



“A STUDY TO ASSESS EFFECTIVENESS OF EDUCATIONAL INTERVENTION ON KNOWLEDGE REGARDING BREAST SELF EXAMINATION AMONG TRIBAL WOMEN LIVING IN SELECTED AREAS OF DADRA AND NAGAR HAVELI.”

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ABSTRACT: Breast cancer is a global health issue and a leading cause of death among women. Early detection through increased awareness and knowledge of breast cancer and breast cancer screening is thus crucial. The aim of the present study was to assess the effect of an educational intervention on knowledge regarding breast self-examination among the tribal women living in Sayli, Baldevi, Rakholi, and Kudacha, D&NH. The aim of the study was to assess the effectiveness of educational interventions on knowledge regarding breast self-examination among the tribal women. A pre-experimental, one-group pre-test post-test study design was conducted at selected areas (Kudacha, Sayli, Baldevi, and Rakholi) of Dadra and Nagar Haveli. Educational information on breast self-examination (BSE) and demonstrations of BSE procedures among 100 tribal women after obtaining written informed consent. Pre-intervention and 14-day post-intervention assessments were conducted to assess the changes in knowledge on BSE. A paired sample t-test was performed to evaluate the effectiveness of the educational intervention, and a chi square test was performed for the association between the pre-test knowledge score regarding SBE and their selected demographic variables. A total of 100 women aged between 15–49 years were included in the sample. The results showed that the mean score of the post-test level of knowledge of tribal women on breast self-examination was higher than the mean score of the pre-test score. Further, the paired t test value was

t(99,0.050=27.870,0.000) at the $p<0.05$ level of significance. It shows that educational intervention was effective in increasing the knowledge of tribal women regarding breast self-examination. Study findings confirm that the study population had inadequate awareness and knowledge regarding breast self examination which was improved significantly after educational intervention.

Key words: Assess, Knowledge, Breast Self Examination, Effectiveness, Educational intervention.

INTRODUCTION

Every year Women's International Day is celebrated to inspire the women to stride ahead in life. While women had made progress in most of the field still she tends to inexplicably neglect her own health. The technological advancement, modernization, urbanization, economic liberation, and challenging values of the society have been influencing the health care tremendously. Every year October month is considered as the Breast Cancer Awareness Month, which is worldwide annual campaign involving thousands of organizations to highlight the importance of breast awareness, education and research. Breast is the symbol of femininity, beauty, sexuality and motherhood, So any diseases most commonly cancer of breast is a life threatening disease as it effects the organ, intimately associated with self-image, reproductive and nurturing capacity.

Breast diseases are very common and can be found in most women. As the female breast has been regarded as a symbol of beauty, sexuality, and motherhood, any actual or suspected disease or injury affecting the breast tends to reflect the prevailing societal view of the breast. The threat of mutilation or loss of a breast may be devastating for women because of the psychosocial, sexual, and body image implications associated with it. Cancer of the breast is a disease that affects many dimensions of health as it gives physical, emotional, psychological, as well as economic setbacks to the women affected. Breast cancer is ranked the number one cancer among Indian women, with a rate as high as 25.8 per 100,000 women and a motility rate of 12.7 per 100,000 women, according to a health ministry report in 2017. According to the 2017 World Cancer Report, about 5.37 lakh Indian women got breast cancer in 2012, which was a leading cause of death among women between the ages of 20 and 59 worldwide. Among Kashmiri women, breast cancer is the second leading cancer after oesophageal cancer, with an incidence rate of 12.6 per 100,000 women. The incidence, mortality, and survival rates for breast cancer vary across the globe because of underlying differences in known risk factors, the availability of organized screening programs, and access to effective and affordable treatment modalities. In 2020, there were 2.3 million women diagnosed with breast cancer and 685,000 deaths globally. Epidemiological studies have shown that the global burden of breast cancer is expected to cross almost 2 million by the year 2030.

Prevention is better than cure. Measures should be taken to prevent cancerous lesion by detecting it at earliest stage. Breast screening in general population has shown to reduce mortality and helps to detect it at earliest stage. Breast self-examination is a technique that all women can use to assess their own breasts.

Women familiar with their own normal breast characteristics can easily notice the development of abnormalities early.

