



A STUDY TO EVALUATE THE EFFECTIVENESS OF STRUCTURED DEMONSTRATION PROGRAMME ON KNOWLEDGE AND TECHNIQUE OF BREAST SELF EXAMINATION (BSE) AMONG COLLEGE GIRLS REGARDING EARLY DETECTION OF BREAST CANCER IN SELECTED DEGREE COLLEGE AT BELAGAVI KARNATAKA.

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ABSTRACT

Breast cancer disease is on rise due to failure of awareness and compliance of young females to screening strategies of breast cancer. Breast Self Examination (BSE) is one such screening strategy which female can perform regularly on her own. Young girls should be educated through various structured demonstration programmes about significance of BSE to empower them to practice which ultimately helps in early detection of breast cancer.

Materials and method: Objectives of the study were to assess the knowledge and technique of BSE regarding early detection of breast cancer, to evaluate the effectiveness of structured demonstration programme on knowledge and technique of BSE and to find out the association between knowledge and technique of BSE regarding early detection of breast cancer with selected demographic variable among degree college girls. Study was conducted on 90 degree college girls selected using purposive sampling technique by an evaluative research approach with a pre experimental one group pretest posttest design. Data was collected using structured knowledge questionnaire and observation checklist of BSE. Data was analyzed in terms of descriptive and inferential statistics.

Results: knowledge scores of BSE revealed that in pretest 56(62.2%) had average knowledge scores and in posttest all i.e. 90(100%) had good knowledge scores. Technique scores of BSE revealed in pretest 78(86.7%) of the girls had poor technique scores. Whereas in posttest 85(94.4%) had good technique score. knowledge and technique scores with paired 't' test was significant at $p < 0.05$ level. Chi square at $p < 0.05$ level for association between pretest knowledge scores and selected socio-demographic variables did not show any significant association. Whereas pretest technique scores and selected socio demographic variables revealed an association between educational level of father and technique score, whereas there was no significant association with other variables.

Conclusion: It was conclusive from the results that there was evident increase in the knowledge and technique of BSE after the administration of structured demonstration programme on BSE.

KEYWORDS : Breast Self Examination (BSE), knowledge, technique, structured demonstration, degree college girls.

Introduction

Since ancient times breasts are recognized as a symbol of womanhood and ultimate fertility. As a result any danger to the breast gives rise to fear of loss of femininity and fertility among women.¹ Carcinoma of breast has taken a tremendous impact on women of all ages, races, and ethnicities leaving a life threatening experience.² In Indian society women are still dependent on men and family members. The major decisions are taken by either father, husband or in laws so she has less freedom to seek medical care early which leads to rise in incidence of breast cancer cases among women.³ As per the American society there are 1.7 million cases diagnosed with breast cancer and among them 521,900 deaths were reported in year 2012.⁴ For India Globocan data shows 144,937 women were newly detected with breast cancer out of those 70,218 women died of breast cancer in 2012.³ The disease is getting more prevalent due to non modifying factors like female gender, aging, genetic variation, family history and personal history of breast cancer.⁵ As per American cancer society's guidelines strategies for early detection of breast cancer are Mammography, Clinical Breast Examination (CBE) and Breast Self Examination (BSE).⁶ Breast Self Examination is simple, low cost, non invasive, adjunct screening method which involves regularly examining of one's own breast. Women of all ages should be reinforced about knowledge on breast cancer and its screening strategies as a means for early detection and to get to know what normal is and report any changes quickly and promptly.⁷ Recommended age to begin BSE is 20 years, and educating young females about BSE is critically significant to help them to take care of themselves and lower their risk of breast cancer.⁸ Most common socio cultural barriers for not practicing BSE are economic constraints, fear of detecting lumps, Forgetfulness, embarrassment, lack of time and ignorance due to poor educational status.⁹ Improving knowledge and technique of BSE as an early detection strategy of breast cancer can positively affect individuals screening behavior. The impact of this education at early age will

enhance the probability of performing BSE throughout their lifespan.⁸ this study brings an opportunity to empower the young girls by upgrading their knowledge and motivate them to practice BSE which ultimately helps in early detection of breast cancer.

