



## A study to assess the effectiveness of structured education program on knowledge regarding prevention of cervical cancer among women in selected area at Moradabad

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### Abstract

Cervical cancer is a cancer a rise from the cervix. It is due to abnormal growth of cells that have the ability to spread of another part of the body and symptoms may consist of abnormal vaginal bleeding, pelvic pain, pain during sexual intercourse, it may specify the presence of cervical cancer.

### Objectives

- To assess the level of knowledge regarding cervical cancer among women,
- To evaluate the effectiveness of planned teaching program on the knowledge regarding cervical cancer among women
- To find out the association between pre test mean knowledge score of cervical cancer among women with their selected demographic variables.

**Material and Methods:** A study to assess the effectiveness of structured education program on knowledge regarding prevention of cervical cancer among women in selected area at Moradabad. Data was collected from 150 samples. The samples were selected by using non probability sampling technique by using structured questionnaires. The collected data was analysed using descriptive and inferential statistics and presents in the form of tables and figures.

**Result:** In relation to the sources of information 11% of womens for getting information from friends, 11% of them from relatives, 13% them from mass media, 62% of them from health personnel and 14% of them from Newspapers. 2% Womens have good knowledge, 31% womens have average knowledge and 67% parents have poor knowledge.

**Conclusion:** 67% of the subjects had poor knowledge regarding cervical cancer and There was no statistically significant association between demographical variables like age, sex, gender, source of information, educational qualification and occupation.

**Keywords:** structured, cervical cancer, knowledge, effectiveness, Moradabad

### Introduction: Background of the study

It is one of the major public health problems in India. Cervical cancer careful to preventable and curable disease because it can be prevented considers the high prevalence of cancer of cervix pap screening. Pap smear helps to reduce the frequency of cervical cancer. Inadequate knowledge is most of the reason why many women do not make use of the currently existing screening methods.

Knowledge regarding prevention of cervical cancer help increasing the incidence of cervical cancer among menopausal women also help to prevent other disease in women. The five-year survival rate for cervical cancer is approximately 92%. If cervical cancer is detected it has invaded any surrounding tissues, the five-year survival rate is nearly 100%. Some physicians will not perform a Pap smears each year if a women has 3 negative (normal) Pap smears in the course of three years. The increased use of the Pap smear, not all women received yearly Pap smears. It is estimated then between 60% and 80% of American women who are newly diagnosed with cervical cancer have not Pap smear within the last five years.

### Need for the Study

Cervical cancer is causes of morbidity and mortality cancers. Human papillomavirus (HPV) is virus which is the important aetiological agent into the enlargement of cervical cancer. The world health organization (2002) cervical cancer is the world second deadly cancer with an approximate of about 493,243 women diagnosed with it and 273,505 dying with it per years and over are at risk of getting cervical cancer, current view states that out of 164 diagnosed with cervical cancer per year about 81 of them die as a result of the disease.

According to the American cancer society recent approximately states that in the year 2011 about 12,710 new cases of invasive cancer will be diagnosed and of these about 4,290 deaths will be recorded.

### Methods and Materials

#### Research Approach

In present study research approach is quantitative method of approach.

Research design is Pre experimental design one group and pretest and post test research design is adopted for this study.

**Setting of study:** The study is conducted in the selected area of Moradabad district a, Uttar Pradesh.

**Population:** The target population in this study are women's of selected area in Moradabad.

**Accessible population:** It is the aggregate of cases that conform to designated criteria and also accessible as subject for a study. <sup>(29)</sup>

**Sample size:** The proposed sample size for this study is 150.

**Sampling Technique:** In this study purposive sampling is used to select the sample.

### **Sampling Criteria**

#### **Inclusion Criteria**

Inclusion criteria is identify women's character are referred to as criteria.

- The woman's in the age group of 25-40 year.
- The selected area woman's who are willing to play a part in the study.
- The selected area woman's who can easily understand and read Hindi

#### **Exclusion Criteria**

The women's is defined in term of characteristics that women's must not posses.

- The woman's age group of 40years.
- The selected area woman's who are not willing to play a part in the study.
- The woman's who are clinically diagnosed to have cervical cancer.