Breast self-examination (BSE) is a screening method used in an attempt to detect early breast cancer. The method involves the woman herself looking at and feeling each breast for possible lumps, distortions or swelling. BSE was once promoted heavily as a means of finding cancer at a more curable stage, but large randomized controlled studies found that it was not effective in preventing death, and actually caused harm through needless biopsies and surgery.

Early diagnosis affords a better chance of survival and better prognosis in absence of an exact etiological agent for breast cancer, the most appropriate way of controlling it, will be early detection and treatment. Mammography is the method of choice but its use is limited due to high cost and unavailability. At present a simple inexpensive and early implant for the detection of breast cancer is breast self-examination. It is one of the simplest and most important health programmes to promote early detection. Regular breast self-examination can identify any abnormal changes in breast to establish good prognosis. If the young groups of women are targeted with accurate information and encouragement they will learn to examine themselves and detect every minute changes early in their later life.

STATEMENT OF THE PROBLEM

“A STUDY TO ASSESS EFFECTIVENESS OF EDUCATIONAL INTERVENTION ON KNOWLEDGE REGARDING BREAST SELF EXAMINATION AMONG TRIBAL WOMEN LIVING IN SELECTED AREAS OF DADRA AND NAGAR HAVELI.”

OBJECTIVES OF THE STUDY

The objectives of the study were to,

- Assess the pre – test and post test level of knowledge regarding breast self examination among tribal women.
- Evaluate the effectiveness of education intervention on level of knowledge regarding breast self examination among tribal women.
- Associate the level of pre-test knowledge score regarding self breast examination among tribal women with their selected demographic variables.

HYPOTHESIS

Null hypothesis

H₀₁: There is no any significant difference in the knowledge score regarding self breast examination among women before and after administration of educational intervention at 0.05 level of significance.

H₀₂: There is no any significant association between the levels of knowledge among women on breast self examination and their selected socio-demographic variables at 0.05 level of significance.

Research hypothesis

H₁: There is significant difference in the knowledge score regarding self breast examination among women before and after administration of educational intervention at 0.05 level of significance.

H₂: There is significant association between the levels of knowledge among women on breast self examination and their selected socio-demographic variables at 0.05 level of significance.

METHODOLOGY

Study Design: Pre experimental one group pre test post test research design

Research Setting: The study was conducted in selected areas (Sayli, Baldevi, Rakholi, Kudacha) of Dadra, and Nagar Haveli.

Population: In the present study the target population includes tribal women of selected areas (Sayli, Baldevi, Rakholi, Kudacha) of Dadra and Nagar Haveli and accessible population refers to women age group 15-49 years residing in tribal areas of Dadra and Nagar Haveli.

Sample Size: 100 tribal women residing in selected areas of Dadra and Nagar Haveli.

Inclusion criteria:

the study include women who are:-

- willing to participate in the study.
- in the age group between 15-49 years.
- available at home
- able to understand Hindi and Gujarati.

Exclusion criteria:

The study excludes women:-

- Women who had been diagnosed as having breast cancer and had undergone mastectomy.
- women who are not available at home.

Tool Description:

Data collection tool

Section I: Demographic and Clinical Variables

Section II: Structured knowledge questionnaire on breast self examination

DATA ANALYSIS AND INTERPRETATION

PART 1A: PERCENTAGE DISTRIBUTION OF TRIBAL WOMEN ACCORDING TO THEIR SOCIO- DEMOGRAPHIC VARIABLES

Sr.No	Socio demographic Variables	Frequency	Percentage (%)
1.	Age (in years)		
	15-21	10	10
	22-28	32	32
	29-35	13	13
	36-42	25	25
	43-49	20	20
2.	Education qualification		
	No formal education	26	26
	Primary education	27	27
	High secondary education	25	25
	Higher secondary education	16	16
	Diploma	6	6
	Graduate	0	0
3.	Monthly income of the family in Rs/-		
	≤ 9307/-	31	31
	9308 – 27882/-	60	60
	27883 – 46474/-	7	7
	46475 – 69534/-	2	2
	69535 – 92950/-	0	0
	92951 – 185894/-	0	0
	≥ 185895/-	0	0
4.	Religion		
	Hindu	100	100
	Muslim	0	0
	Christian	0	0
	Any other (Specify)	0	0
5.	Marital status		
	Married	76	76
	Unmarried	20	20
	Divorcee	0	0
	Widow	4	4
6.	Occupation		