Materials and method

An evaluative research approach was considered to carry out the study. Research design of the study was a pre experimental one group pretest posttest design. Population comprises of Girls studying degree course in Lingaraj College at Belagavi, Karnataka. The sample size considered for the study 90 degree college girls studying Bachelor of Arts degree at Lingaraj College, Belagavi, Karnataka. The sampling technique used for the study was purposive sampling. The conceptual framework for the present study was based on "Rosenstock's & Becker's Health Belief Model (1974)". The tools used for gathering data were structured knowledge questionnaire on knowledge of Breast Self Examination (BSE) and to assess technique of BSE an observation checklist was developed. Descriptive and Inferential statistics were used for analysis.

Results**Findings related to socio demographic data of college girls.**

Out of 90 college girls 53(58.9%) belonged to the age group of 17-19 years, while 36(40%) belonged to the age group of 20-22 years and only 1(1.1%) was in 23-25 years age group. Equal number of girls that is 30(33.33%) were from each year of B.A degree course. data of religion is 75(83.3%) belonged to Hindu, Muslims were 10(11.1%), Christians were 2(2.2%), and girls from other religion were 3 (3.3%). Educational level of father was only 8(8.9%) were not having any formal education, primary was among 12(13.3%), secondary education was of 20(22.2%), higher secondary educated were 17(18.9%), highest level of education was of graduation 24(26.7%), post graduate father were 9(10%). Educational level of mother

showed that 12(13.3%) were not having any formal education, primary was among 19(21.1%), secondary education was of 19(21.1%), highest level of education was higher secondary 21(23.3%), graduated mothers were 17(18.9%), and only 2(2.2%) mothers were postgraduate. Highest percentage of girls 73(81.1) belonged to nuclear family and 17(18.9%) were from joint family. Girls residing in urban area were 52(57.8%) and that in rural were 38(42.2%). Unmarried girls were 82(91.1%) whereas 8(8.9%) were married. Data on source of information showed that highest number of girls 39(43.3%) were not having any source of information on this topic, Newspaper, Books/Magazine was source among 17(18.9%), TV/Radio, Internet, family and social circle shared equal percentage as source among 12(13.3%) of girls, information received from the health professional was 10(11.1%). Girls belonged to income group below Rs. 4000 were 18(20%), in the range Rs.4001-Rs.6000 were 10(11.1%), in Rs.6001-Rs8000 were 12(13.3%), in range from Rs.8001-Rs10000 were 21(23.3%) whereas 29(32.2%) were having family income more than Rs.10000.

Figure 1 Frequency and percentage distribution of knowledge scores of degree college girls regarding Breast Self Examination.

Figure 1 Revealed that pretest good, average and poor knowledge scores were 14(15.6%), 56(62.2%), and 20(22.2%) respectively whereas in posttest all that is 90(100%) college girls had good knowledge scores.

Figure. 2 Frequency and percentage distribution of technique scores of degree college girls regarding Breast Self Examination.

Figure. 2 Revealed that pretest good, average and poor knowledge scores were 0, 12(13.3%) and 78(86.7%) respectively whereas in posttest good, average and poor knowledge scores were 85(94.4%), 5(5.6%) and 0 respectively.

Table 1 Findings to evaluate the effectiveness of structured demonstration programme on Breast Self Examination (BSE) among degree college girls regarding early detection of breast cancer in terms of gain in knowledge. n=90

Mean difference	Standard Error Difference	Paired 't' value Calculated	d.f	'p' value
16.344	0.306	53.33	89	<0.001*

(*significant)

Table 1 revealed that Mean difference (d), Standard Error Difference (SED) and paired't' values of knowledge scores of degree college girls revealed that on comparison of mean pretest and posttest knowledge scores calculated 't' value is 53.33 which is significant at <0.05 level.

