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EFFECTIVENESS OF SELECTED INTERVENTION STRATEGIES ON EARLY DETECTION OF BREAST CANCER IN TERMS OF KNOWLEDGE, ATTITUDE, PRACTICE AMONG WOMEN

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INTRODUCTION

Breast cancer may be invasive or in situ. In general, breast cancer arises from the epithelial lining of the ducts or from the epithelium of the lobules. Most breast cancers arise from the ducts and are invasive. The natural history of breast cancer varies considerably from patient to patient. Cancer growth rate can range from slow to rapid. The history type of breast cancer seems to have little prognostic significance once the cancer has metastasized. [1,2]

Diagnostic Evaluation

The common methods used to detect breast cancer are:

- 1. Clinical examination of the breast
- 2. Mammography
- 3. Biopsy

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Research Article

ABSTRACT

The present study was done to evaluate the effectiveness of selected intervention strategies on early detection of cancer breast in terms of knowledge, attitude, practice among women at Nanchiyampalayam, Dharapuram. The study findings revealed that paired't' value for knowledge was 17.942, for attitude was 10.873 and for practice was 15.336 which was significant at p<0.05. There was a positive correlation (r= 0.70) between the knowledge and attitude of cancer breast among women. The findings revealed that adequate breast self examination practices will help the women to detect cancer breast at early stage.

Objective

- Assess the pre test and post and post test knowledge, practice and attitude regarding cancer breast among women.
- To compare the pre test and post knowledge, practice and attitude regarding cancer breast among women.
- To find the relationship between the post test knowledge scores and post test attitude scores regarding cancer breast among women.
- To find the association between the post test level of knowledge sores with their selected demographic variables.
- To find the association between the post test level of practice scores with their selected demographic variables.

MATERIALS AND METHODS

This chapter includes research approach, design of the study, setting of the study, population, criteria for sample selection, sample size, sampling technique,



instrument and scoring procedure, developing and testing of the tool, data collection procedure and plan for analysis.[3,4]

Research Design

Pre experimental one group pre test and post design was adopted to assess the effectiveness of selected intervention strategies on early detection of cancer breast.

The symbols used:

- 0_1 Assess the pre test level of knowledge, practice and attitude regarding cancer breast among women.
- **X** Demonstrate the Breast self Examination, health talks about cancer breast and issue the information booklet regarding breast self examination.
- $\mathbf{0}_2$ Assess the post test level of knowledge, practice and attitude regarding cancer breast among women.

Setting of the Study

The study was conducted in Nanchiyampalayam, Dharapuram. Nanchiyampalyam is an urban area which is 3 kms away from Dharapuram. The total population of Nanchiyampalayam is 6770(Males-2061 and Females 1879), in that (455) of women belongs to 30 -50 years of age group. It consists of Tirupur streets, RC Street and Nadar Street. The people get medical aid from the Government hospital at Dharapuram. One primary school and one higher secondary school are there for educational purpose. Water and electricity facilities are available. The common occupation in the village is agriculture. Most of the people are coolie workers going for construction work and others include tailors and shop workers.[5,6&7]

Population

The target population selected for the study were adult women.

Sample

Samples are adult women between the age group of 30-50 years.

Criteria for Sample Selection Inclusion Criteria

The women who are available at the time of data collection.

Women who know to read Tamil.[8]

Exclusion Criteria

- The women who are sick at the time of data collection.
 Women who are not willing to participate.
- Women who had breast cancer and breast surgeries.[9]

Sample Size

The sample size for the study was 60.

