Research Article

EFFECTIVENESS OF SELF-INSTRUCTIONAL MODULE ON KNOWLEDGE AND ATTITUDE REGARDING BREAST SELF-EXAMINATION

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ABSTRACT

Breast cancer is the main and foremost cause for death related to cancer worldwide. Globally it was estimated as 8.2 million people died of with various types of cancer. In 2012 1.7million women were diagnosed with breast cancer. It is very common in the developing countries like India. Diagnosis of breast cancer in early period allows women to select more treatment choices and gain greater hope of prolonging the survival period. It is recommended that women above 20 years of age has to do breast self examination to detect new lumps or growth on the breast. WHO estimates that breast cancer kills more than 500,000 women globally every year. Despite of huge efforts to increase the level of breast cancer awareness, BSE is still poorly practiced among women. Early detection of breast cancer can be achieved through a combination of monthly breast self examination. There is also low awareness of important lifestyle factors that could prevent breast cancer. Though the knowledge is provided regarding breast self examination the attitude towards this procedure of doing breast self examination is very poor. This study aims to assess the effectiveness of self-instructional module on knowledge and attitude regarding breast self-examination among Teachers in selected higher secondary schools, Kollam. Quasi experimental research design was used for this study. purposive sampling technique was used. The sample size for this study was sixty. thirty in experimental group, thirty in control group. The result shows that of age distribution majority of the samples (55%) were above the age group 40 years. Out of 60 samples(75%) of the participant had completed degree in their educational qualification, (91.67%)of the participant had no history of breast diseases in the family, regarding the marital status (88.33%)were married, with regard to number of children in the family (75%)has more than two children. Out of 60 participant (63.33%)were residing in urban, and source of information regarding breast diseases (55%) of the samples received information from media only (18.33%)got the information from health professional. Effect of instructional module on knowledge regarding breast self examination the result of the study revealed that the calculated t value is (7.47) at the table value of (2.00) is greater than the table value, so there was significant difference in the knowledge level in post test after the intervention. The mean post test score of experimental group and the control group is ' t value (4.57) is greater than the table value (2.00), there is significant improvement in the knowledge level through the intervention. Effect of instructional module on attitude regarding breast self examination in the experimental group shows pre-test and post-test attitude 't' value (7.40) is greater than the table value (2.05), so there was significant increase in the attitude level of the participants.thus the study proves that instructional module is effective in imparting knowledge.

KEYWORDS: Breast Self Examination, Self Instructional Module, Effectivness Knowledge, Attitude.

INTRODUCTION

Breast cancer is the commonest cancer in women. Worldwide over 1.15 million cases of breast cancer are diagnosed every year and 502,000 women die from the disease each year. Cancer screening tests play a pivotal role in reducing breast cancer related mortality. Early detection and prompt treatment offer the greatest chance of long-term survival. Mammography, clinical breast examination and breast self-examination (BSE) are the secondary preventive methods used for screening in the early detection of breast cancer. The awareness of breast cancer preventive methods is therefore critical in the reduction of breast cancer morbidity and mortality although programes aimed specifically at this important target group. Recommended preventive techniques to reduce breast cancer mortality and morbidity include breast self-examination (BSE), clinical breast examination (CBE), and mammography. CBE and mammography require hospital visit and specialized equipment and expertise whereas BSE is an inexpensive tool that can be carried out by women themselves. BSE benefits women in two ways: women become familiar

with both the appearance and the feel of their breast and detect any changes in their breasts as early as possible. In the literature, it is stated that 90% of the times breast cancer is first noticed by the person herself. Also, several studies have shown that barriers to diagnosis and treatment can be addressed by increasing women's awareness of breast cancer.

Several studies, based on breast cancer patients' retrospective self-report on their practice of the breast self- exam, have established that a positive association exists between performance of the exam and early detection of breast cancer. There is also evidence that most of the early breast tumors are self-discovered, and that most early self-discoveries are by BSE performers. Moreover, the need for greater understanding of the social-psychological factors affecting acceptance of BSE are of growing concern

Breast self-examination is an important screening method used in an attempt to detect early breast cancer. Studies have reported that awareness and practice of breast self-examination is an important method of prevention of breast cancer as it is one of the important public health problem. Women who perform breast self-examination and detect a change may delay seeking medical attention because of fear, economic factors, lack of education and modesty. Despite these factors, many women can discover breast cancer only through breast self-examination. So women's knowledge regarding breast self-examination plays a crucial role in the safeguard of their health.

