



"Effectiveness of Health Awareness Educational Programme on Knowledge and Attitude Towards Cervical Cancer among Women from Rural Area of Didwana Dist. Nagaur, Rajasthan."

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Abstract

Background: Cervical cancer ranks as the second most cause of female cancer deaths in India and is the second leading cause of cancer deaths in women aged 15 to 44 years in India. About 87% cervical cancer deaths occur in less developed regions. In India, it is assessed that there are 96,922 new cervical disease cases (9.19%) with an age-standardized incidence rate of 14.7/10⁵ (higher than the rates observed in many other countries across the globe) and 60,078 cervical cancer deaths (8.4%) with a mortality rate of 9.2/10⁵. **Material & Methods:** A quasi-experimental research design with pre and post-test as well as control group was used to assess Effectiveness of health awareness Educational Programme on knowledge and attitude towards cervical cancer among women from rural area of Didwana Dist. Nagaur, Rajasthan. The sample size consist 400 as 200 for case and 200 for control group. **Results:** Mean Value and Standard deviation of Pre-test knowledge among Experimental group is 14.7750 and 2.26717 while among control group is 14.4700 and 2.58116. In post-test, mean score of experimental group was 26.8450 and mean score of control group was 14.7450. **Discussion & Conclusions:** This study revealed that demographic variables such as age, religion, marital status, number of children, type of family, educational status, monthly family income, previous knowledge on cervical cancer, sources of information on cervical cancer and family history of cervical cancer have direct association with risk of cervical cancer. Our results also revealed that Awareness campaigns accompanied by state-wide and national level screening efforts are necessary to address the heavy burden of this disease in India. Simultaneously, the capacity of health systems across urban and rural India must also be built up in order to sufficiently and effectively screen and treat the women.

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Keywords Effectiveness, health awareness Educational Programme, knowledge and attitude, cervical cancer, women from rural area.

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INTRODUCTION

Wellbeing is a condition of complete physical, mental and social prosperity and not just a shortfall of illness or infirmity¹. Actual wellbeing is basic for by and large prosperity and is the most noticeable of the different elements of wellbeing. Wellbeing envelops profound dependability, unwavering discernment, the capacity to cherish, makes embrace change, practice instinct and experience a proceeding with feeling of spirituality. Disease is a type of internal state which is either an impairment of normal functional ability, i.e. a reduction in one or more functional abilities below typical efficiency, or a limitation on functional ability caused by environmental agents².

Women's health is a unique specialty of health care. Women are becoming more and more aware of their health status as a result of modern education, electronics, print media and health agencies. While women have made progress in most of the fields but still they tend to inexplicably neglect their own health. Though in present age women are aware of their problems, their readiness to seek help from the health personnel is hindered by economic constraints, social stigma and rigid superstitious beliefs regarding health problems³.

Reproductive wellbeing includes every one of the conceptive cycles, capabilities and frameworks at all phases of human existence. Reproductive health is a widespread concern, yet is of exceptional significance for ladies especially during the regenerative years. Reproductive health is a principal part of an individual's overall general wellbeing status and a focal determinant of quality of life^{4,5}.

Cervical disease is the term for a dangerous neoplasm emerging from cells beginning in

the cervix uteri. One of the most well-known side effects of cervical malignant growth is unusual vaginal bleeding, however in some cases there might be no conspicuous side effects until the disease has advanced to a high level stage.^{6,7}

A report from united nation world population prospects indicated a shift in demographic profile from 45 yrs. in 1971 to 64 years in 2005-2010. It is assessed that life expectancy of the Indian populace will increment to 70 years by 2021-25. A cervical malignant growth counteraction and control program includes a coordinated arrangement of exercises pointed toward forestalling and decreasing morbidity, mortality from cervical disease. It is essential for the need activities as expressed in the Global activity plan for the anticipation and control of NCDs 2013-2020. A comprehensive programme includes the principal evidence-based interventions needed to reduce the high and unequal burden imposed on women and health systems in less developed countries by cervical cancer.⁸

