

A Study to Assess the Effectiveness Educational Module on Breast Self-Examination in Terms of Knowledge and Skills Among Girls of Government Pre-University College at Bagalkot

Deepika Dasar¹, Dr. Shridhar G Pujari², Dr. Deelip S Natekar³

¹M.Sc. Nursing Final Year, Shri B.V.V.S Sajjalashree Institute of Nursing Sciences, Bagalkot, Karnataka.

²Associative Professor, Department of Medical Surgical Nursing, Shri B.V.V.S Sajjalashree Institute of Nursing Sciences, Bagalkot, Karnataka.

³Principal, Shri B.V.V.S Sajjalashree Institute of Nursing Sciences, Bagalkot, Karnataka.

Corresponding Author: Dr. Deelip S Natekar

DOI: <https://doi.org/10.52403/ijrr.20220721>

ABSTRACT

Introduction: Defining ideal breast shape is one of the most fundamental and essential. It has been regarded as a symbol of beauty, sexuality and motherhood. Breast diseases are very common and can be found in most women. Among the diseases of the breast, majority of the lesions are benign (non cancerous). This occurs due to various reasons such as infection, trauma, fibro adenoma, cyst or fibrocystic condition of breast. Even so, a woman who detects a breast lump should have it evaluated as soon as possible. Breast self-examination is most important skill in prevention of breast cancer and by performing it. Regularly women can save themselves from getting this disease and death can prevent too. It is very simple requires no instruments and easily performed by every woman. Early. There is high mortality due to late stage diagnosis of breast diseases as patients usually present at an advanced stage because of lack of awareness and nonexistent breast cancer screening programme.

Aims: The aims of study are as follows: (1) To assess the existing knowledge and skills regarding breast self-examination among adolescent girls of Government Pre-University collage at Bagalkot. (2) To determine the effectiveness of educational module regarding breast self-examination among adolescents girls of Government Pre-University collage at Bagalkot. (3) To correlate post-test knowledge

and skills level regarding breast self examination among adolescent girls of Government Pre-University collage at Bagalkot. (4) To find out the association between post-test knowledge level and skills regarding breast self-examination among adolescent girls with their selected socio- demographic variables.

Materials and Methods: Study approach this was a qualitative study and follow the examination plan as pre-exploratory, for example one gathering pre-test and post-test without control group. The population associated with this investigation was adolescent girls studying at government pre-university college at Bagalkot. Test size is 50 (Total) adolescent girls were redeemed for the investigation. Further information was gathered by organized shut finished information poll.

Results: The knowledge level of the students regarding breast self-examination showed that in pre test scores, majority (80%) of the sample had average knowledge, 20% had good knowledge and none of them had very good knowledge on breast self-examination where as in post test score all of them had very good knowledge on breast self-examination. The skill level of students regarding breast self-examination showed that in pre test score, majority (73.33%) of the sample had average level of performance, 23.33% had below average and only 3.33% had good level of performance on breast self-examination where as in post test all of them had good level of performance on breast self-examination.

There was a mild positive and significant correlation between level of knowledge and skill scores of students on breast self-examination ($r_{(28)} = 0.783$; $p < 0.05$). The study also found that the post test knowledge and skill score was not significantly associated with any of the demographic variables under study.

Key words: Breast self-examination, Adolescent girls, educational module, Knowledge, Skills, Adolescent.

INTRODUCTION

Breast diseases are very common and can be found in most women. Among the diseases of the breast, majority of the lesions are benign (non cancerous). This occurs due to various reasons such as infection, trauma, fibro adenoma, cyst or fibrocystic condition of breast. The incidence of benign breast lesions begins to rise during the 2nd decade life and peaks in 4th and 5th decades, as opposed to malignant diseases, for which the incidence continues to increase after menopause, although at less rapid pace. Even so, a woman who detects a breast lump should have it evaluated as soon as possible.