Sampling Technique

The samples were selected by using Convenience sampling technique for the studies.[10,11&12]

The data has been tabulated and organized as follows.Assess the demographic variables among women.(shown in table 1) Assess the pre test and post test knowledge, practice and attitude regarding cancer breast among women. .(shown in table 2,3&4) Compare the pre test and post knowledge, practice and attitude regarding cancer breast among women. .(shown in table 5,6 &7) Relationship between the post test knowledge scores and post test attitude scores regarding cancer breast among women (shown in table 8) Association between the post test level of knowledge sores with their selected demographic variables. .(shown in table 9) Association between the post test level of practice scores with their selected demographic variables. .(shown in table 10)

RESULTS AND DISCUSSION

Table: 1 depicts that the frequency and percentage distribution of demographic variables among women. Regarding age of the women, majority 18 (30%) of women belonged to age group of 30 - 35 years. 15(25%) belonged to age group of 36 - 40 years and 46 -50 years and 12(20%) belonged to age group of 41 - 45years. Regarding education depicts, majority 22 (36.6%) of the women had illiterate and 19(31.8%) of them had primary education, 10(16.6%) had high school education.6(10%) were graduate and 3(5%) had higher secondary education.

Table 1. Free	able 1. Frequency and percentage distribution of demographic variables among women					
S. No	Demographic Variables	Frequency (f)	Percentage (%)			
1. 1.1 1.2 1.3 1.4	Age 30 – 35 years 36 – 40 years 41 – 45 years 46 - 50 years	18 15 12 15	30 25 20 25			



2. 2.1 2.2 2.3 2.4 2.5	Education No formal education Primary school High school Higher secondary Graduate	22 19 10 3 6	36.6 31.8 16.6 5 10
3. 3.1 3.2 3.3 3.4	Occupation Coolie Housewife Government employee Private employee	20 35 3 2	33.3 58.4 5 3.3
4. 4.1 4.2 4.3 4.4	Family income Rs 3000 -4000 Rs 4000-5000 Rs 5000-6000 Rs 6000-7000	42 8 5 5	70 13.4 8.3 8.3
5. 5.1 5.2 5.3	Religion Hindu Christian Muslim	49 11 -	81.6 18.4
6. 6.1 6.2	Type of family Joint family Nuclear family	12 48	20 80
7. 7.1 7.2 7.3 7.4	Age at menarche 10 -11 years 12 -13 years 14 -15 years >15 years	7 27 19 7	11.6 45 31.8 11.6
8. 8.1 8.2 8.3 8.4	Marital status Married Unmarried Widow Divorce	51 4 5 -	85 6.7 8.3
9. 9.1 9.2 9.3 9.4	Number of children No child 1 2 >3	8 6 26 20	13.3 10 43.4 33.3
10. 10.1 10.2 10.3 10.4 10.5	Sources of health information Radio Television News paper Friends Health personnel	4 27 5 11 13	6.7 45 8.3 18.4 21.6

Table 2. Frequency and percentage distribution of pretest and post test knowledge scores regarding breast cancer

			-		n= 60	
G N		Pre-7	ſest	Post Test		
S. No	Level of Knowledge	f	%	f	%	
1.	Adequate	-	-	33	55%	



2.	Moderately Adequate	36	60%	27	45%
3.	Inadequate	24	40%	-	-

Table 3. Frequency and percentage distribution of pretest and post test practice scores regarding breast self
examinationn=60

		Pret	est	Post Test		
S. No	Level of Practice	f	%	f	%	
1.	Adequate	3	5%	34	56.7%	
2.	Moderately Adequate	23	38.3	26	43.3%	
3.	Inadequate	34	56.7%	-	-	

Table 4. Frequency and percentage distribution of pre test and post test Attitude scores regarding cancer breast

n= 60 Pre test Post Test Level of S. No Attitude f % f % 3 1. Favourable attitude 5% 16 26.7% Moderately Adequate attitude 34 56.7% 43 71.7% 2. Unfavourable attitude 23 1 3. 38.3% 1.6%

Table 5. Comparison of mean score, standard deviation and paired 't' test value of pre test and post test score of
knowledge regarding cancer breast among womenn= 60

Variable	Mean	Standard deviation	Mean difference	Paired 't' value	Table value	Inference
Pre test	10.1	2.62		15.040	2 000	C .t
Post test	17.75	2.29	7.65	17.942	2.000	S*
df =59	S – Significant		P<().05		