Cervical cancer ranks as the second most cause of female cancer deaths in India and is the second leading cause of cancer deaths in women aged 15 to 44 years in India. About 87% cervical cancer deaths occur in less developed regions. The estimation of new cancer cases, by major states of India, reveals that burden is very high, in those states which are highly populous. Almost 41.3% of diseases found in Indian females are accounted by malignant growth of cervix and cervix alone. The evaluations of disease cervix rate would increase from 96,156 cases (0.096 million) to 1,48,813 (0.148 million) cases during 2011 to 2026. India has a populace of 432.20 million ladies matured 15 years and more established who are in danger creating cervical disease. Current estimates demonstrate that consistently per year 1,22,844 ladies are determined to have



cervical malignant growth and 67,477 dies from this sickness.^{9,10,11}

In India, it is assessed that there are 96,922 new cervical disease cases (9.19%) with an age-standardized incidence rate of 14.7/10⁵ (higher than the rates observed in many other countries across the globe) and 60,078 cervical cancer deaths (8.4%) with a mortality rate of 9.2/10⁵. The occurrence paces of malignant growth cervix inside India showed variety. The occurrence rates for cervical malignant growth in significant Indian disease vaults are, 15.3 in Bengaluru (2012), 16.1 in Barshi (2012-2014), 15.9 in Chennai (2012-2013), and 19.0 in Mumbai (2012).^{12,13}

MATERIAL & METHODS

ETHICAL ISSUES

Written permission was obtained from the Sarpanch/ Pradhhan of village before data collection. After explaining the purpose of the study and about the confidentiality, informed consent was obtained from each subject. All study participants were informed about participation in the research, objectives of the study, and time of involvement. The subjects were informed that their participation will be on voluntary basis and have the freedom to withdraw from the study at any time. Care was taken to ensure that no harm or discomfort was caused to the study participant. No ethical issues confronted while conducting the study.

Study setting and period

The present study conducted at **selected rural area of Didwana Dist. Nagaur, (Raj.)**. The investigator conducted the main study from 11/04/2022 to 12/05/2022 at **selected rural area of Didwana Dist. Nagaur, (Raj.)**.

Study Design and Population

A quasi-experimental research design with pre and post-test as well as control group was used to assess Effectiveness of health awareness Educational Programme on

knowledge and attitude towards cervical cancer among women from rural area of Didwana Dist. Nagaur, Rajasthan.

Sample Size

The sample size of present study consist 400 women from rural area of Didwana Dist. Nagaur, Rajasthan as 200 for experimental group and 200 for control group.

Sampling Techniques and Approach

The researcher selected the subjects purposively for both control and experimental group from selected rural area of Didwana Dist. Nagaur, Rajasthan.

Tool for data collection

Based on the objectives of the study, a structured knowledge questionnaire and attitude scale towards effectiveness of health awareness Educational Programme on knowledge and attitude towards cervical cancer among women from rural area of Didwana Dist. Nagaur, Rajasthan. The assembled information was statically inspected by using recurrence and rate appropriation.

SCORE	LEVEL OF KNOWLEDGE	LEVEL OF ATTITUDE
0-50%	Inadequate Knowledge	Unfavorable attitude
51-74%	Moderately adequate Knowledge	Moderately Favorable attitude
75% & Above	Adequate Knowledge	favorable attitude

SCORING INTERPRETATION

DATA COLLECTION TECHNIQUES

Pilot study

Pre-test Structured knowledge questionnaire and attitude scale were given to 40 samples (20 control group and 20 experimental group). On the same day, health awareness educational programme towards cervical cancer was given to



experimental group. After 7 days post test was conducted with the same questionnaire and attitude scale. **The reliability coefficient "r" value of knowledge and attitude tool was found to be 0.91 and 0.82 respectively** and so the developed tools was found to be reliable. Since the score is positive; the tool was seen as reliable and valid for the current study.

Main Study

Main study was conducted on 400 samples (200 experimental & 200 control group). The pre-test knowledge questionnaire and attitude scale was administered to the sample followed by health awareness educational programme. The average time taken by the students to answer the tool was 30-35 minutes. Health awareness educational programme was for 45 minutes. Post-test was administered to the same sample using the same tool on the 7th day after the health awareness educational programme. The average time taken for the post-test was 20 minutes.