Breast cancer awareness programs can bring great benefits for women and the communities they live in. But just how cost effective these programs are in low-and-middle-income countries, where breast cancer is an increasing public health concern and where outreach can be challenging, has been unclear. Fortunately, the message from this study, which centered on the Ashanti region of Ghana, is that breast cancer awareness programs are paying big dividends for women's knowledge, attitudes, and practice. Women who attended programs not only enjoyed higher knowledge scores than their non-participant counterparts, but also were more likely to perform breast self-examinations.

Breast self-examination (BSE) is a simple, quick, and cost-free procedure. But the practice of BSE is low and varies in different countries. Several reasons like lack of time, lack of self-confidence in their ability to perform the technique correctly, fear of possible discovery of a lump, and embarrassment associated with manipulation of the breast have been cited as reasons for not practicing BSE. No previous research has been done in the chosen group of the population. Hence, this study attempts to assess the assess the effectiveness of self instructional module on knowledge and attitude regarding breast self examination among teachers in selected in higher secondary schools, Kollam.

Objectives
1. To assess the level of knowledge regarding breast self examination among teachers.
2. To assess the level of attitude regarding breast self examination among teachers.
3. To evaluate the effectiveness of self instruction module on knowledge regarding breast self examination among teachers.
4. To evaluate the effectiveness of self instruction module on attitude regarding breast self examination among teachers.
5. To find association between knowledge regarding breast self examination and selected demographic variables
6. To find association between attitude regarding breast self examination and selected demographic variables.

MATERIALS AND METHODS
The present study selected the quantitative approach for for determining the effect of self instructional module on knowledge and attitude regarding breast self examination among teachers.

Study design
Quasi experimental design was used to collect data from 60 teachers working in higher secondary schools, Kollam and purposive sampling technique was employed to select the teachers. 30 from experimental group and 30 from control group.

Inclusion criteria
➢ Teachers between the age group of 30-45 yrs.
➢ Teachers who are present on the day.
➢ Teachers who are willing to participate in the study.

Tools and techniques
• Section A: Demographic proforma
• Section B: Self structured knowledge questionnaire
• Section C: Three point likerts attitude scale.

Data collection process
A formal written permission was obtained from the institution and written consent was taken from the participants. Samples fulfilling the inclusion criterion was included in the study. The investigators introduced themselves to the subjects and the purpose of the study was explained to them. Confidentiality was assured. The purposive sampling was used to select the samples. 60 teachers were selected and the tool was introduced.

Statistical analysis
The data collected were analyzed according to the objectives. The data were analyzed using descriptive and inferential statistics.

RESULTS
1. Description of demographic variables
a) Age

Fig.1. 55% of samples belong to the age group of above 40 years, 45% of samples belong to 35-40 years.
b)   Educational status
Fig.2. Majority that is 75% of samples had completed degree and 25% of samples had TTC.
c)   Description of history of breast disease in family
Fig.3. Majority of the teachers, that is 91.67% samples has no history of breast diseases in the family
d)   Description of marital status
Fig.4. Most of the samples that is 88.33% samples were married, 8.34% were widow and 3.33% were single
e)   Description of number of children
Fig.5. 75% has two and more children, 21.67% has one child and 3.33% has no children
f)   Description of area of residence
Fig.6. 63.33% samples were from urban and rest that is 36.67% were from rural areas.
g)   Source of information
Fig.7. 55% received the information regarding breast self examination through media and only 18.33% had information through health professionals

2.   Description of knowledge scores
Fig. 8 Majority of samples, that is 63.34% had moderate level of knowledge regarding breast self examination

3.   Description of attitude scores
Fig. 9 58.33% of the samples had positive attitude towards breast self examination, 25% of the samples had negative attitude and only 16.67% had no attitude towards breast self examination

4.   Mean, standard deviation and unpaired 't' value of prêtest knowledge of experimental and control group (Homogeniety)
Table 1. The mean knowledge score of pre test in the experimental group was 9.2 and standard deviation was 1.84. In the control group the mean was 9.1 and standard deviation was 2.44 and calculated "t" value was 0.915.

