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" A STUDY TO EVALUATE THE EFFECTIVENESS OF PLANNED TEACHING PROGRAMME ON KNOWLEDGE REGARDING IMPORTANCE OF PAP SMEAR TEST FOR EARLY DETECTION OF CERVICAL CANCER AMONG WOMEN OF SELECTED COMMUNITY AREAS IN AHMEDABAD, GUJARAT "

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ABSTRACT

BACKGROUND

Worldwide cervical cancer is the second most common cancer in women, however in developing countries. In India 74,000 deaths occurs in each year due to cervical cancer.

OBJECTIVES OF THE STUDY

1) To assess the pre-test score of knowledge regarding importance of Pap smear test for early detection for cervical cancer among women in selected community areas in Ahmedabad, Gujarat.
2) To assess the post-test score of knowledge regarding importance of Pap smear test for early detection for cervical cancer among women in selected community areas in Ahmedabad, Gujarat.
3) To evaluate the effectiveness of planned teaching programmed on knowledge among women in selected community areas in Ahmedabad, Gujarat.
4) To find the association between pre-test score and selected demographic variables of women in selected community areas in Ahmedabad, Gujarat.

METHODS

Pre experimental approach was used with one group Pre-test and Post-test design. The investigator used convenient sampling technique for selecting 60 samples. A structured knowledge questionnaire to assess the knowledge of samples. The reliability of the structured knowledge questionnaire was determined by 'test retest method' and using 'Karl Pearson's correlation co-efficient formula'. Descriptive and inferential statistics was used to analysed the data.

RESULTS

In the age majority of the sample 23 (38.3%) belong to the age group of 30-35 years, In the religion majority of the sample 41 (68.3%) belong to the Hindu, In the occupation majority of

samples 33 (55.0%) were housewife, In the type of family majority of samples 41 (78.3%) belong to joint family, In the marital status majority of sample 56 (93.3%) were married, In the education level majority of the samples 24 (40.0%) were primary education, In the heard about pap smear test majority of the sample 53 (88.3%) have no idea about the pap smear test, In the family history of the cancer majority of the sample 53 (88.3%) have no any family history of the cancer, In the age of menarche majority of the sample 20 (33.3%) were age group of 10-12 years, In the no. of children majority of sample 26 (43.3%) were 2 children.

The mean Pre-test knowledge score of sample regarding was 12.74, whereas mean of Post-test knowledge score was 21.49 with a mean difference of 8.76 and SD Pre-test was 3.13 and Post-test was 2.31. The calculated‘t’ value 36.517 was greater than tabulated‘t’=2.00 which is statistically proved at 0.05 level of significance. It revealed that the planned teaching programme was effective in increasing knowledge among the samples. The association between the pre-test knowledge score and demographic variables was tested by using chi square. There was significant association found in age of menarche and heard about Pap smear test.

CONCLUSION

This indicates that the planned teaching programme was effectiveness to enhance the level of knowledge regarding importance of Pap smear test for early detection of cervical cancer among women.

KEY WORD

Early detection of cervical cancer, Pap smear test, Effectiveness of planned teaching programme, women

INTRODUCTION

In the early nineties when revolution was occurring in health care system throughout the world, India was facing a lot of death due to communicable disease. However after independence, the government of India took lot of measures to improve the life expectancy of Indian population, these measures gave fruitful results by showing a massive control I mortality due to communicable disease. In modern era where urbanization, industrialization, lifestyle changes and population growth etc. are influencing the disease pattern, we can see a paradigm shift from communicable disease to non-communicable disease like cancer, diabetes and hypertension. Recent time have seen an increase in the incidence of cancer.

Worldwide, cervical cancer is the second most common cancer in women, however, in developing countries, it is the most common cancer among women. According to the International Agency for Research on Cancer (IARC), and India has the highest number of cervical cancer cases in the world. There are an estimated 1,32,000 new cases and 74,000 deaths each year which occur due to cervical cancer in India. India bears about one fifth of the world’s burden of cervical cancer, and >100,000 new cases are detected every year in India, which causes 20% of all female deaths in India. Cervical cancer and its mortality have been proven preventable by various screening and treatment strategies aimed at sexually active women. The number of cervical cancer cases diagnosed increasing day by day.