### **Description of Tool**

Structured questionnaire

**Part A:** The items seeking information on sample's demographic information such as Age, Religion, Occupation, Education, Marital status, Duration of marriage, Children, source of information, previous knowledge and monthly income

**Part B:** The 23 multiple choice Questionnaire included on anatomy and physiology of cervix, Definition, risk factor, Cause, Sign and symptoms, diagnostic evaluation, Stages, treatment, method of treatment, Prevention and vaccination of cervical cancer.

### **Pilot Study**

Pilot study is a small scale version or assessment run of the major study. The purpose is to find the feasibility of the study. Clarity of language of tools and also to find out the difficulties in conducting the main study. The pilot study was conducted

in bagadpur on 05/03/17 to 10/03/17 among 25 samples. A written permission was obtained from the principle of Teerthanker Mahaveer College of nursing, pradhan, gram panchayat. The respondents were assured of the confidentiality of their identify and the tools was administered. It was conducted in a similar way as final data collection. The average time taken to complete the test was 30 minutes. Pilot study revealed that a majority 11(55%) of woman's had inadequate knowledge regarding cervical cancer. The study was found reliable, practicable and acceptable. After pilot study some modifications were made to the tools.

### **Content Validity**

Content validity of the tool was obtained from 3 experts in relatred field and modified based on their suggestions and opinions

### **Data Collection Procedure**

The findings are the objectives of the study and are the presentation in following section:

**Section 1:** To quantitative the demographic variable

**Section 2:** To consider the effectiveness of structural education program on knowledge about prevention of cervical cancer among women's in selected area

**Section 3:** Find out the association between score regarding prevention of cervical cancer which include age, religion, education, occupation, marital status, duration of marriage, children, source of information, and previous knowledge.

### **Data Analysis**

Analysis is the strategy used in theory development in which concept, statements or theories are clarified or refined.

The data obtained was planned to the analyzed by both descriptive and inferential statistics on the basis of the objectives of the study. To compute the data, a master data sheet was prepared by the investigator.

- Frequency and percentage of data would be calculated for describing demographic variables.
- The knowledge scores would be analyzed by using mean, standard deviation and paired't' test.
- 'Chi square' test were taken in to account to find out the association between knowledge of women's with selected demographic variables.

-Analysis related to demographic variables,

The chapter deal with the analysis of the data collected from 150 women's of rural area regarding early prevention of cervical cancer and a view to develop the educational health teaching at Dayodi village in Moradabad.

**Section 1:** To quantitative the demographic variable.**Table 1:** Frequency and percentage distribution among women's in selected area. N=150

S. No	Demographic Variables		f <sub>x</sub>	%
1	Age in year	25-30 Years	66	44%
		31-35 Years	22	15%
		36-40 Years	20	13%
		Above 40 Years	42	28%
2	Marital status	Married	150	100%
3	Duration of marriage	0-3 Years	25	18%
		4-6 Years	16	11%
		7-9 Years	22	15%
		Above 10 Years	87	58%
4	Religion	Hindu	142	95%
		Muslim	8	5%
5	Education	Illiterate	67	45%
		Primary and middle	49	33%
		Intermediate	14	9%
		Graduation	20	13%
6	Occupation	House Wife	136	95%
		Private Job	5	3%
		Govt. Job	8	5%
		Others	1	1%
7	family Income	5000-10000 Rs	122	81%
		10000-15000 Rs	13	9%
		15000-20000 Rs	7	5%
		Above 20000 Rs	8	5%
8	No. of Children's	1 child	26	17%
		2 Children's	35	23%
		3 Children's	41	27%
		More then 4 Children's	42	28%
		No baby	6	4%
9	Source of information	Mass media	19	13%
		News paper	21	14%
		Friend and family	17	11%
		Health worker	93	62%
10	Previous knowledge	Yes	85	57%
		No	59	39%
		Don't know	6	4%

**Section 2****Table 2:** Frequency and percentage distribution in sample according to their pre test and post test level of knowledge. N=150.

Level of knowledge	Range	Pre test		Post test	
		f	%	F	%
Inadequate	0 – 8	101	67	NIL	NIL
Moderate	9 – 16	46	31	82	55
Adequate	17 – 23	3	2	68	45

Table:2 Denoted that pre test 101 (67%) women's having inadequate level of knowledge followed by 46 (31%) women's were having moderate knowledge, 3 (2%) women's having adequate knowledge. In post test 82 (55%) women's had moderate knowledge followed by 68 (45%) women's had adequate knowledge.