5.   Mean, standard deviation and paired 't' value of pre-test and post-test knowledge in experimental group
Table 2. The mean knowledge score of pre test in the experimental group was 9.2 and the standard deviation was 1084. The mean knowledge score of post test was 12.1 and standard deviation was 2.13. The calculated "t" value is 7.47.

6.   Mean, standard deviation and unpaired 't' value of post-test knowledge among experimental and control group
Table 3. The mean knowledge score of post test in experimental group was 12.14 and standard deviation was 2.99. in the control group the mean score was 9.07and standard deviation was 2.13 and calculated "t" score was 4.57.

7.   Mean, standard deviation and paired 't' value of pre-test and post-test scores of attitude among experimental group

Table 4. The mean score of attitude of pre test in the experimental group was 28.4 and standard deviation was 4.17. In the post test mean score was 29.43 and standard deviation was 3.81 and calculated "t" score was 7.40.

8.   Mean, mean difference, standard deviation and unpaired 't' value of post-test attitude among experimental and control group
Table 5. The mean score of post test attitude in the experimental group was 37.67 and standard deviation was 4.55. In the control group mean was 29.43 and standard deviation was 3.81 and calculated "t" value was 7.60.

9.   Association between knowledge and selected demographic variables
Table 6. There was significant association between knowledge and selected demographic variables such as area of residence and source of information.\

10.   Association between attitude and selected demographic variables
Table 7. There was significant association between attitude and selected demographic variables such as marital status and number of children.

1: DESCRIPTION OF SELECTED VARIABLES
a)   Age

N=60
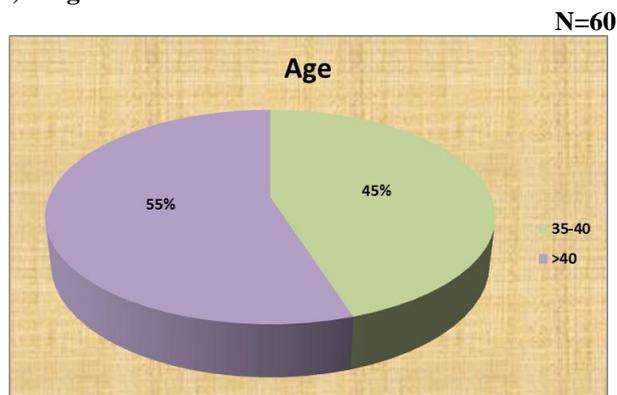
Fig.1: Majority of samples 55 %belongs to the age group of above 40 years.

b)   Educational status

N=60
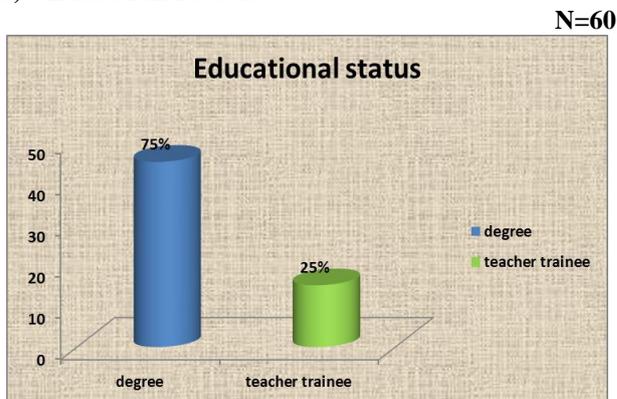
Fig. 2: Most of the samples 75% had completed degree and only 25% had teacher training.