RESULTS

Socio-demographic characteristics of the study participants (Table 1 & 2)

This study consist of demographic variable like –age, religion, marital status, number of children, type of family, educational status, monthly family income, previous knowledge on cervical cancer, sources of information on cervical cancer and family history of cervical cancer. Frequency and percentage distribution of study sample characteristics for both groups are presented under table 1 and 2.

Analysis and interpretation of pre -test and post- test level of knowledge and attitude score for both experimental and control group (Table 3 to 6)

➤ Table 3 shows pre-test knowledge of the experimental and control group in all viewpoints. In pretest, exploratory gathering as well as control subjects are

having an inadequate degree of knowledge. Mean Value and Standard deviation of Pre-test knowledge among Experimental group is 14.7750 and 2.26717 while mean value and standard deviation of Pre-test knowledge among control group is 14.4700 and 2.58116

- Table 4 post-test knowledge of the experimental and control group in all areas. In post-test, mean score of experimental group was 26.8450 and mean score of control group was 14.7450
- Table 5 shows the pre-test attitude of the experimental and control group. In pretest, experimental group as well as control group subjects are having an Unfavorable attitude. Mean Value and Standard deviation of Pre-test attitude among Experimental group was 31.800 and 6.93400 while mean value and standard deviation of Pre-test attitude among Control group was 32.7800 and 8.71270
- Table 6 shows the post-test attitude of the experimental and control group. In post-test, mean score of experimental group was 77.3100 and mean score of control group was 34.0400

EFFECTIVENESS OF HEALTH AWARENESS EDUCATIONAL PROGRAMME ON KNOWLEDGE AND ATTITUDE TOWARDS CERVICAL CANCER (Table-7)

In the Experimental group, the pre-test subjects scored 14.7750 mean worth of knowledge and 26.8450 mean worth of attitude. After execution of health awareness educational program they scored 31.8000 mean worth of knowledge and 77.3100 mean worth of attitude. The rate worth of distinction in mean worth of knowledge score is 40.23% and in mean worth of attitude score is 56.88%. It shows positive effect of health awareness educational program towards cervical



cancer among women from rural area of Didwana.

CORRELATION BETWEEN KNOWLEDGE AND ATTITUDE SCORE TOWARDS CERVICAL CANCER AMONG WOMEN FROM RURAL AREA IN EXPERIMENTAL GROUP (Table-8)

Result shows that, there was a positive correlation ($r= 0.694$ and 0.689) between posttest level of knowledge and attitude towards cervical cancer among women from rural area in experimental group at $P<0.01$ level. It was inferred that there is a significant improvement in knowledge and attitude towards cervical cancer among women from rural area in experimental group.

Association between pre-test Knowledge scores and selected demographic Variables

For Experimental group knowledge - From table 4.9 and 4.10 it is evident that the demographic variables such as age, religion, marital status, number of children, type of family, educational status, monthly family income, previous knowledge on cervical cancer, sources of information on cervical cancer and family history of cervical cancer, the calculated **p-value is less than 0.05 (typically ≤ 0.05)** at $p<0.05$ level of significance. **It indicates strong evidence for the research hypothesis.**

For Control group knowledge- From table 4.11 and 4.12 it is evident that the demographic variables such as age, marital status, number of children, type of family, educational status, monthly family income, previous knowledge on cervical cancer, sources of information on cervical cancer and family history of cervical cancer, the calculated **p-value is less than 0.05 (typically ≤ 0.05)** at $p<0.05$ level of significance. **It indicates strong evidence for the research hypothesis.** From table 4.11 it is evident that the demographic variables such as religion, the calculated **p-value is higher than 0.05 (typically ≤ 0.05)** at $p<0.05$

level of significance. **It indicates strong evidence for the null hypothesis.**

For Experimental group attitude- From table 4.13 and 4.14 it is evident that the demographic variables such as age, religion, marital status, number of children, type of family, educational status, monthly family income, previous knowledge on cervical cancer, sources of information on cervical cancer and family history of cervical cancer, the calculated **p-value is less than 0.05 (typically ≤ 0.05)** at $p<0.05$ level of significance. **It indicates strong evidence for the research hypothesis.**