Table 2 Findings to evaluate the effectiveness of structured demonstration programme on Breast Self Examination (BSE) among degree college girls regarding early detection of breast cancer in terms of gain in technique. n=90

Mean difference	Standard Error Difference	Paired 't' value Calculated	d.f	'p' value
11.133	0.213	52.342	89	<0.001*

(* significant)

Table 2 revealed that Mean difference (d), Standard Error Difference (SED) and paired't' values of technique scores of degree college girls on comparison of mean pretest and posttest technique scores calculated 't' value is 52.342 which is significant at p<0.05 level.

Findings on association between pretest knowledge and technique scores with selected demographic variables among college girls.

Table 3 Association between pretest knowledge scores of college girls and selected socio-demographic variables. n=90

Sr. No	Variables	Good	Average	Poor	d.f.	Chi square Calculated	P value
1.	Age group 17-19	9	32	12	2	0.249	0.88
	20-25	5	24	8			
2.	Religion Hindu	12	44	19	2	2.931	0.23
	Any other	2	12	1			
3.	Educational level of father No formal education	1	6	1	8	5.246	0.73
	Primary	1	9	2			
	Secondary	4	11	5			
	Higher secondary	2	13	2			
	Graduation and above	6	17	10			
4.	Educational level of Mother No formal education	2	8	2	8	5.117	0.74
	Primary	3	14	2			
	Secondary	2	11	6			
	Higher secondary	5	12	4			
	Graduation and above	2	11	6			
5.	Type of family Nuclear	11	46	16	2	0.114	0.94
	Joint	3	10	4			
6.	Residential area Urban	8	33	11	2	0.096	0.95
	Rural	6	23	9			
7.	Marital status Unmarried	12	52	18	2	0.745	0.68
	Married	2	4	2			
8.	Source of information Newspaper,books/magazine	1	12	4	8	2.921	0.93
	TV/radio, internet	1	8	3			
	Health personnel	2	6	2			
	Family/social circle	2	8	2			
	No source of information	8	22	9			
9.	Family income(Rs) <4000	3	12	3	8	3.248	0.91
	4001-6000	1	6	3			
	6001-8000	1	9	2			
	8001-10000	3	14	4			
	>10000	6	15	8			

(* significant)

Table 3 revealed that calculated chi square value for all associations of pretest knowledge scores and selected demographic variable is not significant at p<0.05 level which means there is no significant association between knowledge scores and selected demographic variables.

Table 4 Association between pretest technique scores of college girls and selected socio demographic variables. n=90

Sr. No	Variables	Average	Poor	d.f.	Chi-Squarc calculated	P value
1	Age group					
	17-19	6	47			
	20-25	6	31	1	0.452	0.5
2	Religion					
	Hindu	11	64	1	0.692	0.4
	Any other	1	14			

3	Educational level of father					
	No formal education	3	5			
	Primary	1	11			
	Secondary	2	18	4	11.33	0.02*
	Higher secondary	5	12			
	Graduation and above	1	32			
4	Educational level of Mother					
	No formal education	3	9			
	Primary	3	16			
	Secondary	2	17	4	5.159	0.27
	Higher secondary	4	17			
	Graduation and above	0	19			
5	Type of family					
	Nuclear	10	63			
	Joint	2	15	1	0.045	0.83
6	Residential area					
	Urban	8	44			
	Rural	4	34	1	0.448	0.5
7	Marital status					
	Unmarried	11	71			
	Married	1	7	1	0.005	0.94
8	Source of information					
	Newspaper, books/magazine	3	14			
	TV/radio, internet	3	9			
	Health personnel	0	10	4	3.494	0.47
	Family/social circle	1	11			
	No source of information	5	34			
9	Family income(Rs)					
	<4000	4	14			
	4001-6000	3	7	4	6.363	0.17
	6001-8000	1	11			
	8001-10000	3	18			
	>10000	1	28			

(* significant)

Table 4 revealed that calculated chi square value for association of educational level of father and pretest technique score is 11.330 which is significant at $p < 0.05$ level. Whereas Chi square calculated value for association of all the other selected variables and pretest technique score is not significant at $p < 0.05$. Which means technique scores and educational level of father are associated whereas technique scores and other selected demographic variables do not show any association.