By 2030, cervical cancer is expected kill over 474,000 women per year and over 95% of these deaths are expected to be in low and middle income countries. India has a population of 366.58 millions women ages 18 years and older who are at risk of developing cervical cancer. Current estimates indicate that every year 1,34,420 women are diagnosed with cervical cancer and 72,825 die from the disease. The incidence is higher in the rural population where the majority of women are socio-economically disadvantaged, with no formal education and no awareness of the risk factors associated with development of the disease.

Cervical cancer is a deadly disease once it reaches the invasive stages, but out of all the female genital tract cancer, it is the only preventable cancer if detected at its early stages. Population based screening with Pap smear is an important secondary preventive measure for cervical cancer that leads to a high-cure rate among cervical cancer patients. The facilities to carry out Pap smear are available in the institute where the study has been carried out.

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1. ANALYSIS AND INTERPRETATION OF DEMOGRAPHICVARIABLES OF THE SAMPLES

Sr. No.	Demographic Variables		Frequency	Percent
1	Age (Years)	30-35	23	38.3
		36-40	14	23.3
		41-45	12	20.0
		46 & Above	11	18.3
		Total	60	100.0
2	Religion	Hindu	41	68.3
		Muslim	15	25.0
		Other	4	6.7
		Total	60	100.0
3	Occupation	Housewife	33	55.0
		Private job	11	18.3
		Daily wage	14	23.3
		Garah udhyog	2	3.3
		Total	60	100.0
4	Type of family	Joint family	47	78.3
		Nuclear family	13	21.7
		Total	60	100.0
5	Marital status	Married	56	93.3
		Unmarried	1	1.7

		Divorce	1	1.7
		Widow	2	3.3
		Total	60	100.0
6	Education level	Primary	24	40.0
		Secondary & higher secondary	23	38.3
		Graduate	12	20.0
		Post graduate	1	1.7
		Total	60	100.0
7	Heard about pap smear test	YES	7	11.7
		NO	53	88.3
		Total	60	100.0
8	Family history cancer	YES	7	11.7
		NO	53	88.3
		Total	60	100.0
9	Age of menarche	7-9 year	10	16.7
		10-12 year	20	33.3
		13-15 year	19	31.7
		15 above	11	18.3
		Total	60	100.0
10	No. of children	0	4	6.7
		1	17	28.3
		2	26	43.3
		3 or More	13	21.7
		Total	60	100.0

Table 1. shows that the distribution of samples by age, majority of the samples23 (38.3%) belong to the age group of 30-35 years, 14 (23.3%) samples belong to the age group of 36-40 years, 12 (20.0%) belong to the age group of 41-45 years and 11 (18.3%)belong to the age group of 46 & above years. Distribution of sample according to religion, majority of the samples 41 (68.3%) sample belongs to the Hindu religion, 15 (25.0%) sample belongs to the Muslim religion and 4 (6.7%) sample belong to the other religion. Distribution of sample by occupation, majority of samples 33 (55.0%) were housewife, 11 (18.3%) sample were private job, 14 (23.3%) sample were daily wages and 2 (3.3%) sample were garah udhyog. Distribution of the sample according to type of family, majority sample belong to joint family 41 (78.3%) and 13 (21.7%) sample belong to nuclear family. Distribution of the sample by marital status, majority sample 56 (93.3%) were married, only 1 (1.7%) sample were unmarried and divorce and 2 (3.3%)sample were widow. Distribution of the sample by education level, majority of the samples 24 (40.0%) sample were primary education, 23 (38.3%) sample were secondary & higher secondary education, 12 (20.0%) sample were graduate and only 1 (1.7%) sample were post graduate. Distribution of the sample by heard about pap smear test, majority of the sample 53 (88.3%) have no idea about the pap smear test, only 7 (11.7%) have heard about the pap smear test. As about the family history of the cancer, majority of the sample 53 (88.3%) have no any family history of the cancer, only 7 (11.7%) have the family history of the cancer. Distribution of the samples according to age of menarche, 10 (16.7%) were age group of 7-9 years, majority of the sample 20 (33.3%) were age group of 10-12 years, 19 (31.7%) were age group of 13-15 years and 11 (18.3%) were age group of 15 years above. Distribution of the samples by no. of children, 4 (6.7%) sample were 0 child, 17 (28.3%) sample were 1 child, majority sample 26 (43.3%) sample were 2 children and 13 (21.7%) sample were 3 or more children.