For Control group attitude- From table 4.15 and 4.16 it is evident that the demographic variables such as age, religion, marital status, number of children, type of family, educational status, monthly family income, previous knowledge on cervical cancer, sources of information on cervical cancer and family history of cervical cancer, the calculated **p-value is less than 0.05 (typically ≤ 0.05)** at $p<0.05$ level of significance. **It indicates strong evidence for the research hypothesis.**

DISCUSSION

Worldwide, cervical cancer is the commonest cancer and is the second most diagnosed, and is the major gynecological cancer in Asia and Africa. An increased risk of cervical cancer is associated with low socio economic status, early sexual activity before 17 years of age, multiple sexual partners, infection with HPV (Human Papilloma Virus), Immune suppression and smoking.¹⁴

Cervical cancer is a significant public health burden in most developing countries, where it is a major cause of mortality and morbidity among women. Several factors are attributed to the wide spread incidence of cancer, the precise etiology of which remains unclear. Awareness of Cancer should be encouraged in its prevention, detection and treatment.¹⁵



SUMMARY

➤ What is known on the subject

Cervical Cancer is a disproportionate burden borne in the developing world. Over 85% of the women 2,75,000 die every year from Cervical Cancer. If left untreated by 2030 Cervical Cancer will kill as many as 4,30,000 women, virtually all living in-low-income countries.¹⁵

➤ What the paper adds to existing knowledge-

This study is mainly intended to assess Effectiveness of health awareness Educational Programme on knowledge and attitude towards cervical cancer among women from rural area of Didwana Dist. Nagaur, Rajasthan. This study revealed that demographic variables such as age, religion, marital status, number of children, type of family, educational status, monthly family income, previous knowledge on cervical cancer, sources of information on cervical cancer and family history of cervical cancer have direct association with risk of cervical cancer.

➤ What are the implications for practice

Awareness campaigns accompanied by state-wide and national level screening efforts are necessary to address the heavy burden of this disease in India. Simultaneously, the capacity of health systems across urban and rural India must also be built up in order to sufficiently and effectively screen and treat the women.

CONCLUSION & FUTURE DIRECTION

This study revealed that demographic variables such as age, religion, marital status, number of children, type of family, educational status, monthly family income, previous knowledge on cervical cancer, sources of information on cervical cancer and family history of cervical cancer have direct association with risk of cervical cancer.

Our results also revealed that Awareness campaigns accompanied by state-wide and national level screening efforts are necessary to address the heavy burden of this disease in India. Simultaneously, the capacity of health systems across urban and rural India must also be built up in order to sufficiently and effectively screen and treat the women.

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Conflicts of interest- There are no conflicts of interest

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ANNEXURES- FIGURE & TABLES

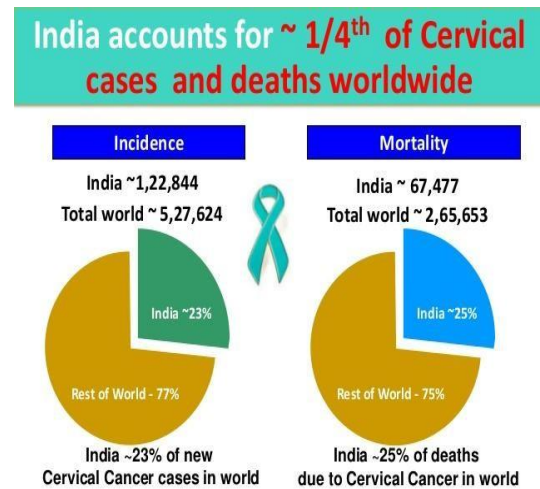


Fig 1: Source:

<http://globocancancerfactsheet2020>

Table 4.1: Recurrence and rate appropriation of study test qualities

Demographic variables		N=400 (200+200)			
		Experimental Group		Control Group	
		N	%	N	%
Age (years)	20-30 years	48	24	39	19.5
	31-40 years	80	40	65	32.5
	41-50 years	60	30	74	37
	51-60 years	12	06	22	11
Religion	Hindu	152	76	133	66.5
	Muslims	36	18	42	21
	Christian	08	04	15	7.5
	Others	04	02	10	05
Marital Status	Married	153	76.5	142	71
	Unmarried	27	13.5	38	19
	Widowed	08	04	10	05
	Divorced	12	06	10	05
No. of children	0	32	16	47	23.5
	1	48	24	43	21.5
	2	88	44	74	37
	3 and more	32	16	36	18
Type of family	Nuclear family	68	34	60	30
	Joint family	132	66	140	70