	Homemaker	64	64
	Govt.employee	14	14
	Private employee	17	17
	Self employee/ business	0	0
	Any Other (Specify)	5	5
7.	Structure of family		
	Joint family	72	72
	Nuclear family	28	28
	Extended family	0	0

PART 1B: PERCENTAGE DISTRIBUTION OF TRIBAL WOMEN ACCORDING TO THEIR CLINICAL VARIABLES

Sr.No.	Clinical Variables	Frequency	Percentage (%)
1.	Age at menarche		
	< 12 years	30	30
	12-15 years	66	66
	>16 years	4	4
2.	Number of children		
	1 child	16	16
	2 and above	58	58
	No child	26	26
3.	Family history of breast cancer		
	Yes	0	0
	No	100	100
4.	Previous knowledge of breast self examination		
	Yes	0	0
	No	100	100

PART 2: ASSESSMENT OF PRE- TEST AND POST -TEST LEVEL OF KNOWLEDGE REGARDING BREAST SELF EXAMINATION.

SR.NO	LEVEL OF KNOWLEGE (SCORE)	PRE TEST		POST TEST	
		Freq	%	Freq	%
1	Poor Knowledge	77	77	1	1
2	Fair Knowledge	23	23	28	28
3	Good Knowledge	0	0	71	71
	TOTAL	100	100	100	100

The above table depicts the frequency percentage of pre test and post test level of knowledge of tribal women on breast self examination after implementing educational intervention. It shows that in pre test, the maximum number of tribal women 77% had poor knowledge on breast self examination and 23% of tribal women had Fair knowledge on breast self examination. In post-test , the maximum number of tribal women 71% had good knowledge and 28%of tribal women had Fair knowledge , 1% women has Poor knowledge on breast self examination. It shows that educational intervention is enhanced the level of knowledge of tribal women.

PART3: KNOWLEGE COMPONENT WISE ASSESSMENT OF PRE- TEST AND POST –TEST LEVEL OF KNOWLEDGE OF REGARDING BREAST SELF EXAMINATION.

Component	Max Mark	PRE TEST			POST TEST		
		Mean	SD	Mean %	Mean	SD	Mean %
1.General aspects	5	1.6	1.206	32%	4.12	0.90207	82.4%
2.Steps and Guidelines for BSE	8	2.11	1.54	26.375%	6.35	1.33617	79.375%
3.Brest Cancer	7	1.92	1.41	27.43%	5.74	1.1944	82%

Table shows that mean score of the post test was greater than the mean score of the pre test score in all component of the breast self examination.

PART4: : EFFECTINESS OF EDUCATIONAL INTERVENTION REGARDING LEVEL OF KNOWLEDGE ON BREST SELF EXAMINATION

Component	Pre test mean	Post test mean	Mean difference	't' Value	df	p-value
1.General aspects	1.6	4.12	2.54	18.34	99	<0.00001 S
2.Steps and Guidelines for BSE	2.11	6.35	4.24	22.87	99	<0.00001 S
3.Brest Cancer	1.92	5.74	3.77	21.6	99	<0.00001 S
Overall	5.68	16.49	10.81	27.870	99	0.000 S

S= Significant at 0.05 level

The table depicts the mean post test scores of knowledge regarding breast self examination 16.49of the group were higher than mean pre test score of knowledge regarding breast self examination 5.68. The obtained standard deviation of knowledge regarding breast self examination during post test 2.2087 and he pre test standard deviation was 3.39304. Effectiveness of educational intervention regarding level of knowledge of tribal women on breast self examination which was calculated by paired t test. The

obtained 't' value is ($t(99, 0.05) = 27.870, 0.000; p < 0.05$) significant. It shows that educational intervention was effective in increasing the knowledge of tribal women regarding breast self examination.