c) **History of breast disease**

N=60
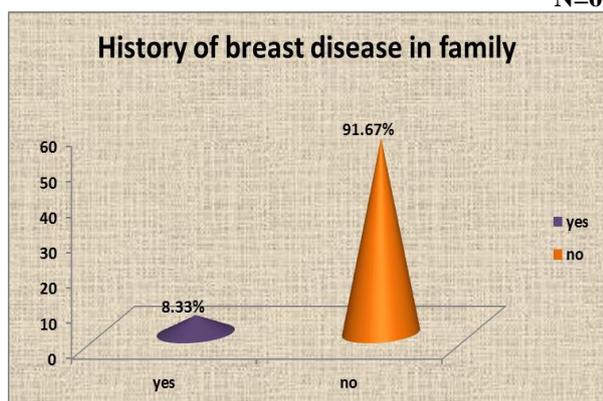
Fig.3: Majority of samples 91.67% samples has no history of breast diseases in the family.
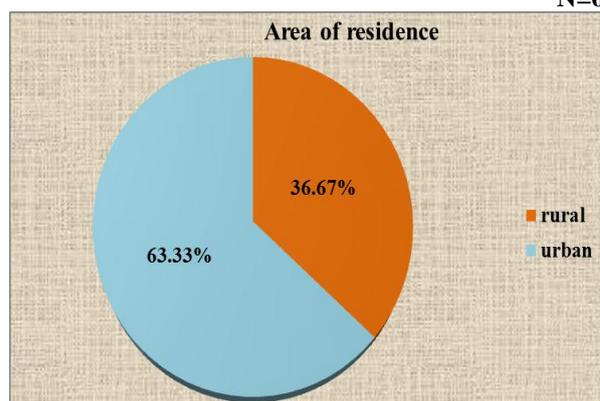
d) **Marital status**

N=60

Fig.4: Out of 60 samples 88.33% samples were married, 8.34% were widow and 3.33% were single.

e) **Number of children**

N=60

Fig. 5: Most of the samples 75% has two and more children, 21.67% has one child and 3.33% has no children.

f) **Area of residence**

N=60

Fig.6: 63.33% samples were from urban and rest that is 36.67% were from rural areas.

g) **Source of information**

N=60
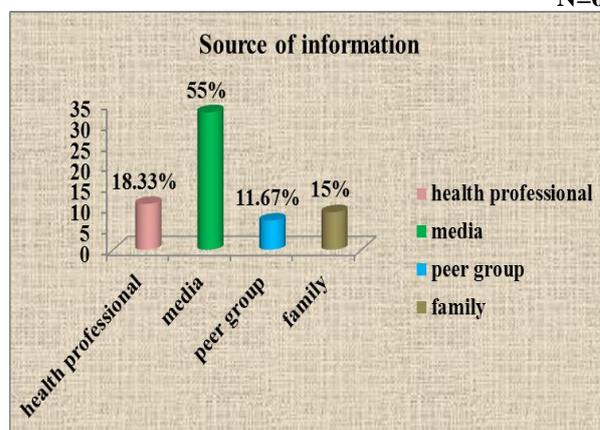
Fig. 7: Most of the samples 55% received the information regarding breast self examination through media and only 18.33% had information through health professionals.

2. DESCRIPTION OF KNOWLEDGE SCORES
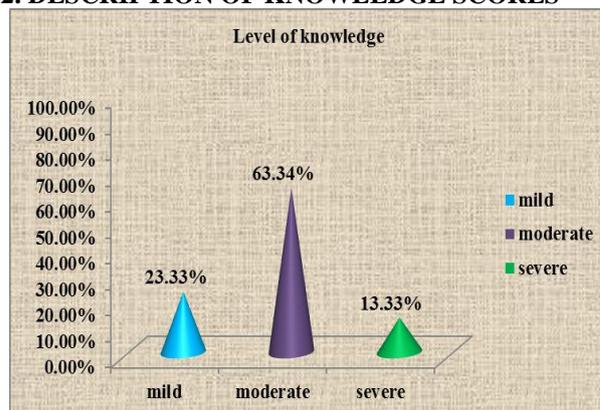
Fig. 8: Majority of samples, that is 63.34% had moderate level of knowledge regarding breast self examination.