Women and men share many similar health problems, but women also have their own health issues, which deserve special consideration. Women's lives have changed over the centuries. Historically life was particularly difficult for most women. Aside from the numerous dangers & diseases²

October is breast cancer awareness month, an annual campaign to educate people about breast cancer. Breast cancer is the most prevalent form of cancer. This disease has become a major problem all across the world including India.³

Cancer is one of the most important diseases which threaten human health. In the World, breast cancer is the most commonly seen type of cancer in woman. Cancer is ultimately the result of cells that uncontrollably grow & do not die. Normal cells in the body follow an orderly path of growth, division & death. Programmed cell death is called "apoptosis" and when this

process breaks down, cancer begins to form. Unlike regular cells, cancer cells do not experience programmed death & instead continue to grow and divide. This leads to a mass of abnormal cells that grows out of control.⁴

For early identification of breast cancer breast self-examination is an important and inexpensive method. Breast self examination is the examination done by individuals to help identify any abnormality within the breasts .it involves visually and by hand examining the breast. It should be done at the age of 20 years and monthly.¹²

OBJECTIVES:

1. To assess the existing knowledge and skills regarding breast self – examination among adolescent girls of Government Pre –University collage at Bagalkot.
2. To determine the effectiveness of educational module regarding breast self- examination among adolescent girls of Government Pre-University collage at Bagalkot.
3. To correlate post-test knowledge and skills level regarding breast self examination among adolescent girls of Government Pre-University collage at Bagalkot.
4. To find out the association between post-test knowledge level and skills regarding breast self-examination among adolescent girls with their selected socio- demographic variables

MATERIALS AND METHODS:

Study design: Pre-experimental one group pre-test post-test design was used to determine effectiveness of Educational module on breast self-examination among adolescent's girls.

Setting of the study: The study was conducted at adolescent girls of Government Pre-University College at Bagalkot.

Participants: sample consist 50 adolescent girls studying in science Stream of Government Pre- University College in Bagalkot.

Sampling techniques: Simple random sampling technique was used to select the sample. There were 107 adolescents girls from first year and second year of science stream. In that 58 adolescent's girls from first year and 49 adolescent girls from second year were selected by usage of lottery method.

DESCRIPTION OF DATA COLLECTION:

Section 1: Socio Demographic Factors: Demographic pro forma consisted of adolescents girls age, religion, year of study, mother occupation, father occupation, family history of breast cancer, previous intervention related on breast self examination, previous history of breast disease.

Section 2: Structured Knowledge questionnaire on breast self-examination had 30 items. The subjects were instructed to tick mark (√) on the space provided towards the correct response. The scoring was done by just counting the correct responses and according to the total score obtained. The highest possible score was 30. It was arbitrarily classified into four levels: [0-10 (Poor)], [11-20, (Average)], [21-30, (Good)].

Section 3: Observational checklist on breast self-examination had 12 items. The investigator would observe the performance of breast self-examination and places a tick mark (√) in the appropriate column as indicated by 'Yes' or 'No'. The scoring was done by giving '1' mark for the correct performance and '0' mark for the incorrect responses. The highest possible score was 12. It was

arbitrarily classified into three levels: [0-4 (poor)], [5-8 (average)], [9-12 (good)].

Data Collection:

The data was collected from 15/04/2021 to 23/04/2021 .The exact time and data planned with college authority and was communicated to the respondents. The investigator approached principal of Government Pre -University college for girls at Bagalkot.

Variables Under the Study:

Dependent variables: the dependent variable refers to the level of knowledge and skill regarding breast self-examination among adolescent girls of Government Pre-University collage, Bagalkot.

Independent variables: Educational module

Statistical Analysis:

Data was collected using a demographic perform and structured knowledge questionnaire consisting of 30 questions and also using a BSE observational checklist that consisted of 12 questions.

The tool and the Educational module was validated by 7 experts. Reliability of the structured knowledge questionnaire was established using Karl Pearson's ($\alpha=0.809$) and that of observational checklist was $r=0.783$. Pilot study was conducted on 5 selected PU students. The main study was conducted among 50 randomly selected government pre-university students from 24.03.2021 to 30.03.2021. Following the pre-test, educational module was administered and post-test was conducted on the 8th day of administration of educational module.

RESULT

The study was begun with selection of 50 adoloscent girls who are presented at girls government pre-university College at Bagalkot. All the adolescent girls were screened for eligibility criteria. Researcher has allocated to subjects to the group

TABLE 1 : Description of Socio- demographic characteristic of sample.

Variables	Frequency	Percentage (%)	
Age	16 & Below	4	8
	17-18	46	92
	19 & above	0	0
Religion	Hindu	44	88
	Muslim	5	10
	Christian	1	2

Table no: Icontinued...

