



# RURAL WOMEN'S KNOWLEDGE OF CERVICAL CANCER PREVENTION AND DETECTION

Susma Charly<sup>1</sup>, Krishnaveni R<sup>2</sup> and Anuja Daniel<sup>3</sup>

1. Nursing tutor - IGIMS, Patna
2. Assistant professor - AIIMS Patna
3. Principal - IGIMS Patna

## Abstract:

**Background of the study:** Cervical cancer, the third most prevalent malignancy among women worldwide, caused 275,000 deaths in 2008, of which 88% occurred in developing countries and 159,800 in Asia. India has the greatest number of cervical cancer patients in the globe, with one out of every five cervical cancer patients worldwide being Indian. **Purpose:** The primary objective of the study is to increase rural women's awareness of cervical cancer's early detection and prevention in order to reduce its incidence. **Methodology:** The study employed a descriptive design to evaluate the knowledge of married women regarding cervical cancer. The current study was conducted among Parkwara village women. The sample size was set at 100, The sampling technique used to select study samples was convenience sampling. Structured Interview questions were administered to samples after consent. descriptive and inferential statistics was used to analysed the data. **Results:** Knowledge mean score of the rural women were 14.89, median was 15, standard deviation 4.4, mean percentage 49.13 and level of knowledge is average. **Conclusion:** The study's key findings: Cervical cancer was familiar to most American women. Religion strongly influenced rural women's cervical cancer knowledge. Their cervical cancer knowledge was strongly correlated with where they received it. The poll revealed the need of teaching women about cervical cancer, its risk factors, symptoms, and prevention. Launch large-scale cervical cancer education programmes in rural India.

**Key Words:** Rural Women, Knowledge, Cervical Cancer, Prevention and Detection

## Introduction:

There have been huge changes in the country's population. Changes in the way people get sick have been caused by the fact that people are living longer. Non-communicable diseases like cancer have become a major cause of death, even though there are already many communicable diseases. Since India is a developing country and cancer is a threat there, activities to stop cancer got the attention they deserved. Realizing how important this disease is, the Indian Council of Medical Research started the National Cancer Registry Programmed in December 1991. This set up a network of cancer registries to create a database of how big the cancer problem is in different parts of the country.

The health of women shows how healthy a country is as a whole. The health of women is important because it directly affects the health of their children. Mothers are a "special risk group" or a "vulnerable group." The risk has to do with having children and caring for them. Disparities between men and women start at birth and sometimes even before that. "Women's vulnerability has social roots, not just biological ones," as the saying goes.

After heart disease, cancer is the second most common cause of death in developed countries. As people in India live longer, more and more cases of cancer are seen. In India, there are about 500,000 new cases of cancer every year. The founder secretary of the Indian Cancer Society, Dr. D.J. Jussawalla, said, "Cancer is one of the leading causes of death in India today, and it is getting worse every year."

Each year, more than 70,000 new cases of cervical cancer are reported in India. The National Cancer Control Program in India emphasises the significance of early detection and treatment. However, there is no organised screening programme, and the majority of Indian women lack both disease awareness and access to prevention and treatment services. Furthermore, nearly 75,000 Indian women die each year from cervical cancer (58%). Almost 70% of India's population lives in rural areas, where health and living standards are poor. Most of the things that put women at risk for cervical cancer, like getting married young, having kids young, having more than one partner, not taking care of their genitalia, and being infected with a sexually transmitted disease over and over again, are more common in rural areas. In India, a country of over a billion people, there are no organised Pap smear programmes, and screening has not reached the vast majority of women in need. As a result of these challenges, many Indian women seek treatment only when their cancer has progressed and is no longer curable.

Cervical cancer can always be prevented with regular screenings and treatment of precancerous changes. So, this study will help figure out how much women know about cervical cancer, and the planned educational pamphlet will help women in rural areas learn more. This will help find and stop cervical cancer early, and it will also lower the death rate from the disease. So, the researcher thought it was important to do the study to find out how much people knew about cervical cancer and how to prevent it. This information could then be used to help a possible community-based screening programme succeed.

### **Statement of the Problem:**

"A study to assess the knowledge of rural women regarding early prevention and detection of cervical cancer with a view to develop an educational pamphlet at Pakbara village in Moradabad, (UP)"

### **Objectives of the Study:**

1. To assess the knowledge of rural women regarding cervical cancer early detection and prevention.
2. To determine the relationship between rural women's knowledge of cervical cancer early detection and prevention and selected demographic variables pertaining to cervical cancer.
3. To create an informative pamphlet on the early detection and prevention of cervical cancer.