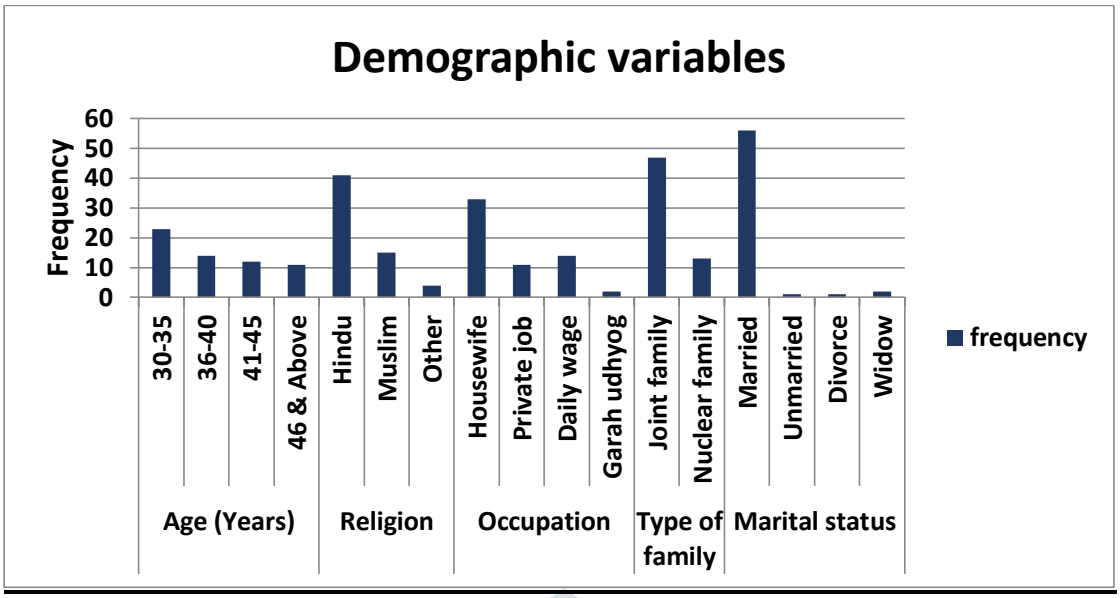

FIGURE: 1 BAR GRAPH SHOWING THE DEMOGRAPHIC DISTRIBUTION OF THE SAMPLES

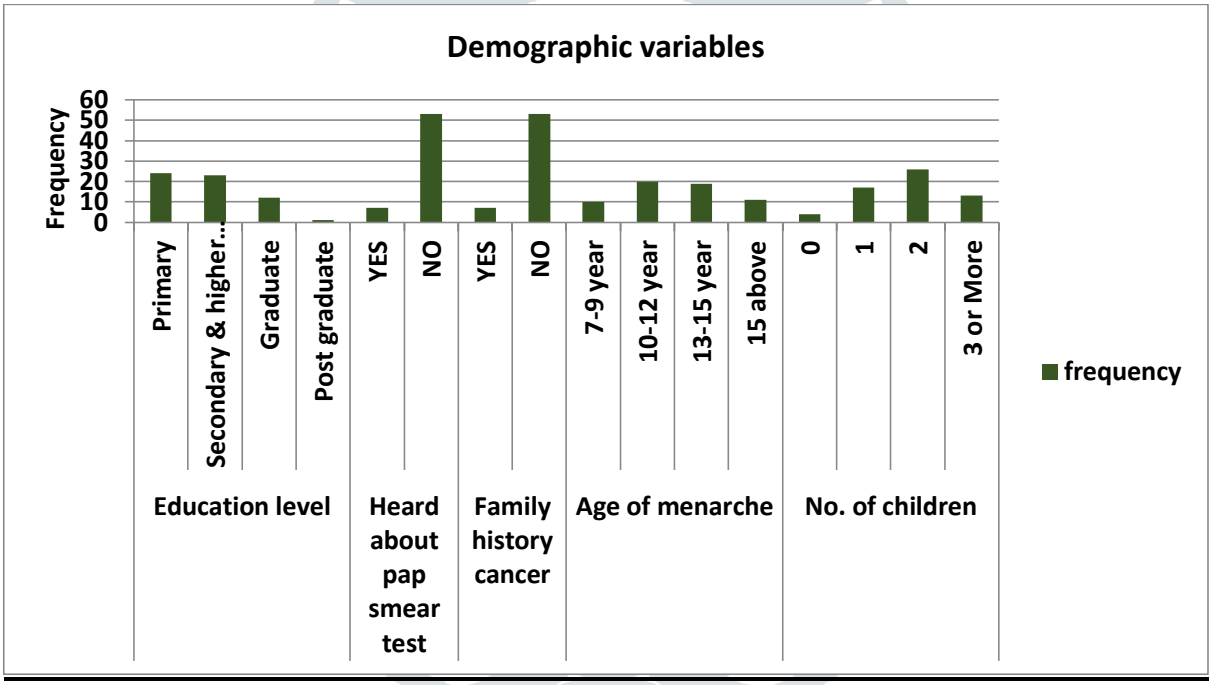

FIGURE: 2 BAR GRAPH SHOWING THE DEMOGRAPHIC DISTRIBUTION OF THE SAMPLES

2. ANALYSIS AND INTERPRETATION OF THE DATA RELATED TO THE KNOWLEDGE OF THE SAMPLES BEFORE AND AFTER ADMINISTRATION OF THE PLANNED TEACHING PROGRAMME.

Sr no.	Area of content	Max score	Pre test score		Post test score		Gain %	Mean difference
			Mean	%	Mean	%		
1	Related to cervix	2	0.87	43.33	1.82	90.83	47.5	0.95
2	Related to cervical cancer	10	5.00	50.00	7.62	76.17	26.17	2.62
3	Related to pap smear test	18	6.87	38.15	12.05	66.94	28.79	5.18
	Total	**30**	**12.74**	**43.82**	**21.49**	**77.98**	**34.15**	**8.76**

Table 2. Shows that the mean pretest knowledge score of related to cervix was 0.87 and the mean post test score was 1.82 with a mean difference of 0.95. The mean pretest knowledge score of related to cervical cancer was 5.00 and the mean post

test score was 7.62 with a mean difference of 2.62. The mean pretest knowledge score of related to Pap smear test was 6.87 and the mean post test score was 12.05 with a difference of 5.18.

The above table shows that percentage gain in the area related to cervix was 47.5. In the area related to cervical cancer was 26.17. In the area related to Pap smear test was 28.79.

So, the investigator conclude that there was a significant increase in the mean posttest knowledge as compared to the mean pretest knowledge score of samples after the administration of the planned teaching programme.