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Table 4.2: Recurrence and rate appropriation of study test qualities

Demographic variables		N=400 (200+200)			
		Experimental Group		Control Group	
		N	%	N	%
Educational Status	No formal education	20	10	18	09
	Primary education	48	24	58	29
	Higher secondary education	72	36	78	39
	Graduation and above	60	30	46	23
Monthly Family Income (In Rs.)	Below 10,000/-	68	34	58	29
	10,001-20,000/-	66	33	70	35
	20,001-30,000/-	40	20	50	25
	30,001 & Above	26	13	22	11
PREVIOUS KNOWLEDGE ON CERVICAL CANCER	Yes	52	26	56	28
	No	148	74	144	72
Sources of Information on cervical cancer	Health personnel	50	25	40	20
	T.V./ Internet/Media	120	60	128	64
	Teachers/Parents	22	11	18	09
	Friends/Peer group	08	04	14	07
Any Family History of Cervical Cancer	Yes	64	32	56	28
	No	136	68	144	72

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Table 4.3- Examination and understanding of pre - test and post-test level of information and mentality score for both Trial and control bunch

N= 200 in each study group

Knowledge	Experimental group		Control group	
	Mean score	Std. deviation	Mean score	Std. deviation
PRE-TEST	14.7750	2.26717	14.4700	2.58116

Table 4.4- Post-test information towards cervical malignant growth among ladies from rustic region among Exploratory and control bunch

N= 200 in each study group

Knowledge	Experimental group		Control group	
	Mean score	Std. deviation	Mean score	Std. deviation
POST-TEST	26.8450	2.62400	14.7450	2.33608

Table 4.5- Pre-test demeanor towards cervical disease among ladies from provincial region among Exploratory and control bunch

N= 200 in each study groups

Attitude	Experimental group		Control group	
	Mean Score	Std. deviation	Mean Score	Std. deviation
PRE-TEST	31.8000	6.93400	32.7800	8.71270

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Table 4.6- Post-test disposition towards cervical malignant growth among ladies from country region among Exploratory and control bunch

N= 200 in each study groups

Attitude	Experimental group		Control group	
	Mean Score	Std. deviation	Mean Score	Std. deviation
POST-TEST	77.3100	4.81245	34.0400	10.27259



Table-4.7

TEST SCORES	KNOWLEDGE	ATTITUDE
PRE-TEST SCORES	14.7750	31.8000
POST-TEST SCORES	26.8450	77.3100
DIFFERENCE PERCENTAGE	40.23 %	56.88 %

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**RELATIONSHIP AMONG'S INFORMATION AND DEMEANOR SCORE
 TOWARDS CERVICAL MALIGNANT GROWTH AMONG LADIES FROM
 RUSTIC REGION IN TRIAL GATHERING**

Table- 4.8

SUBJECTS	"r" value
EXPERIMENTAL GROUP	
Pretest- level of knowledge and attitude	0.694
Posttest- level of knowledge and attitude	0.689

(- P<0.01, highly significant)**



**RELATIONSHIP OF MEAN PRE-TEST INFORMATION AND DISPOSITION
SCORE TOWARDS CERVICAL MALIGNANT GROWTH AMONG LADIES
FROM COUNTRY REGION WITH THEIR CHOSE SOCIO-SEGMENT
FACTORS**

**Table 4.9: Chi-square test showing the relationship between pre-test
Information scores and chose segment factors**

N=200 (Experimental Group)

S. No	Variables	Pre-test knowledge scores		χ^2 (Chi-Square) Chi-Square	df	Level of significance
		< mean	> mean			
1	Age (in years)					
	20-30 years	38	10	12.4553	3	P= 0.005976 S*
	31-40 years	52	28			
	41-50 years	32	28			
	51-60 years	04	8			
2	Religion					
	Hindu	105	47	13.8238	3	P= 0.00315 S*
	Muslims	13	23			
	Christian	05	03			
	Others	03	01			
3	Marital Status					
	Married	105	48	9.7444	3	P= 0.02086 S*
	Unmarried	13	14			
	Widowed	04	04			
	Divorced	04	08			
4	Number of children					
	0	15	17	15.0586	3	P= 0.00176 S*
	1	31	17			
	2	51	37			
	3 and more	29	03			