Year of study	First year	22	44
	Second year	28	56
Mother occupation	Housewife	30	60
	Self employed	5	10
	Health professional	1	2
	Agriculture	14	28
Father occupation	Agriculture	36	72
	Self employed	8	16
	Health professional	1	2
	Unemployed	5	10
Family history of breast cancer	Yes	0	0
	No	50	100
Any previous intervention related BSE	Yes	46	92
	No	4	8
Previous history of breast disease	Yes	48	96
	No	2	4

TABLE 2 : Assessment of pre-test knowledge and skill regarding breast self-examination among adolescent girls Bagalkot. N=50

Test	Level of knowledge	Number (f)	Percentage (%)
Pre-test knowledge	Good	0	0%
	Average	6	12%
	Poor	44	88%
Total		50	100%

Percentage wise distribution of adolescent girls in pre-test reveals that out of 50 adolescent girls, highest percentage (88%) of adolescent girls had poor knowledge

followed by lowest percentage (12%) Of girls had average knowledge, None of the adolescent girls had good knowledge regarding breast self-examination.

TABLE 3: Percentage wise distribution of adolescent girls according to the levels of knowledge pre-test skills. N=50

Test	Level of knowledge	Number (f)	Percentage (%)
Pre-test skill	Good	0	0%
	Average	46	92%
	Poor	4	8%
Total		50	100%

Percentage wise distribution of pre-test skill level of adolescents girls showed that out of 50 students highest percentage (92%) of students had average skill,8% of students had poor skill none of them had good skill regarding breast self –examination.

knowledge and skill of breast self-examination among adolescent girls Bagalkot.

Section I: Comparison of knowledge level of adolescent girls in pre-test and post-test. N=50

PART 3 : To evaluate the effectiveness education of educational module on

Table 4: Comparison of knowledge level of adolescent girls in pre-test and post-test

Level of knowledge	Pre-test		Post-test	
	Number of respondents	Percentage (%)	Number of respondents	Percentage (%)
Good	0	0%	46	92%
Average	6	12%	4	8%
Poor	44	88%	0	0%
Total	50	100%	50	100%

Knowledge wise comparison of adolescent girls in pre-test reveals that. Out of 50 adolescent girls, highest percentage (88%) of adolescent girls had poor knowledge, (8%) of adolescent girls had average knowledge. However, after administration

of educational module (92%) of adolescent girls had good knowledge ,8% of adolescent girls had average knowledge

Section II: Comparison of skill level of adolescent girls in pre-test and post-test N=50

Table 5: Comparison of skill level of adolescent girls in pre-test and post-test

Level of skill	Pre-test		Post-test	
	No. of respondents	Percentage(%)	No. of respondents	Percentage(%)
Good	0	0%	46	92%
Average	46	92%	4	8%
Poor	4	8%	0	0%
Total	50	100%	50	100%

Section III: Area wise effectiveness of educational module on breast self-examination N=50

Table 6: Area wise effectiveness of educational module on breast self-examination

Knowledge area	Max. score	Pre-Test (O ₁)		Post-Test (O ₂)		Effectiveness (O ₂ - O ₁)	
		Mean ±SD	Mean %	Mean ±SD	Mean%	Mean ±SD	Mean%
General information about of breast cancer.	07	1.74 ± 1.15	24.85%	6.98±1.37	99.71%	5.24 ±0.18	75.28%
Knowledge related to Breast self-examination.	23	5.88 ±2.11	25.56%	20.28±2.08	88.17%	14.7±0.03	63.91%
Total	30	7.62 ± 3.26	25.4%	27.26±3.45	90.86%	19.64±1.21	65.46%

Section IV: Effectiveness of educational module on skill of breast self-examination. N=50

Area	Max. score	Pre-Test (O ₁)		Post-Test (O ₂)		Effectiveness (O ₂ - O ₁)	
		Mean ±SD	Mean %	Mean ±SD	Mean%	Mean ±SD	Mean%
Skill	12	6.02 ± 2.08	50.16%	11.42±0.85	95.16%	5.4±1.23	45%

The overall findings shows that the post-test skill score (11.42 ± 0.85) which was 95.16% of total score was more when compared to the pre-test skill score (6.02 ± 2.08) which was 50.16% of total score. The effectiveness of educational module in this area was mean

skill score was 5.4 with SD ± 1.23 which was 45% of total score. Hence it indicates that educational module was effectiveness in enhancing the knowledge of adolescent girls.