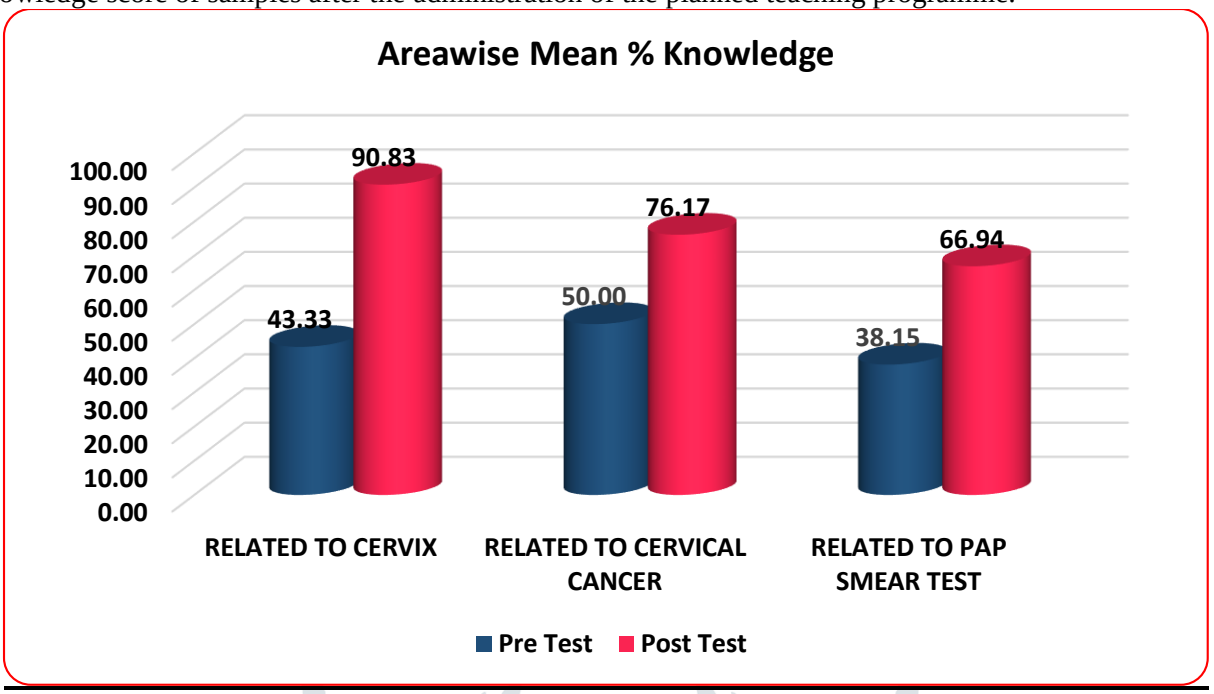

FIGURE:3 BAR GRAPH SHOWING THE DISTRIBUTION OF AREA WISE KNOWLEDGE OF THE SAMPLES

Table 3. Level of knowledge before and after administration of Planned Teaching Programme.

LEVEL OF KNOWLEDGE	PRE-TEST		POST-TEST	
	Frequency	Percentage %	Frequency	Percentage %
POOR (1-10)	20	33.33	0	0.00
AVERAGE(11-20)	40	66.67	20	33.33
GOOD(21-30)	0	0.00	40	66.67
TOTAL	60	100.00	60	100.00

Table 3.shows the total 40 (66.67%) of the samples had Average, 20 (33.33%) of the sample had Poor and 0 (0%) sample had good knowledge in pre-test knowledge score. Whereas 20 (33.33%) samples had Average, 40 (66.67%) samples had Good, and 0 (0%) samples had poor knowledge in post-test knowledge score regarding importance of Pap smear test for early detection of cervical cancer. Thus, the researcher concluded that a Planned Teaching Programme was effective in gaining knowledge regarding importance of Pap smear test for early detection of cervical cancer.