### **Hypothesis:**

**H<sub>1</sub>:** There was a significant association of the knowledge of rural women regarding early prevention and detection of cervical cancer with selected demographic variables.

### **Research Methodology:**

**Research Approach and Design:** In this study, it was determined that descriptive survey research was the most appropriate method for assessing knowledge regarding cervical cancer. The study employed a descriptive design to evaluate the knowledge of married women regarding cervical cancer.

**Settings:** The current study was conducted among Parkwara village women. This location was chosen for the study because it is close to our college and also located in a rural area. They lack knowledge about cervical cancer and its prevention.

**Sampling Process:** The sample size was set at 100, and rural women who met the inclusion criteria were chosen as samples. The sampling technique used to select study samples was convenience sampling.

**Research Tools:** The interview questionnaires were divided into two components.

**Section I** - Section I has items seeking information of demographic background of women.

**Section II** - It has 5 sub sections, regarding knowledge on cervical cancer.

**Structured Questionnaire on Cervical Cancer Related to:** Definition, Risk factors, Signs and symptoms, Investigation, Managements and Prevention of cervical cancer. It has 30 questions.

**Sub section 1** - Questionnaire related to anatomy and physiology of cervix (5 questions).

**Sub section 2** - Questionnaire related to cervical cancer (5 questions).

**Sub section 3** - Questionnaire related to management and prevention (6 questions).

**Subsection 4** - Questionnaire related to signs and symptoms and investigation of cervical cancer (9 questions).

**Subsection 5** - Questionnaire related to preventive measures and treatment and complication (5 questions).

**Scoring Procedure** - The possible vital scores for multiple choice questions on knowledge on cervical cancer the score of 30. A score of one mark was given for every correct answer and zero was given for wrong answer.

**The score was ranged as follows;**

Adequate knowledge	76 – 100 %
Moderately adequate knowledge	51 – 75%
Inadequate knowledge	less than 50%

**Pilot Study:** Following gaining authorization from the appropriate authorities, pilot research was undertaken on ten women from the community. The experimental study was carried out in the same manner as the final study. The pilot study demonstrated the feasibility of the investigation. The data were analysed to determine the validity of the statistics.

**Data Collection Procedure:** Research requires data collection. The main study sampled 100 women. Structured Interview questions were administered to samples after consent.

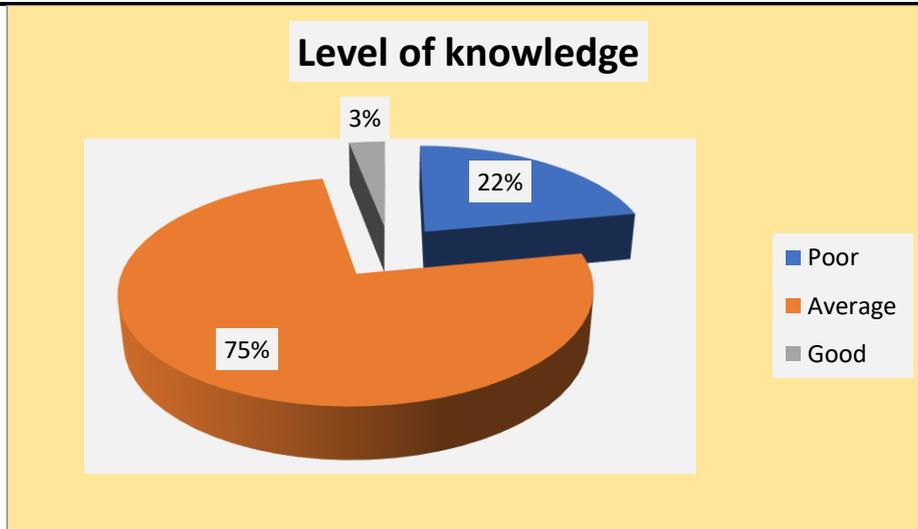
**Data Analysis:** It was intended to use descriptive and inferential statistics to assess the data acquired based on the study's goals.

- In a master data sheet, arrange the data.
- It is necessary to assess demographic variables in terms of frequencies and percentages.
- It is necessary to give knowledge regarding cervical cancer in terms of mean, median, and standard deviation.
- The chi-square test is employed to ascertain the relationship between demographic factors and women's knowledge of cervical cancer.

