about BSE	Frequency	Percentage
Yes	34	56.7
No	26	43.3
Total	60	100

Table 5: Distribution of samples as per the source from which they receive information about breast self-examination

Source of information	Frequency	Percentage
Newspaper	4	11.8
Television	2	5.9
Family member	11	32.4
Internet	17	50
Total	34	100

Table 6: Effect of planned teaching programme on knowledge and practices about breast self-examination

Comparison of knowledge	Mean	SD	MD	SEMD	*t*-value	*P*-value
Overall knowledge						
Pre-test	5.98	1.15	5.83	0.183	31.905	0.05
Post-test	11.82	1.24				

Table 7: Comparison of pre- and post- mean score of overall practice

Practice score	Mean	SD	MD	SEMD	*t*-value	*P*-value
Overall practices						
Pre-test	1.60	1.47	4.23	0.192	22.029	0.05
Post-test	5.83	0.806				

for overall practice. As the calculated *t* value is greater than the table value 2.00 at 0.05 level of significance with the degree of freedom being 59 so null hypothesis is rejected.

This result proves that planned teaching program was effective on improvement of overall practice regarding breast self-examination among adolescents from selected rural area.

Association of demographic variables with knowledge and practice score.

All the calculated F values are less than their respective F Table value at 0.05 levels. Hence, pre-test of knowledge and practice is not associated with age, education of mother, type of family, and source to receive information but is associated only with heard about breast self-examination in demographic variable.

Discussion

History of breast self-examination evolved in the 19th century, activist began promoting breast self-examination in the 1930 because their exhortation to not delay seeking treatment for suspicious lumps was not affecting the death rate in the 1950s and 1960s, a film demonstrating breast self-examination[6] Promotion of breast health is an attitude that is fostered early in life may pay lifelong divide ends. Breast health programs focus on adolescents females with the premise that teaching adolescents breast self-awareness will increase the likelihood they will continue the practice into adulthood, when she becomes at risk for breast lumps and cancer and able to differentiate the abnormalities.[7]

The aim of the study was to educate the adolescents regarding BSE which will help to diagnose any abnormality in early stage. Hein K Dell R. Cohen who also conducted a study on self-detection of breast mass in adolescents female found that 77 cases out of 95 able to detect the masses themselves.[8,9]

There was significant difference in pre-test and post-test mean score as well as *t*-value regarding knowledge and practice, which showed that planned teaching was effective. The study also can be correlated with other study conducted by Nisha Abraham on effectiveness of planned teaching program in terms of knowledge on BSE among adolescents' girls in government secondary school found it was effective to improve the knowledge.[10-12] The study also can be correlated with the study carried out by Philomena Fernandes who conducted study for nursing students found the improvement in knowledge.[13]

The importance of such study can correlated by study carried out by Tiwari and Naik[14] for college girls in selected college of Bhilai which shows significant improvement in knowledge.[15]

Conclusion

Knowledge is a necessary condition; however, it is not sufficient. In addition to knowledge, individual beliefs towards health issues and their preventive behaviors play the main role in facilitating or impending health promoting behaviors. It

can enhance or improve the practice. Breast self-examination remains an important diagnostic tool for early detection of breast cancer.Breast examination is a simple, affordable, non-invasive adjuvant screening method for the detection of early breast cancer. Planned teaching on breast self-examination was found to be effective in increasing the knowledge and practical skills of adolescents.

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Conflict of Interest

All authors declare that they have no conflicts of interest.

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