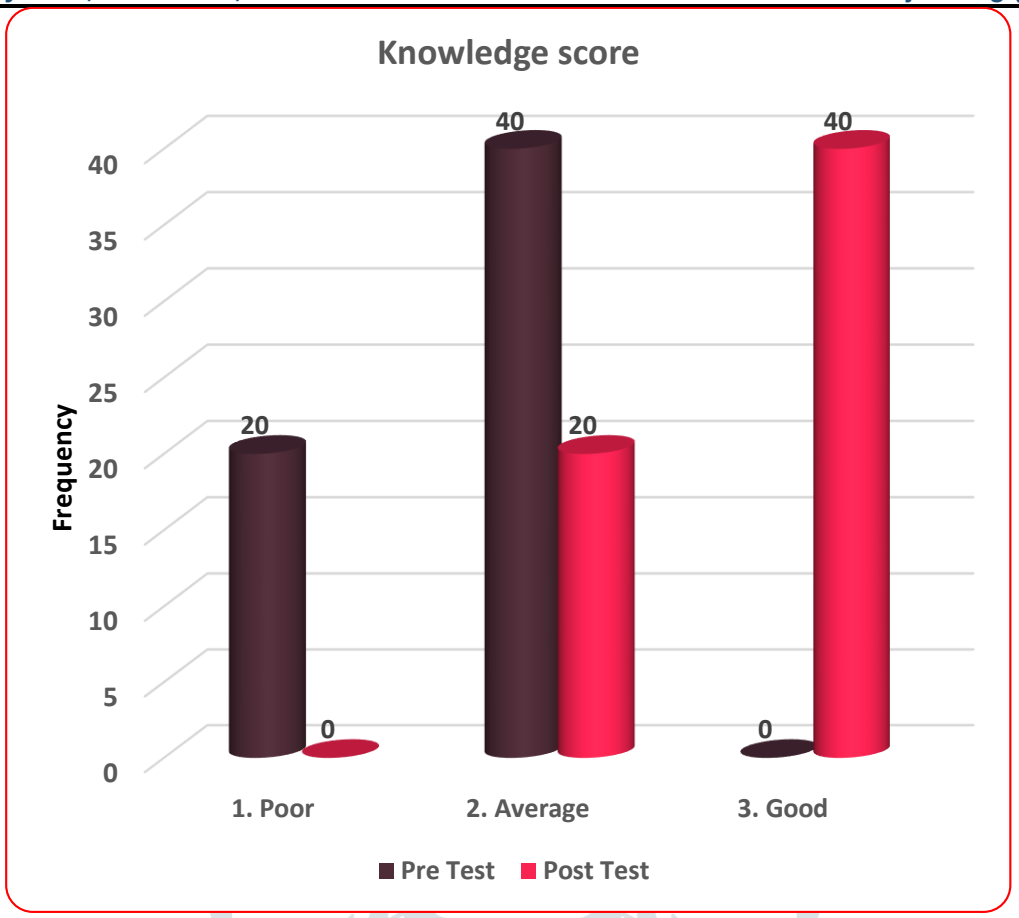

FIGURE: 4 BAR GRAPH SHOWING THE DISTRIBUTION OF LEVEL OF KNOWLEDGE SCORE

TABLE 4. Mean, Mean Difference, Standard Deviation (SD) and 't'test value ofthe pre-test and post-test knowledge score of the samples. (N=60)

Knowledge test	Mean	StandardDeviation	't'	DF	TableValue	Sig/ Non-Sig
PRE-TESTTOTAL SCORE	12.73	3.13	36.517	59	2.00	Sig
POST-TESTTOTAL SCORE	21.48	2.31				

Table 4. shows the comparison between pre-test and post-test knowledge scores obtained by the respondents regarding importance of pap smear test for early detection of cervical cancer among women in selected community area at Ahmedabad. The mean pre-test score was 12.73 and the mean post-test score was 21.48. The mean difference betweenpre-test and post-test knowledge scores is 8.75. The table was also showing that the standard deviation (SD) of mean difference for pre-test is 3.13 and for post-test is 2.31 The "t" test value is 36.517 and the tabulated 't' value is 2.00 at a 0.05 level of significance. The Bar graph reveals that the mean post-test knowledge score was significantly higher than the mean pre-test knowledge score. The calculated 't' value was greater than the tabulated 't' value. Therefore, the null hypothesis H0 was rejectedand research hypothesis H1 was accepted and it reveals that a Planned Teaching Programme was effective in terms of knowledge among the samples. The Researcher concludes that there was a significant increase in the mean post-test knowledge score as compared to the mean pre-test knowledge score after the administration of a Planned Teaching Programme.