**Table 3:** Mean and standard Deviation of pre test and post test knowledge score.

Test	Range	Mean	Standard Deviation
Pre Test	01 - 19	7.36	3.46
Post Test	10 -23	15.86	2.8

Table 3: Indicates that in the pre test range of scores is 1-19, while the mean 7.36 and standard deviation 3.46 and the post test range of score 10-23, while the mean 15.86 and standard deviation 2.80.

**Section – III:** Effectiveness of Planed Teaching Programme Comparison of pre test and post test knowledge score.

To compare the pre test and post test mean score of knowledge, the paired 't' test was used. To test the statistically significance, following the hypothesis was stated H1: there was significant difference between pre test and post test mean knowledge scores regarding cervical cancer among middle age of women in selected area.

**Table 4:** Mean standard deviation and paired't' test value of pre test and post test knowledge score.

Test	Mean	Standard deviation	Paired 't' test value	Inference
Pretest	7.36	3.46	35	S*
Posttest	15.86	2.8		

The table no 4 indicates that the pre test mean knowledge score was 7.36 and standard deviation 3.46 followed by post test mean knowledge score was 15.86 and standard deviation 2.80 was obtained.

The paired't' test value pre test 35.0 was obtained. It shows that there was significance between pre test and post test means knowledge score at level  $p < 0.05$

However the result revealed that the overall main score of post

test knowledge was more compare to the main score to the mean score of the pre test knowledge. Hence it is observed that the planned health education program was effective in enhancing the knowledge of women regarding Cervical Cancer.

#### Association Between Knowledge And Selected Demographic Variables

**Table 5:** Association between Age and Knowledge of middle age of women regarding cervical cancer.

Demographic variables	Knowledge scores			$\chi^2$	df	Table value	Inference
	Inadequate	Moderate	Adequate				
25 to 30 years	38	26	2	1.928	6	12.59	NS
31 to 35 years	11	11	0				
36 to 40 years	12	8	0				
Above 40 years	23	18	1				

Table:5 The result obtained in the association of knowledge scores with the age in years of rural women confirmed calculated  $\chi^2 = 1.928$  was much lesser than the table value i.e.,

12.59. Hence it interpreted that the age in years of middle age of women was not significant with their knowledge and their knowledge score.

**Table 6:** Association between Religion and Knowledge of middle age of women regarding cervical cancer.

Demographic variables	Knowledge scores			$\chi^2$	df	Table value	Inference
	Inadequate	Moderate	Adequate				
Hindu	79	60	3	0.273	4	9.45	NS
Muslim	5	3	0				
Christian	0	0	0				

**Table 7:** Association between occupation and Knowledge of middle age of women regarding cervical cancer.

Demographic variables	Knowledge scores			$\chi^2$	df	Table value	Inference
	Inadequate	Moderate	Adequate				
House Wife	79	54	3	8.016	6	12.59	NS
Private Job	3	2	0				
Government Job	1	7	0				
Other Like Business Farmer	1	0	0				

**Table 8:** Association between Educational Status and Knowledge of middle age of women regarding cervical cancer.

Demographic variables	Knowledge scores			$\chi^2$	df	Table value	Inference
	Inadequate	Moderate	Adequate				
No formal education	46	21	0	23.26	6	12.59	S
Primary or middle	28	20	1				
Intermediate	7	7	0				
Graduated	3	15	2				

**Table 9:** Association between Income and Knowledge of middle age of women.

Demographic variables	Knowledge scores			$\chi^2$	df	Table value	Inference
	Inadequate	Moderate	Adequate				
5,000 TO 10,000	70	50	2	10.31	6	12.59	NS
10,000 TO15,000	9	4	0				
15,000 TO20,000	3	3	1				
ABOVE 20,000	2	6	0				

Table: 9 The result obtained in the association of knowledge scores with the Income of rural women confirmed calculated  $\chi^2 = 10.31$  was much lesser than the

table value i.e., 12.59. Hence it interpreted that the Income of middle age of women was not significant with their knowledge score.