**Results and Interpretation:****Table – I: DESCRIPTIVE ANALYSIS OF DEMOGRAPHIC VARIABLE:****(n = 100)**

S. N.	Demographic variable	Frequency	Percentage
<b>1</b>	<b>Age of rural women</b>		
	25-30	32	32
	31-35	25	25
	36-40	24	24
	41-45	19	19
<b>2</b>	<b>Religion of rural women</b>		
	Hindu	38	38
	Muslim	28	28
	Sikh	2	2
	Christian	32	32
	Others		
<b>3</b>	<b>Educational status</b>		
	Illiterate	40	40
	Secondary and higher secondary	24	24
	Graduate	24	24
	Others	12	12
<b>4</b>	<b>Occupation of self</b>		
	House wife	48	48
	Govt - employee	10	10
	Private job	28	28
	Daily wages	14	14
<b>5</b>	<b>Type of family</b>		
	Joint family	42	42
	Nuclear family	58	58
<b>6</b>	<b>Family income per month in Rupees</b>		
	Below 3000	34	34
	3001-6000	32	32
	6001-10000	19	19
	More than 10000	15	15
<b>7</b>	<b>Number of pregnancies</b>		
	1-2	39	39
	3-4	31	31
	5-6	16	16
	7-8	14	14
	More than 8		
<b>8</b>	<b>Source of information</b>		
	Mass media	39	39
	Health care providers	31	31
	Friends	16	16
	Relatives	14	14

The following conclusions were derived from the above table. Majority, of the respondents, were to Hindus (38%) Majority, of women were between the age group 25-30 years (32%) Educational status of most the women, most of them fell under illiterate category (40%) Occupational status, most of the subjects belong to House wife.(48%) Most of the women have family income of below Rs. 3,000 /- (34%) Majority, of the respondents were belonging to nuclear family.(58% ) A majority, 39% of women under gone 1-2 times of pregnancies. A majority of 39% the women had information through mass media.



**Fig - 1 Pie diagram representing percentage distribution of rural women according to their level of knowledge the above pic diagram shown:**

As with regards to early prevention and detection of cervical cancer, 75% of women have somewhat adequate understanding, 22% have inadequate knowledge, and 3% have adequate knowledge.

**Table - II: Obtained range of score, Maximum score, Mean, Median, Standard Deviation, Mean Percentage and Level of knowledge of rural women**

Obtained	Max.	Mean	Median	Standard	Mean	Level of knowledge
9-26	30	14.89	15	3.11	49.63	Average

N = 100

The above table show that obtained mark range is form 9-29, maximum score 30, mean of the score 14.89, median 15 standard deviation 4.4, mean percentage 49.13 and level of knowledge is average.

Table 11: Association of knowledge with selected demographic variables

(N=100)

S. No.	Demographic variables	Poor	Average	Good	$\chi^2$ value	df	Table value	Inference
1.	<b>Age of rural women</b>				8.303	6	12.592	NS
	25-30	5	26	1				
	31-35	8	15	2				
	36-40	7	17	-				
	41-45	2	17	-				
2.	<b>Religion of rural women</b>				18.884	6	12.592	S*
	Hindu	8	30	-				
	Muslim	6	22	-				
	Sikh	-	1	1				
	Christian	8	25	2				
	Others							
3.	<b>Educational status of rural women</b>				7.922	6	12.592	NS
	Illiterate	8	31	1				
	Secondary and higher secondary	9	15	-				
	Graduate	3	19	2				
	others	2	10	-				
4.	<b>Occupation of self rural women</b>				1.238	6	12.592	NS
	House wife	10	36	2				
	Govt.employee	2	8	-				
	Private job	7	20	1				
	Daily wages	3	11	-				
5.	<b>Type of family in rural women</b>				1.669	2	5.991	NS
	Joint family	11	29	2				
	Nuclear family	11	46	1				
6.	<b>Family income per month in Rupees rural women</b>				8.072	6	12.592	NS
	Below 3000/-	7	27	-				
	3001-6000/-	8	24	-				
	6001-10000/-	4	14	1				
	More than 10000/-	3	10	2				
7.	<b>Number of pregnancies in rural women</b>				3.202	6	12.592	NS
	1-2	20	57	3				
	3-4	-	1	-				
	5-6	1	9	-				
	7-8	1	8	-				
	More than 8	-	-	-				
8.	<b>Source of information</b>				17.386	6	12.592	S*
	Mass media	7	29	3				
	Health care providers	2	29	-				
	Friends	7	9	-				

Relatives	6	8	-				
-----------	---	---	---	--	--	--	--

Tabled value of  $\chi^2$  at 5% level

S\* = Significant

NS = Not significant

The results were significant at the 5% level since the p-value for the demographic variables of religion and information source was less than 0.05. According to the analysis, there was a strong correlation between respondents' religious affiliation and their degree of awareness about cervical cancer early detection and prevention.