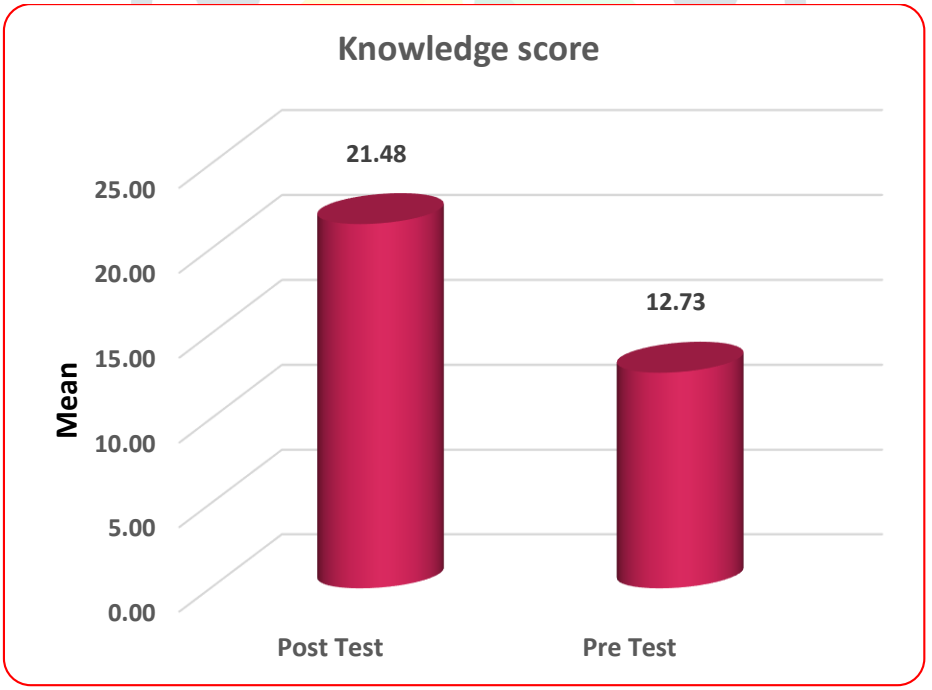

FIGURE:5 BAR GRAPH SHOWING THE COMPARISON OF POST TEST AND PRE TEST MEAN SCORE

5. ANALYSIS AND INTERPRETATION OF THE DATA RELATED TO ASSOCIATION OF DEMOGRAPHIC VARIABLESWITH PRE-TEST KNOWLEDGE SCORE.

(N=60)

Sr No.	Demographic Variables		Pre Test		Total	Chi square	DF	Table value	Sig & non sig.
			1. Poor	2. Average					
1	**Age (Years)**	30-35	8	15	23	1..569	3	7.82	non significant
		36-40	5	9	14				
		41-45	5	7	12				
		46 & Above	2	9	11				
2	**Religion**	Hindu	14	27	41	0.137	2	5.99	non significant
		Muslim	5	10	15				
		Other	1	3	4				
3	**Occupation**	Housewife	13	20	33	2.075	3	7.82	non significant
		Private job	2	9	11				
		Daily wage	4	10	14				
		Garah udhyog	1	1	2				
4	**Type of family**	Joint family	17	30	47	0.786	1	3.84	non significant
		Nuclear family	3	10	13				
5	**Marital status**	Married	20	36	56	2.143	3	7.82	non significant
		Unmarried	0	1	1				
		Divorce	0	1	1				
		Widow	0	2	2				
6	**Education level**	Primary	11	13	24	3.106	3	7.82	non significant
		Secondary & higher secondary	6	17	23				
		Graduate	3	9	12				
		Post graduate	0	1	1				
7	**Heard about pap smear test**	YES	0	7	7	3.962	1	3.84	Significant
		NO	20	33	53				
8	**Family history cancer**	YES	2	5	7	0.81	1	3.84	non significant
		NO	18	35	53				
9	**Age of menarche**	7-9 year	7	3	10	7.838	3	7.82	Significant
		10-12 year	5	15	20				
		13-15 year	6	13	19				
		15 above	2	9	11				
10	**No. of children**	0	0	4	4	5.298	3	7.82	non significant
		1	7	10	17				
		2	11	15	26				
		3 or More	2	11	13				