Table 6. Comparison of mean score, standard deviation and paired 't' test value of pre test and post test score of
practice regarding breast self examination among womenn= 60

Variable	Mean	Standard deviation	Mean difference	Paired 't' value	Table value	Inference
Pre test	2.62	2.85	5 10	15.000	2 000	G **
Post test	7.8	1.26	5.18	15.336	2.000	S*
df =59		S – Significant		P<0.05		

Table 7. Comparison of mean score, standard deviation and paired 't' test value of pre te	est and post test score of
Attitude regarding cancer breast among women	n= 60

Variable	Mean	Standard deviation	Mean difference	Paired 't' value	Table value	Inference
Pre test	40.05	3.91	2.07	10.050	• • • • •	G it
Post test	43.9	2.86	3.85	10.873	2.000	5*
df=59	S- Si	gnificant	P<0.05			

	ist among
women	n= 60

Variable	Mean	Standard deviation	Correlation (r)	Table value	Inference
Knowledge	17.75	2.29	0.70	0.054	C.*
Attitude	43.9	2.86	0.70	0.254	5*
df =59	S-	Significant P<0.05			



Table 9. A	9. Association between post test knowledge scores with their selected demographic variables					iables	n=60	
		Level of Knowledge						
SL. NO	Demographic Variables	Adeo	quate	Moderately Adequate		χ2	Table Value	Inference
		f	%	f	%			
1 . 1.1 1.2 1.3 1.4	Age 30 – 35 years 36 – 40 years 41 – 45 years 46 - 50 years	11 5 6 11	18.4 8.3 10 18.4	7 10 6 4	11.6 16.6 10 6.7	5.16	7.82 (df=3)	NS
2 . 2.1 2.2 2.3 2.4	Education No formal education Primary school High school Higher secondary	13 9 5 2	21.8 15 8.3 3.3	9 10 5 1	15 16.6 8.3 1.7	19.18	9.49 (df=4)	S*
2.5	Graduate	4	6.7	2	3.3			
3 . 3.1 3.2 3.3 3.4	Occupation Coolie Housewife Government employee Private employee	10 21 2 1	16.6 35 3.3 1.7	10 14 1 1	16.6 23.4 1.7 1.7	18.21	7.82 (df=3)	S*
4 . 4.1 42. 4.3 4.4	Family income Rs 3000 -4000 Rs 4000-5000 Rs 5000-6000 Rs 6000-7000	22 4 3 4	36.6 6.7 5 6.7	20 4 2 1	33.3 6.7 3.3 1.7	2.14	7.82 (df=3)	NS
5 . 5.1 5.2 5.3	Religion Hindu Christian Muslim	27 6 -	45 10 -	22 5 -	36.7 8.3 -	19.58	3.84 (df=1)	S*
6 . 6.1 6.2	Type of family Joint family Nuclear family	9 25	15 41.7	3 23	5 38.3	0.41	3.84 (df=1)	NS
7 . 7.1 7.2 7.3 7.4	Age at menarche 10 -11 years 12 -13 years 14 -15 years >15 years	2 16 11 4	3.3 26.6 18.4 6.7	5 11 8 3	8.3 18.4 13.3 5	14.55	7.82 (df=3)	S*
8 . 8.1 8.2 8.3 8.4	Marital status Married Unmarried Widow Divorce	27 3 3	45 5 5	24 1 4	40 1.7 3.3	0.78	5.99 (df=2)	NS
9 . 9.1 9.2 9.3 9.4	Number of children No child 1 2 >3	6 2 10 14	10 3.3 16.6 23.4	2 4 16 6	3.3 6.7 26.7 10	7.67	7.82 (df=3)	NS





10 . 10.1 10.2 10.3 10.4 10.5	Sources of health information Radio Television News paper Friends Health personnel	1 14 4 8 7	1.7 23.4 6.6 13.3 11.6	3 13 1 3 6	5 21.7 1.7 5 10	4.29	9.49 (df=4)	NS
S*-Significant	NS-Not significant			P<0.0	5			