**Table 10:** Association between Marital Status and Knowledge of middle age of women regarding cervical cancer.

Demographic variables	Knowledge scores			$\chi^2$	df	Table value	inference
	Inadequate	Moderate	Adequate				
Married	84	63	3	0	1	3.84	NS
Unmarried	0	0	0				

**Table 11:** Association between Duration of Marriage and Knowledge of middle age of women regarding cervical cancer.

Demographic variable	Knowledge scores			$\chi^2$	df	Table value	Inference
	Inadequate	Moderate	Adequate				
0-3 yrs	19	8	1	6.239	6	12.59	NS
4-6 yrs	6	8	1				
7-9 yrs	11	11	0				
More than 10 yrs	48	36	1				

Table: 11 The result obtained in the association of knowledge scores with the Duration of Marriage of rural women confirmed calculated  $\chi^2 = 6.239$  was much lesser than the

table value i.e., 12.59. Hence it interpreted that the Duration of Marriage of middle age of women was not significant with their knowledge score.

**Table 12:** Association between number of Children and Knowledge of middle age of women regarding cervical cancer.

Demographic variables	Knowledge scores			$\chi^2$	df	Table value	inference
	Inadequate	Moderate	Adequate				
1 child	13	12	1	12.14	8	15.51	NS
2 children	12	22	1				
3children	26	14	1				
More than 4 children	29	13	0				
No child	4	2	0				

**Table 13:** Association between Source of information and Knowledge of middle age of women regarding cervical cancer.

Demographic variables	Knowledge scores			$\chi^2$	df	Table value	Inference
	Inadequate	Moderate	Adequate				
Mass media, t.v.	9	8	2	8.368	6	12.59	NS
Newspaper	12	9	0				
Pear group, friends, family member	10	7	0				
Health worker	53	39	1				

**Table 14:** Association between Previous Knowledge and Knowledge of middle age of women regarding cervical cancer.

Demographic variables	Knowledge scores			$\chi^2$	df	Table value	Inference
	Inadequate	Moderate	Adequate				
YES	50	33	2	0.98	4	9.45	NS
NO	31	27	1				
DON'T KNOW	3	3	0				

### Discussion, summary and conclusion: Summary

This chapter deals with the Research Methodology include research approach, Research design, Variables settings, Sampling Techniques, Samples, Development of Tools, Description of the Tools, Development of planned teaching planning, Validity of the tools, Reliability of the tools, Pre test of the tools, Pilot Study, Data collection procedure and Plan for the data Analysis.

### The major findings

#### Analysis related to demographic variables,

The result obtained in the association of knowledge scores with the age in years of rural women confirmed calculated  $\chi^2 = 1.928$  was much lesser than the table value i.e., 12.59. Hence it interpreted that the age in years of middle age of women was not significant with their knowledge and their knowledge score

The result obtained in the association of knowledge scores with the Religion of rural women confirmed calculated  $\chi^2 = 0.273$  was much lesser than the table value i.e., 9.45. Hence it interpreted that the Religion of middle age of women was not significant with their knowledge and knowledge score. The result obtained in the association of knowledge scores with the Educational status of rural women confirmed calculated  $\chi^2 = 23.26$  was much more than the table value i.e., 12.59. Hence it interpreted that the Educational Status of middle age of women was significant with their knowledge score. The result obtained in the association of knowledge scores with the Source of Information of rural women confirmed calculated  $\chi^2 = 8.368$  was much lesser than the table value i.e., 12.59. Hence it interpreted that the Source of information of middle age of women was not significant with their knowledge score. The result obtained in the association of knowledge scores with the Number of Children of rural women confirmed

calculated  $\chi^2 = 12.148$  was much lesser than the table value i.e., 15.51. Hence it interpreted that the Number of Children of middle age of women was not significant with their knowledge score

### Conclusion

On the basis of analysis of the study the following conclusion were drawn. It also brings out the limitation of the study into the picture. The implications are given on the aim of cervical cancer vaccination, placed, time investment and research it also gives insight into the future studies.

The knowledge regarding cervical cancer at selected village in dayodi, Amroha 150 samples. 55% are having moderate knowledge, 45% are having average knowledge and 40% parents are having poor knowledge.

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