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Table 4.10: Chi-square test showing the relationship between pre-test Information scores and chose segment factors

N=200 (Experimental Group)

S. No	Variables	Pre-test knowledge scores		χ^2 (Chi-Square) Chi-Square	df	Level of significance
		< mean	> mean			
5	Type of family					
	Nuclear Family	51	17	6.3648	1	P= 0.011641 S*
	Joint Family	75	57			
6	Educational Status					
	No formal education	19	01	62.2611	3	P= <0.00001 S*
	Primary education	45	03			
	Hr. secondary education	46	26			
	Graduation and above	16	44			
7	Monthly Family Income					
	Below 10,000/-	60	08	91.0978	3	P= <0.00001 S*
	10,001-20,000/-	55	11			
	20,001-30,000/-	07	33			
	30,001 & Above	04	22			
8	Previous Knowledge on cervical cancer					
	Yes	40	12	5.8439	1	P= 0.015631 S*
	No	86	62			
9	Sources of information					
	Health personnel	23	27	32.045	3	P= <0.00001 S*
	T.V./ Internet/Media	91	29			
	Teachers/Parents	05	17			
	Friends/Peer group	07	01			
10	Family history of cer. cancer					
	Yes	23	41	29.5709	1	P= <0.00001 S
	No	103	33			

S=Significance

NS= Not significant

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Table 4.11: Chi-square test showing the relationship between pre-test Information scores and chose segment factors

N=200 (Control Group)

S. No	Variables	Pre-test knowledge scores		χ^2 (Chi-Square) Chi-Square	df	Level of significance
		< mean	> mean			
1	Age (in years)					
	20-30 years	34	05	15.1141	3	P= 0.001722 S*
	31-40 years	38	27			
	41-50 years	45	29			
	51-60 years	09	13			
2	Religion					
	Hindu	84	49	1.5169	3	P=0.678381 NS*
	Muslims	24	18			
	Christian	11	04			
	Others	07	03			
3	Marital Status					
	Married	97	45	9.0837	3	P= 0.02819 S*
	Unmarried	16	22			
	Widowed	06	04			
	Divorced	07	03			
4	Number of children					
	0	23	24	12.3779	3	P= 0.00619 S*
	1	26	17			
	2	46	28			
	3 and more	31	05			
5	Type of family					
	Nuclear Family	44	16	3.9264	1	P= 0.047534 S*
	Joint Family	82	58			

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Table 4.12: Chi-square test showing the relationship between pre-test Information scores and chose segment factors

N=200 (Control Group)

S. No	Variables	Pre-test knowledge scores		χ^2 (Chi-Square) Chi-Square	df	Level of significance
		< mean	> mean			
6	Educational Status					
	No formal education	17	01	61.8134	3	P= <0.00001 S*
	Primary education	53	05			
	Hr. secondary education	46	32			
	Graduation and above	10	36			
7	Monthly Family Income					
	Below 10,000/-	52	06	52.9606	3	P= <0.00001 S*
	10,001-20,000/-	51	19			
	20,001-30,000/-	19	31			
	30,001 & Above	04	18			
8	Previous Knowledge on cervical cancer					
	Yes	42	14	4.8048	1	P= 0.02838 S*
	No	84	60			
9	Sources of information					
	Health personnel	14	26	37.6124	3	P= <0.00001 S*
	T.V./ Internet/Media	95	33			
	Teachers/Parents	03	15			
	Friends/Peer group	11	03			
10	Family history of cervical cancer					
	Yes	16	40	39.5504	1	P= <0.00001 S
	No	110	34			

S=Significance

NS= Not significant

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Table 4.13: Chi-square test showing the association between pre-test Attitude scores and selected demographic variables

N=200 (Experimental Group)