Table 10. Association between post test p	ractice scores with their selected demogra	phic variables	n=60

		Level of Practice						
SI. NO	Demographic variables	Adequate		Moderately Adequate		X ²	ole ue	
		f	%	f	%		Tak Val	rence
1. 1.1 1.2 1.3 1.4	Age 30 – 35 years 36 – 40 years 41 – 45 years 46 - 50 years	10 7 9 8	16.7 11.7 15 13.3	8 8 3 7	13.3 13.3 5 11.7	13.04	7.82 (df=3)	s. Infe
2 . 2.1 2.2 2.3 2.4 2.5	Education No formal education Primary school High school Higher secondary Graduate	8 12 8 3 3	13.3 20 13.3 5 5	14 7 2 - 3	23.4 11.7 3.3 5	7.36	9.49 (df=4)	NS
3 . 3.1 3.2 3.3	Occupation Coolie Housewife Government employee	11 21 2	18.3 35 3.314	9 14 1	15 23.4 1.7	2.6	7.82 (df=3)	NS
3.4	Private employee	-	-	2	3.3			
4 . 4.1 4.2 4.3 4.4	Family income Rs 3000 -4000 Rs 4000-5000 Rs 5000-6000 Rs 6000-7000	21 6 4 3	35 10 6.7 5	21 2 1 2	35 3.3 1.7 3.3	12.21	7.82 (df=3)	S*
5 . 5.1 5.2 5.3	Religion Hindu Christian Muslim	28 6 -	46.7 10 -	21 5 -	35 8.3	12.54	3.84 (df= 1)	
6 . 6.1 6.2	Type of family Joint family Nuclear family	9 25	15 41.6	3 23	5 38.4	2.04	3.84 (df=1)	NS
7 . 7.1 7.2 7.3 7.4	Age at menarche 10 -11 years 12 -13 years 14 -15 years >15 years	1 17 12 4	1.6 28.4 20 6.6	6 10 7 3	10 16.7 11.7 5	12.85	7.82 (df=3)	S*

8. 8.1 8.2 8.3 8.4	Marital status Married Unmarried Widow Divorce	31 2 1	51.7 3.3 1.7	20 2 4 -	33.4 3.3 6.6	3.15	5.99 (df=2)	NS
9 . 9.1 9.2 9.3 9.4	Number of children No child 1 2 >3	5 5 15 9	8.4 8.4 25 15	3 1 11 11	5 1.6 18.3 18.3	18.74	7.82 (df=3)	S*
10 . 10.1 10.2 10.3 10.4 10.5	Sources of health information Radio Television News paper Friends Health personnel	2 19 5 5 3	3.3 31.6 8.4 8.4 5	2 8 - 6 10	3.3 13.3 - 10 16.7	10.32	9.49 (df=4)	S*

Regarding occupation depicts, majority 35 (58.4%) of the women were housewife, 20(33.3%) of the women were coolie, 3(5%) of the women were government employee and 2(3.3%) of the women were private employee. Regarding family income depicts, majority 42(70%) of the women had family income between Rs.3000 -4000, 8(13.4%) of the women had family income between Rs. 4000 - 5000, 5(8.3%) of the women had family income between Rs 5000 - 60000 and Rs. 6000 - 7000. Regarding religion depicts, majority 49 (81.6%) of the women were Hindu and 11(18.4%) of the women were Christian. Regarding type of family depicts, majority 48(80%) of the women belonged to Nuclear family and 12(20%) of the women belonged to joint family. Regarding age at menarche depicts, 27 (45%) of the women had 12 - 13 years, 19(31.8%) of them had 14 - 1415 years and 7(11.6%) of the women had 10 -11 and above 15 years. Regarding marital status depicts, 51(85%) of the women were married, 5(8.3%) of the women were unmarried and 4(6.7%) of the women were widow. Regarding number of children depicts, 26(43.3%) of the women had 2 children, 20(33.3%) of the women had above 3 children, 8(13.4%) of the women had no child and 6(10%) of the women had 1 child. Regarding sources of health information depicts, 27(45%) had health information from television, 13(21.6%) of the women had health information from health personnel, 11(18.,4%) of the women had health information from friends, 5(8.3%)of the women had health information from news paper and 4(6.7%) of them had from radio.