3. DESCRIPTION OF ATTITUDE SCORES
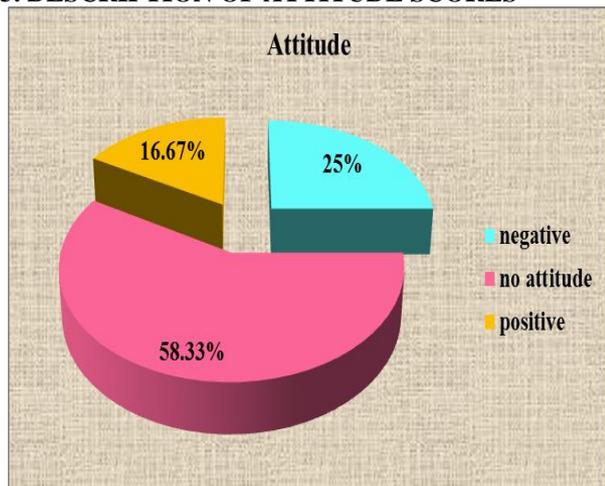
Fig. 9: 58.33% of the samples had positive attitude towards breast self examination, 25% of the samples had negative attitude and only 16.67% had no attitude towards breast self examination.

Table 1: Prê test knowledge of experimental and control group.

N=60

Group	Mean	Mean difference	SD	t value
Experimental	9.2	0.10	1.84	
Control	9.1		2.44	

$t_{(58)=}$ 2.00, Not significant at 0.05 level

Data in the table 2 shows the mean, mean difference, standard deviation and unpaired 't' value of pre-test knowledge among experimental and control group. Since the calculated 't' value (0.915) is less than the table value (2.00). So there was no significant difference between pretest scores of knowledge among experimental and control group at 0.05 level of significance.. Thus homogeneity of experimental and control group is ensured.

Table 2 Pre-test and post-test scores of knowledge among experimental group

(n=30)

Test	Mean	Mean difference	SD	t value
Pre-test	9.2	2.9	1.84	
Post-test	12.1		2.13	

$t_{(29)}$= 2.05, *Significant at 0.05 level of significance

Data in the table 2 shows the mean, mean difference, standard deviation and paired 't' value of pre-test and post-test knowledge in experimental group. Since the calculated 't' value (7.47) is greater than the table value (2.00), the teaching method of using self instructional module was effective in increasing the knowledge.

Table 3: Mean, mean difference, standard deviation and unpaired 't' value of post-test knowledge among experimental and control group.

(N=60)

Group	Mean	Mean difference	SD	t value
Experimental	12.14	3.07	2.99	4.57*
Control	9.07		2.13	

$t_{(58)}$= 2.00, *Significant at 0.05 level of significance

Data in the table 2 shows the mean, mean difference, standard deviation and unpaired 't' value of post-test knowledge among experimental and control group. Since the calculated 't' value (4.57) is greater than the table value (2.00), there is significant difference in knowledge after the intervention.

Table 4: Mean, mean difference, standard deviation and paired 't' value of pre-test and post-test scores of attitude among experimental group.

(n=30)

Test	Mean	Mean difference	SD	t value
Pre-test	28.4	4.17	1.03	7.40*
Post-test	37.67		4.55	

$t_{(29)}$=2.05, *significant at 0.05 level

Data in the table 3 shows the mean, mean difference, standard deviation and paired 't' value of pre-test and post-test attitude in experimental group. Since the calculated 't' value (7.40) is greater than the table value (2.05), the intervention was effective on improving the attitude of the participants.

Table 5: Mean, mean difference, standard deviation and unpaired 't' value of post-test attitude among experimental and control group.

(N=60)

Group	Mean	Mean difference	SD	t value
Experimental	37.67	4.55	8.24	7.60*
Control group	29.43		3.81	

$t_{(58)}$=2.00,p(0.01)<0.05 *significant at 0.05 level

Data in the table 5 shows the mean, mean difference, standard deviation and unpaired 't' value of post-test attitude score among experimental and control group. Since the calculated 't' value (7.60) is greater than the table value (2.00), there is significant increase in the attitude after the use of instructional module.

Table.6 Association between knowledge and selected demographic variables such as age, history of breast diseases, marital status, number of children, area of residence and source of information.