Table 7: Significant difference between the pre-test knowledge and post-test knowledge scores of adolescent girls studying in Govt PU college for girls. N=50

Test (Knowledge)	Mean	Mean Diff	SD Diff	Paired t-value	Table value
Pre-test (O ₁)	7.62	19.64	0.19	37.74	1.96
Post-test (O ₂)	27.26				

Table 8: Significant difference between the pre-test skill and post-test skill scores of adolescent girls studying in Govt PU college for girls. N=50

Test (skill)	Mean	Mean Diff	SD Diff	Paired t-value	Table value
Pre-test (O ₁)	6.02	5.4	1.23	16.93	1.96
Post-test (O ₂)	11.42				

As calculated “t” value (16.93) was much higher than table value (1.96) for degree freedom 49 and 5% level of significance. There is a positive significant difference

(16.93) between Pre –test and Post –test knowledge scores, hence null hypothesis H₁ is accepted

Table 9: To find out the association between knowledge and socio-demographic variables, a research hypothesis was formulated. N=50

No	Socio demographic variables	Df	Chi-square-value	Table value	P-value	Association
1	Age	1	0.81	3.84	0.36	NS
2	Religion	1	0.15	3.84	0.69	NS
3	Year of study	1	1.33	3.84	0.24	NS
4	Mother occupation	1	0.02	3.84	0.87	NS
5	Father occupation	1	0.13	3.84	0.71	NS
6	Family history of breast cancer	1	1	3.84	0.05	NS
7	Previous Intervention of BSE	1	0.03	3.84	0.8	NS
8	Previous history of breast disease.	1	1	3.84	0.05	NS

(Table 9) shows the findings related to association between the knowledge and

socio-demographic variables of adolescent girls and found that there was no significant

association between knowledge and any of the socio-demographic variables. Hence H₃ stated is rejected.

Table 10: To find out the association between skill and socio-demographic variables, a research hypothesis was formulated. Hypothesis was tested by using Chi-square test. N=50

SL.NO	Socio demographic variables	Df	Chi-square-value	Table value	P-value	Association
1	Age	1	0.08	3.84	0.36	NS
2	Religion	1	0.15	3.84	0.69	NS
3	Year of study	1	1.33	3.84	0.24	NS
4	Mother occupation	1	0.02	3.84	0.87	NS
5	Father occupation	1	0.13	3.84	0.71	NS
6	Family history of breast cancer	1	1	3.84	0.05	NS
7	Previous Intervention of BSE	1	0.03	3.84	0.8	NS
8	Previous history of breast disease.	1	1	3.84	0.05	NS

(Table 10) shows the findings related to association between the skill and socio-demographic variables of adolescent girls and found that there was no significant association between skill and any of the socio-demographic variables. Hence H₃ stated is rejected.

CONCLUSION

The findings of the study concluded that the students lacked adequate knowledge and skill regarding breast self-examination and the educational module administered by the investigator helped them to improve the knowledge and skill on breast self-examination. The effectiveness of educational module was tested in terms of gain in knowledge and skill and the findings showed that it was statistically significant at 0.05 level. The findings of the study concluded that the educational module was effective in improving the knowledge and skill of the students regardless of their any personal characteristics. All the subjects had a gain in knowledge and skill compared to their pre-test knowledge scores.

Limitations of the Study: The study included adolescent girls under 20 years of age. Only structured knowledge questionnaires and criteria checklist are used to assess the effectiveness of educational module. The interventions were administered only for the period of 24 days.

Educational module was administered by researcher herself.

Ethical Approval: Approved

Conflict of Interest: None

REFERENCES

1. Guraj.M. Shahin.A.A. Benign breast disease: classification, diagnosis, and management. The official journal of the society for translational oncology 2006; 11(5):435-99
2. VF and Moiseenko VM (2011).Breast self examination for early detection of breast cancer; AUSSR/WHO Controlled trial in Leningrad Bulletin of WHO.; R Deepa (feb2011). Breast self examination for early detection of breast cancer. Nightingale nursing times. 6(11):39-42
3. Breast cancer awareness 2019 cited from https://www.nhp.gov.in/breast-cancer-awareness-month2019_pg
4. Umbreen G. Jabeen C. Riaz MS. Breast self examination (BSE); knowledge attitude and practice regarding among post RN nursing student in Lahore professional Med J 2017; 24(3):453-457.DOI: 17957/TPMJ/17.3745

How to cite this article: Deepika Dasar, Shridhar G Pujari, Deelip S Natekar. A study to assess the effectiveness educational module on Breast Self-Examination in terms of knowledge and skills among girls of government pre-university college at Bagalkot. *International Journal of Research and Review*. 2022; 9(7): 197-202.
DOI: <https://doi.org/10.52403/ijrr.20220721>