PART 5: ASSOCIATION BETWEEN THE PRE TEST LEVEL OF KNOWLEDGE AND SELECTED SOCIO- DEMOGRAPHIC VARIABLES.

n=100

Sr. no.	Demographic variables	level of knowledge		Chi square value (χ^2)	df	p value
		Poor	Average			
1.	Age					
	15-21	7	3	10.974 [t=9.49]	4	0.027S
	22-28	19	13			
	29-35	10	3			
	36-42	23	2			
	43-49	18	2			
2.	Education qualification					
	No formal education	26	0	51.685 [t=9.49]	4	0.000 S
	Primary education	24	3			
	High secondary education	22	3			
	Higher secondary education	2	14			
	Diploma	3	3			
3.	Monthly income of the family in Rs/-					
	≤ 9307/-	30	1	10.886 [t=5.99]	4	0.012S
	9308 – 27882/-	42	18			
	27883 – 46474/-	4	3			
	46475 – 69534/-	1	1			
4.	Marital status					
	Married	62	14	4.172 [t=5.99]	2	0.124 NS
	Unmarried	12	8			
	Widow	3	1			
5.	Occupation					
	Homemaker	52	12	2.351 [t=7.82]	3	0.503 NS
	Govt. employee	9	5			
	Private employee	12	5			
	Any Other (Specify)	4	1			
6.	Structure of family					
	Joint family	55	17	0.054 [t=3.84]	1	0.816 NS
	Nuclear family	22	6			
7.	Age at menarcho					
	< 12 years	22	8	1.425	2	0.490 NS
	12-16 years	51	15			

	>16 years	4	0	[t=5.99]		
8.	Number of children					
	1 child	11	5			
	2 and above	48	10	2.587	2	0.274 NS
	No child	18	8	[t=5.99]		

S= Significant at 0.05 level, NS = Non Significance

Table shows that association between the pre test level of knowledge and selected socio- demographic variables which was assessed by chi-square test.

The chi square value of ($\chi^2(10.974, 0.027)$) showed that there was a significant association of age and pre test level of knowledge after information education communication package at the level of $p < 0.05$.

With regard to the education status, chi square value of ($\chi^2 = 51.685, 0.00$) showed that there was significant at the level of $p < 0.01$. In concern with the family monthly income chi square value of ($\chi^2 = 10.886, 0.012$) was significant at the level of $p < 0.05$.

There was no significant association was found with other demographic variables such as structure of family, age of attaining menarche, number of children, religion, marital status, occupation.

DISCUSSION

The analyses of knowledge score on breast self examination among tribal women in pre test post test disclosed that in pre test the maximum number of tribal women 77% had inadequate knowledge on breast self examination and 23% of tribal women had moderately adequate knowledge on breast self examination. In post-test, the maximum number of tribal women 71% had good knowledge and 28% of tribal women had moderately knowledge, 1% women has inadequate knowledge on breast self examination. It shows that educational intervention is enhanced the level of knowledge of tribal women.

Effectiveness of educational intervention was assessed by the inferential statistics. A paired' test was computed and results are shown below:

The findings of the study reveals that the obtained "t" value is ($t(99, 0.05) = 27.870, 0.000; p < 0.05$) significant. It shows that educational intervention was effective in increasing the knowledge of tribal women regarding breast self examination. Hence, the research hypothesis accepted at 0.05 level of significance

The findings are supported by a similar pre experimental pre test post test research which was conducted on to assess the effectiveness of educational intervention programme regarding breast self examination among girl student of study school, in total 61 girls were included. the result showed that in pre test 75.4% had inadequate and only 1.6 % had adequate knowledge regarding breast self examination, In contrast after the intervention the adequate knowledge was increased to 62.3% .the overall mean score was

increased from 33.07% to 85.14%.the test of significance revealed that the increment in BSE knowledge score due to program intervention was highly significant ($p < 0.001$).

The chi square value of ($\chi^2 = 10.974$) showed that there was a significant association of age and pre test level of knowledge after information education communication package at the level of $p < 0.05$. With regard to the education status, chi square value of ($\chi^2 = 51.685$) showed that there was significant at the level of $p < 0.01$. In concern with the family monthly income chi square value of ($\chi^2 = 10.886$) was significant at the level of $p < 0.05$. There was no significant association was found with other demographic variables such as structure of family, age of attaining menarche, number of children, religion, marital status, occupation. Present study finding shows that there is no statistical chi square calculation for demographic variable such as religion, family history of breast cancer and previous knowledge of breast self examination because of these all data are constant.

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