N=60

Demographic variable	Knowledge			df	λ^2	Table value	Significance
	Mild	Moderate	severe				
Age in yrs							
35-40 yrs	2	2	0	2	0.17	5.99	NS
>40 yrs	25	29	2				
Educational status							
Degree	10	35	5	2	3.88	5.99	NS
TTC	2	8	0				
History of breast disease							
Yes	3	6	0	2	0.22	5.99	NS
No	15	35	1				
Marital status							
Single	0	2	0	4	1.02	9.49	NS
Married	17	37	1				
Widow	1	2	0				
No. of children							
Nil	0	2	0	2	0.04	5.99	S
One	4	17	0				
Two and above	10	25	2				
Area of residence							
Rural	10	15	1	2	6.16	5.99	S
Urban	5	29	0				
Source of information							
Health professional	5	6	2	6	18.6	12.59	S
Media	7	25	0				
Peer group	3	8	0				
Family	4	6	0				

*Significant at 0.05 level   NS-not significant   S-significant

Data in the table 6 shows the association between knowledge and selected demographic variables: History of breast disease, Marital status, Number of children, Source of information Area of residence and source of information were computed by chi-square test.as the calculated value of area of residence and source of

information were more than the table value at 0.05 level of significance there was association between knowledge

and selected demographic variables such as area of residence and source of information.

Table.7 Association between attitude and selected demographic variables such as age, history of breast diseases, marital status, number of children, area of residence and source of information.

N=60

Demographic variable	Attitude			df	λ^2	Table value	significance
	Negative	No	Positive				
Age 35-40 yrs >40 yrs	2 1	15 31	4 7	2	1.447	5.99	NS
Educational status Degree TTC	3	40 6	8 3	2	1.967	5.99	NS
History of breast disease Yes No	2	5 40	3 10	2	1.568	5.99	NS
Marital status Single Married Widow	3	2 38	3 9 5	4	17.838	9.49	S
Number of children Nil One >Two	1 1 1	10 42 0	5	4	21.378	9.49	S
Area of residence Rural Urban	3	18 33	3 3	2	5.221	5.99	NS
Source of information Health professional Media Peer group Family	3	9 17 18 6	1 4 2	6	6.596	12.59	NS

Data in the table 7 shows the association between attitude and association between attitude and selected demographic variables: Age, Educational status, History of breast disease, marital status, Number of children, Area of residence and Source of information were computed by chi-square test.as the calculated value of area of residence and source of information were more than the table value at 0.05 level of significance there was association between attitude and selected demographic variables such as marital status and number of children. Hence the research hypotheses is accepted only for these two variables.

DISCUSSION
The present study aimed to assess the effectiveness of self-instructional module on knowledge and attitude regarding breast self-examination among teachers. Self-structured knowledge questionnaire and five point attitude scales along with demographic proforma were used to collect data from 60 teachers. The result shows that of age distribution majority of the samples (55%)were above the age group 40 years. Out of 60 samples(75%)of the participant had completed degree in their educational qualification, (91.67%)of the participant had no history of breast diseases in the family, regarding the marital status (88.33%)were

married, with regard to number of children in the family (75%)has more than two children. Out of 60 participant (63.33%)were residing in urban.,and source of information regarding breast diseases (55%)of the samples received information from media only(18.33%)got the information from health professional.

The present study is supported by the study conducted by Mesfin Tafa Segni, Dagne Mulu Tadesse, Roza Amdemichael and Hailu Fekadu Demissie Department of Public Health, College of Health Science, Arsi University, Assela, Ethiopia program of enrolment.

A total of 368 respondents participated in the study, of these, only 8.7% of them had good knowledge and 59.2% had positive attitude towards BSE. About two fifth (39.4%) of the respondents had done Breast self examinations, from these only 9.7% of them practiced monthly. Statistically significant association was obtained only with, level of education of the participant, father's educational level.

CONCLUSION
The present study aimed to assess the effectiveness of self instructional module on knowledge and attitude regarding breast self examination among teachers in

selected in higher secondary schools, kollam. The findings of the study reveals that there was significant increase in the knowledge and attitude. It proves that self instructional module is effecetive in imparting knowledge and brings change in the attitude level of the participants also.

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