Table 5. shows Age group with the pre-test knowledge scores, the calculatedvalue of chi-square 1.569 was less than 7.82, the table value of chi-square at the 3 degree of freedom and 0.05 level of significance. Therefore, age was non-significant for the knowledge of the samples. Under the religion of samples with pre-test knowledge scores, the calculated value of chi-square 0.137 was less than 5.99

the tablevalue of chi-square at the 2 degree of freedom and 0.05 level of significance. Therefore,the religion of samples was non-significant for the knowledge of the samples. Under the occupation of samples with pre-test knowledge scores, the calculated value of chi-square 2.075 was less than 7.82 the tablevalue of chi-square at the 3 degree of freedom and 0.05 level of significance. Therefore,the religion of samples was non-significant for the knowledge of the samples. Under the type of family of samples with pre-test knowledge scores, the calculated value of chi-square 0.786 was less than 3.84 the tablevalue of chi-square at the 1 degree of freedom and 0.05 level of significance. Therefore,the type of family of samples was non-significant for the knowledge of the samples. Under the marital status of samples with pre-test knowledge scores, the calculated value of chi-square 2.143 was less than 7.82 the tablevalue of chi-square at the 3 degree of freedom and 0.05 level of significance. Therefore,the marital status of samples was non-significant for the knowledge of the samples. Under the education level of samples with pre-test knowledge scores, the calculated value of chi-square 3.106 was less than 7.82 the tablevalue of chi-square at the 3 degree of freedom and 0.05 level of significance. Therefore,the education level of samples was non-significant for the knowledge of the samples. Under the heard about the pap smear test of samples with pre-test knowledge scores, the calculated value of chi-square 3.962 was more than 3.84 the tablevalue of chi-square at the 1 degree of freedom and 0.05 level of significance. Therefore,the heard about the pap smear test of samples was significant for the knowledge of the samples. Under the family history of the cancer of samples with pre-test knowledge scores, the calculated value of chi-square 0.81 was less than 3.84 the tablevalue of chi-square at the 1 degree of freedom and 0.05 level of significance. Therefore,the family history of the cancer of samples was non-significant for the knowledge of the samples. Under the age of menarche of samples with pre-test knowledge scores, the calculated value of chi-square 7.838 was more than 7.82 the tablevalue of chi-square at the 3 degree of freedom and 0.05 level of significance. Therefore, the age of menarche of samples was significant for the knowledge of the samples. Under the no. of children of samples with pre-test knowledge scores, the calculated value of chi-square 5.298 was less than 7.82 the tablevalue of chi-square at the 3 degree of freedom and 0.05 level of significance. Therefore,the no. of children of samples was significant for the knowledge of the samples.

DISCUSSION

The present study was conducted to evaluate the effectiveness of a planned teaching programme on knowledge regarding importance of pap smear test for early detection of cervical cancer among women in selected community area in Ahmedabad. The researcher has collected the samples by the Non-Probability Convenient Sampling Technique. The researcher has collected the data by using a structured knowledge questionnaire to evaluate the knowledge regarding importance of pap smear test for early detection of cervical cancer among women in selected community area in Ahmedabad.

The data identified from the present study shows that the mean pre-test knowledge score **12.42**. These findings indicate the need to develop a planned teaching Programme. In the present study, the investigator has developed a planned teaching Programme and administered to the women in selected communityarea in Ahmedabad, to improve their knowledge regarding importance of pap smear test for early detection of cervical cancer. After administration of structured teaching programme mean post-test knowledge score **21.67**.

In connection with the above, the study was undertaken with the main objectiveof evaluating the knowledge regarding importance of pap smear test for early detection of cervical cancer among women in selected community area in Ahmedabad.

CONCLUSION

Analysis and interpretation of data collected from 60 samples, before and after administration of a Planned Teaching Programme in terms of knowledge regarding importance of pap smear test for early detection of cervical cancer among women in selected community area in Ahmedabad. Descriptive and inferential statistical methods were used to analyze the data. The mean post-test knowledge score was higher than the mean pre-test knowledge score. The Significance of the difference between pre-test and post knowledge scores was statistically tested using paired ‘t’ test and it was found significant.

Hence it was proved that the Planned Teaching Programme was effectiveness in increasing knowledge regarding importance of pap smear test for early detection of cervical cancer among women inselected community area in Ahmedabad. There was a significant association between heard about pap smear test, age of menarche and pre-test knowledge score.

Hence it was concluded that there is no significant association between demographic variable age, religion, occupation, type of family, marital status, education level, family history of the

cancer, no. of children and pre-test knowledge score.

CONSENT FROM PUBLICATION

Written consent for publication was obtained from each participate.

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