Table 2 depicts that, in pretest Majority36 (60%) of women had moderately adequate knowledge regarding the cancer breast, 24 (40%) of them had inadequate knowledge and none of them had adequate knowledge. In post test Majority33 (55%) of women had adequate

P<0.05

knowledge, 27(45%) of them had moderately adequate knowledge regarding the cancer breast and none of them had inadequate knowledge. Table 3 depicts that, in pretest majority 34 (56.6%) of women had inadequate, 23(38.3%) moderately adequate and 3(5%) had inadequate practice regarding the breast self examination. In post test majority (56.6%) of women had adequate, 26(43.3%) had moderately adequate practice regarding the breast self examination and none of them had inadequate practice. Table 4 depicts that, in pretest majority 34(56.6%) of women had unfavorable attitude,23(38.3%) of them had moderately favorable attitude and 3(5%) of them had unfavorable attitude regarding cancer breast. In post test majority 43(71.6%) of women had moderately favorable attitude, 16(26.6%) of them had favorable attitude and 1(1.6%) of them had unfavorable attitude regarding cancer breast.

Table 5 depicts that the mean and standard deviation for pre test and post test of knowledge among women were $10.1(SD \pm 2.62)$ and $17.75(SD \pm 2.92)$ respectively. The mean difference was 7.65. The paired "t" value was 17.942. There was a significant difference between the pre test and post test knowledge regarding cancer breast among women. Table 6 depicts that the mean and standard deviation for pre test and post test of practice among women were 2.62(SD± 2.85) and 7.8(SD±1.26) respectively. The mean difference was 5.18. The paired "t" value was 15.336. There was a significant difference between the pre test and post test practice regarding cancer breast among women. Table 7 depicts that the mean pre test scores of attitude was 40.05(SD±3.91) and post test mean score was 43.9(SD±2.86) respectively. The mean difference was 3.85. The 't' value was 10.873. There was a significant difference between the pre and post test attitude regarding



cancer breast among women. Table 8 depicts that the mean and standard deviation scores for the knowledge were $17.75(SD\pm 2.29)$ and the mean and standard deviation scores for the Attitude were 43.9 (SD \pm 2.86) respectively. There was a positive correlation (r= 0.70) between the knowledge and attitude regarding cancer breast among women.

Table 9 depicts that the Chi-square values were calculated to find the association level of knowledge sores with their selected demographic variables. The results reveals that, there was significant association of knowledge with education(χ^2 =19.18), Religion($\chi^2 =$ Occupation($\chi^2 = 18.21$) 19.58), and Age at menarche(χ^2 =14.55), except age, family income, type of family, marital status, number of children, source of health information which was significant at the level of p<0.05. Table :10 depicts that the Chi-square values were calculated to find the association level of practice with their selected demographic variables. The results reveals that, there was significant association of practice with Age (χ^2 =13.04), Family income (χ^2 = 12.21), Religion($\chi^2=12.54$), Age at menarche ($\chi^2=12.85$), Number of children ($\chi^2=18.74$) and health information($\chi^2=10.32$), except education, occupation, type of family, marital status which was significant at the level of p<0.05.

CONCLUSION

The study findings revealed that paired't' value for knowledge was 17.942, for attitude was 10.873 and for practice was 15.336 which was significant at p<0.05. There was a positive correlation (r= 0.70) between the knowledge and attitude of cancer breast among women. The findings revealed that adequate breast self examination practices will help the women to detect cancer breast at early stage. This study will improve the knowledge, develop skill in practicing Breast self examination and develop positive attitude towards breast self examination. It will help the women to disseminate knowledge to others and protect themself from cancer breast. By creating awareness among women, incidence of breast cancer may decrease which will help the women to lead a healthy life [13,14&15].

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