The other demography factors, with the exception of religion and information source, had p values greater than 0.05, making the results, at the 5% level, not statistically significant. The investigation revealed that demographic factors, with the exception of the respondents' informational sources and religious affiliations, did not affect their level of awareness regarding cervical cancer early detection and prevention.

### Discussion:

To our knowledge, this is the largest study that has shown rural women in Moradabad, Uttar Pradesh, India, are aware of cervical cancer screening and associated prevention. Unfavorable attitudes regarding the Pap smear test, certain demographic characteristics, and a lack of understanding about cervical cancer and the test can all have an adverse effect on women's use of the test. Conversely, cervical cancer prevention initiatives can be successful in raising awareness of the disease, perceptions of vulnerability, and cancer preventative behaviours.

In a Chinese study conducted by Jia, women with lower incomes were more willing to screen than their counterparts [19], whereas a Botswanan study discovered that previous cervical cancer screenings were common among women with higher incomes.

Understanding the causes, risks, symptoms, and countermeasures for a specific cancer can make all the difference; without this knowledge, prevention is much more challenging. Although there haven't been many studies done in Uttar Pradesh, research across India has revealed that women don't know much about both cervical and breast cancer.

Many research have found that certain sociodemographic factors have an impact on understanding about cervical cancer. In this study, women's religious affiliation and the source of their cervical cancer information were linked to their level of understanding.

"Effect of Educational Program Women's Knowledge, Attitude Towards Cervical Cancer and Early Detection by Pap Test" at the king of Saudi Arabia, it was shown that most of the women studied didn't know much about pap tests before the programme. This was true for both the control group and the study group. This is because there isn't a well-run programme for people with cervical cancer.

### Conclusion:

Based on what the study found, the following were the most important conclusions: Most women in the country knew a little bit about cervical cancer. There was a strong link between how much rural women knew about cervical cancer and their religion. There was also a strong link between how much they knew about cervical cancer and where they got their information. The survey showed how important it is to teach women about cervical cancer and how to find it early, as well as its risk factors, symptoms, and ways to avoid it. This can be done by launching large-scale programmes in rural India to teach women about cervical cancer.

**References:**

1. Khanna D. Evaluating Knowledge Regarding Cervical Cancer and Its Screening among Woman in Rural India. *South Asian J Cancer*. 2020 Jul;9(3):141-146. doi: 10.1055/s-0041-1723072. Epub 2021 Mar 19. PMID: 33937136; PMCID: PMC8075625.
2. Khanna D, Khargekar N, Budukh A. Knowledge, attitude, and practice about cervical cancer and its screening among community healthcare workers of Varanasi district, Uttar Pradesh, India. *J Family Med Prim Care*. 2019 May;8(5):1715-1719. doi: 10.4103/jfmpe.jfmpe\_143\_19. PMID: 31198742; PMCID: PMC6559093.
3. Kadian L, Gulshan G, Sharma S, Kumari I, Yadav C, Nanda S, Yadav R. A Study on Knowledge and Awareness of Cervical Cancer Among Females of Rural and Urban Areas of Haryana, North India. *J Cancer Educ*. 2021 Aug;36(4):844-849. doi: 10.1007/s13187-020-01712-6. PMID: 32112367.
4. Dr. Aggrawal Neelam. Cervical Cancer Screening. *IndianJournal of Gynecology and Oncology*. 2002.October VI; 62-63.
5. Dr. Mahajan Neeraj. Cervical Cancer a Global HealthProblem. *Indian Journal of Gynecology and Oncology*. 2011. November X; 39-42
6. Hildesheim A et al. Effect of human papillomavirus 16/18 L1 viruslike particle vaccine among young women withpreexisting infection: a randomized trial. *JAMA* 2007; 298(7): 743–753.
7. Kreimer AR. et al. Efficacy of a bivalent HPV 16/18 vaccine against anal HPV 16/18 infection among young women: a nested analysis within the Costa Rica Vaccine Trial. *Lancet Oncology* 2011; 12(9): 862–870.
8. Long H.J. et al. Prevention, Diagnosis and Treatment of Cervical Cancer.2007 April 8.[www.mayoclinicproceeding.org/article/S0025-6196\(11\)61104](http://www.mayoclinicproceeding.org/article/S0025-6196(11)61104).
9. Steinbrook R. The potential of human papillomavirus vaccines. *New England Journal of Medicine*, 2006; 354(11): 1109–1112.
10. Williams. S. Linda. *Medical and Surgical Nursing*, (4th edition), New Delhi: Jaypee Brothers, 2012, p-996- 997.
11. Workman Ignatavicius. *Medical and Surgical Nursing*, (7th edition), New Mexico: Elsvier, 2013, Pp-1622-1658.