S. No	Variables	Pre-test knowledge scores		χ^2 (Chi-Square) Chi-Square	df	Level of significance
		< mean	> mean			
1	Age (in years)					
	20-30 years	40	08	9.7483	3	P= 0.020832 S*
	31-40 years	52	28			
	41-50 years	33	27			
	51-60 years	08	04			
2	Religion					
	Hindu	102	50	11.3574	3	P=0.009942 S*
	Muslims	28	08			
	Christian	02	06			
	Others	01	03			
3	Marital Status					
	Married	106	47	13.1645	3	P= 0.00429 S*
	Unmarried	20	07			
	Widowed	01	07			
	Divorced	06	06			
4	Number of children					
	0	25	07	18.6401	3	P= 0.00032 S*
	1	25	23			
	2	53	35			
	3 and more	30	02			
5	Type of family					
	Nuclear Family	36	32	8.5024	1	P= 0.00354 S*
	Joint Family	97	35			

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**Table 4.14: Chi-square test showing the relationship between pre-test
Mentality scores and chose segment factors**

N=200 (Experimental Group)

S. No	Variables	Pre-test knowledge scores		χ^2 (Chi-Square) Chi-Square	df	Level of significance
		< mean	> mean			
6	Educational Status					
	No formal education	19	01	93.5024	3	P= <0.00001 S*
	Primary education	46	02			
	Hr. secondary education	57	15			
	Graduation and above	11	49			
7	Monthly Family Income					
	Below 10,000/-	66	02	126.683	3	P= <0.00001 S*
	10,001-20,000/-	58	08			
	20,001-30,000/-	08	32			
	30,001 & Above	01	25			
8	Previous Knowledge on cervical cancer					
	Yes	03	49	116.338	1	P= <0.00001 S*
	No	130	18			
9	Sources of information					
	Health personnel	21	29	54.9236	3	P= <0.00001 S*
	T.V./ Internet/Media	101	19			
	Teachers/Parents	04	18			
	Friends/Peer group	07	01			
10	Family history of cervical cancer					
	Yes	10	54	109.348	1	P= <0.00001 S
	No	123	13			

S=Significance

NS= Not significant

Table 4.15: Chi-square test showing the relationship between pre-test Mentality scores and chose segment factors

N=200 (Control Group)

S. No	Variables	Pre-test knowledge scores		χ^2 (Chi-Square) Chi-Square	df	Level of significance
		< mean	> mean			
1	Age (in years)					
	20-30 years	35	04	16.9524	3	P= 0.000723 S*
	31-40 years	39	26			
	41-50 years	46	28			
	51-60 years	09	13			
2	Religion					
	Hindu	84	49	7.9028	3	P=0.048065 S*
	Muslims	23	19			
	Christian	13	02			
	Others	09	01			
3	Marital Status					
	Married	99	43	8.3913	3	P= 0.03858 S*
	Unmarried	17	21			
	Widowed	07	03			
	Divorced	06	04			
4	Number of children					
	0	25	22	10.305	3	P= 0.01614 S*
	1	26	17			
	2	47	27			
	3 and more	31	05			
5	Type of family					
	Nuclear Family	46	14	5.5413	1	P= 0.01857 S*
	Joint Family	83	57			

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Table 4.16: Chi-square test showing the relationship between pre-test Mentality scores and chose segment factors

N=200 (Control Group)

S. No	Variables	Pre-test knowledge scores		χ^2 (Chi-Square) Chi-Square	df	Level of significance
		< mean	> mean			
6	Educational Status					
	No formal education	17	01	67.6937	3	P= <0.00001 S*
	Primary education	55	03			
	Hr. secondary education	47	31			
	Graduation and above	10	36			
7	Monthly Family Income					
	Below 10,000/-	53	05	54.9487	3	P= <0.00001 S*
	10,001-20,000/-	52	18			
	20,001-30,000/-	20	30			
	30,001 & Above	04	18			
8	Previous Knowledge on cervical cancer					
	Yes	43	13	5.1271	1	P= 0.023556 S*
	No	86	58			
9	Sources of information					
	Health personnel	17	23	30.8311	3	P= <0.00001 S*
	T.V./ Internet/Media	97	31			
	Teachers/Parents	04	14			
	Friends/Peer group	11	03			
10	Family history of cervical cancer					
	Yes	17	39	39.5974	1	P= <0.00001 S
	No	112	32			

S=Significance

NS= Not significant

631