Discussion

Findings related to level of knowledge of BSE revealed that out of 90 college girls in pretest 56(62.2%) had average knowledge scores with a mean score of 12.90 with SD of 2.403. Whereas in posttest all i.e. 90(100%) of college girls had good knowledge scores with a mean score of 29.24 with SD of 1.813. similar findings were seen in Varghese D, Nayak M. out of 40 girls 29(72.5%) had average score in pretest whereas in posttest 34(85%) had good score.¹⁰ Findings related to level of technique of BSE revealed that out of 90 girls in pretest majority 78(86.7%) of the girls had poor technique scores. Whereas in posttest 85(94.4%) girls had good technique scores. Our findings are similar to the Moustafa DG, Abd-Allah ES, Taha NM. study as they also had in pretest score 179(99.4%) as unsatisfactory but in posttest 169(93.9%) got satisfactory score.¹¹ Findings related to the effectiveness of structured demonstration programme on Breast Self Examination (BSE) among degree college girls regarding early detection of breast cancer in terms of gain in knowledge and technique scores. In current study findings related to knowledge scores with paired't' test was significant at $p < 0.05$ level ($p = < 0.001$). And findings related to technique scores with paired't' test was

significant at $p < 0.05$ level ($p = < 0.001$). Thus showed that the structured demonstration programme was effective in improving degree college girls knowledge and technique of BSE. Similar findings were seen in the study conducted by Moustafa DG, Abd-Allah ES, Taha NM. The findings with paired't' test for knowledge and practice of BSE was significant at $p < 0.05$ level ($p = < 0.001$) thus showed effectiveness of lecture method and demonstration and re demonstration programme on BSE in improving knowledge and practice of university students.¹¹ Findings related to association between pretest knowledge and technique scores of effectiveness of structured demonstration programme on Breast Self Examination (BSE) regarding early detection of breast cancer with selected demographic variables among degree college girls. Statistical analysis using chi square for Association between pretest knowledge scores of college girls and selected socio-demographic variables of age, religion, educational level of father and mother, type of family, area of residence, source of information on present topic, marital status, and family income revealed that none of the demographic variable showed any significant association with pretest knowledge score at $p < 0.05$. Similar findings were found in the study done by Varghese D, Nayak M. The findings showed that chi square computed to find the association between pretest knowledge and selected variables of age, education and exposure to mass media shows no significant association between pretest knowledge and selected variables.¹⁰ Statistical analysis using chi square for Association between pretest technique scores of selected college girls and selected socio demographic variables revealed a significant association between educational level of father and technique score at $p < 0.05$ level. Whereas it did not show any association between pretest technique scores and other selected demographic variables of age, religion, educational level of mother, type of family, area of residence, source of information on present topic, marital status, and family income.. Which means technique scores and educational level of father are associated whereas technique scores and other selected demographic variables do not show any association. Contrast findings were found in the study conducted by Moussa MM, Shalaby NS. Findings showed that there was no statistical significant association between practice Score of students regarding breast self-examination with socio-demographic data of age, family history and marital status.¹²

Conclusion

It was evident that there was increase in the knowledge and technique of BSE after the administration of structured demonstration programme on BSE. Thus it was inferred that structured demonstration programme was effective in improving degree college girls knowledge and technique of BSE which can be used by college girls for early detection of breast cancer. The socio demographic variables were found to have no significant association with pretest knowledge and technique except there was significant association found only between pretest technique score and education level of father.

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