



## **A study to assess the knowledge and practices regarding cervical cancer among women in urban area of Prayagraj, Uttar Pradesh**

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### **Abstract**

Cervical cancer is the second most common cancer in women worldwide and causes most deaths in low- and middle-income countries. It is mainly caused by a long-term infection with the Human Papilloma Virus (HPV). Every year, about 500,000 women get this disease and more than 276,000 die from it. In developing countries, where 80-90% of cases occur, it is the leading cause of cancer deaths among women. Cervical cancer often affects women in their early 40s and is the most common cancer among Indian women of reproductive age. Although effective methods for prevention exist, many women are still not screened. Current research is focused on improving prevention, early detection, treatment, and ensuring equal access to these services around the world.

**Keywords:** Assess knowledge, practices, cervical cancer and vaccination

### **Introduction**

Cervical Cancer is the second most common cancer among women in the world leading to 80% - 90% deaths in low and middle income countries. About 97,000 new Cervical Cancer cases are diagnosed annually in India. Cervical cancer often affects women at a young age, and many die in their early 40s while they are still working and raising children. In the past 50 years, developed countries have reduced cervical cancer cases by regularly screening women with Pap tests. The Pap test is a simple and low-cost way to find cervical cancer early. Women need to be aware of cervical cancer so they can take steps to prevent it.

### **Background**

Early detection and timely treatment through effective screening can prevent up to 80-90% of cervical cancer cases in developed countries, where organized screening programs are well established. In contrast, developing nations face limited access to large-scale, high-quality screening, resulting in higher mortality rates from cervical cancer. Although there is strong evidence supporting screening as a highly effective preventive measure, India still lacks widespread implementation of such programs.

This systematic review analyzed existing literature on women's knowledge, attitudes, and barriers related to cervical cancer screening in India. The findings revealed consistent patterns across studies, reflecting a situation common to many developing nations. Despite awareness of cervical cancer among women in both urban and rural areas, the actual participation in screening remains alarmingly low. Contributing factors include inadequate knowledge and awareness, low perceived risk, social stigma, fear of cancer

diagnosis, financial constraints, and family responsibilities.

There is an urgent need for India to strengthen its healthcare infrastructure to support large-scale, efficient cervical cancer screening programs, alongside community-based initiatives aimed at enhancing awareness and encouraging regular screening practices.

### **Problem Statement**

Study to assess the knowledge, practices and attitude on cervical cancer among women aged between 12 years to 40 years in urban areas of Prayagraj.

### **Aim of the study**

Assess the knowledge, attitude and practices on cervical cancer among women aged between 12 years to 40 years in urban areas of Prayagraj.

### **Objectives of the study**

1. To find out how much people know about cervical cancer.
2. To assess the practices related to prevention of cervical cancer.

### **Operational Definition**

1. **To assess:** 'To assess' means the assessment of percentage of exclusive breastfeeding practices and barriers associated with breast feeding.
2. **Knowledge:** 'Knowledge' is the information, understanding, and skills that a person obtains through education or experience.
3. **Practice:** 'Practice' is a way to do something that is the usual or expected way in a particular organization or

situation.

4. **Cervical Cancer:** Cervical cancer is a malignant condition that originates in the cervix, involving abnormal cellular growth within one or more layers of the cervical wall. These abnormal cells possess the potential to invade surrounding tissues and metastasize to distant parts of the body.
5. **Vaccination:** Vaccination is the process of administering a vaccine to an individual or animal to stimulate the immune system and provide protection against specific infectious diseases, or it refers to the state of having received such immunization.

## Materials and Methods

A survey using interviews was done among women aged 12 to 40 years in a selected urban area of Prayagraj to find out their knowledge, attitudes, and practices about cervical cancer. A structured tool was administered to a sample of 100 by convenient sampling. The tool was validated by 03 experts from the field of Nursing. Permission to conduct the study was secured from the administrative head of the Public Health Centre, and ethical clearance was duly obtained. Written informed consent was collected from all participants, ensuring their voluntary involvement. The objectives of the study were clearly explained, and participants were assured that the information provided would remain confidential and be utilized solely for research purposes.

The Knowledge, Attitude, and Practice (KAP) instrument comprised three sections: Section I included selected demographic variables such as age, education, and occupation, while Section II assessed attitudes and practices related to cervical cancer. The collected data were systematically tabulated and analyzed using the Statistical Package for the Social Sciences (SPSS) for Windows, Version 21. Descriptive statistical measures-including mean, standard deviation, score range, frequencies, and percentages-were employed for data interpretation.

## Data Collection

A self-structured knowledge questionnaire was utilized to collect data from the Community Health Centre (CHC) and Primary Health Centre (PHC) in Prayagraj. Formal written permission to conduct the study was obtained from the respective authorities of both health centers.

## Results

The study included a total of 100 women, with ages ranging from 12 to 40 years. The overall level of knowledge regarding cervical cancer among participants was found to be 65%. Awareness of risk factors and signs and symptoms of the disease was generally adequate. Specifically, 55% of respondents identified early age at marriage as a risk factor for cervical cancer, while 45% recognized early initiation of sexual activity as a common contributing factor. Knowledge, attitude, and practice related to cervical cancer

screening were observed in 70%, 60%, and 50% of participants, respectively.

**Table 1:** Shows the number and percentage of participants based on their characteristics such as age, gender, language, marital status, and qualification (N=50).

Variables	Options	Percentage (%)	Frequency(f)
Age	12-25 yrs	18%	9
	26-30	40%	20
	31-35	30%	15
	36-40	12%	6
Gender	Male	0%	0
	Female	100%	50
Language Spoken	English	6%	3
	Hindi	92%	46
	Panjabi	0%	0
	Urdu	2%	1
Marital Status?	Single	12%	6
	Married	84%	42
	Married / Separated	2%	1
	Educated	38%	19
	Divorced	0%	1
	Widowed	2%	1
Qualification	No Qualification	2%	1
	Higher Education	52%	26
	Studying	8%	4

**Table 2:** Shows the average scores based on different demographic factors (N=50).

Variables	Options	Mean%	Mean	SD	N
Age	12-25 yrs	23.7%	7.11	3.72	9
	26-30 yrs	34.2%	10.25	6.92	20
	31-35 yrs	24.8%	8.33	5.59	15
	30-40 yrs	35.0%	10.50	8.17	6
Gender	Female	30.5%	9.14	6.18	50
	Male	0.0%	-	-	0
Language Spoken	English	32.2%	9.67	4.73	3
	Hindi	29.7%	8.91	6.23	46
	Panjabi	0.0%	-	-	0
	Urdu	60.0%	18.00	-	1
Marital Status	Single	21.7%	6.50	4.89	6
	Married	31.0%	9.31	6.23	42
	Married / Separated	23.3%	7.00	-	1
	Divorced	0.0%	-	-	0
	Widowed	66.7%	20.00	-	1
Qualification	No Qualification	10.0%	3.00	-	1
	Studying	25.0%	7.50	6.61	4
	Higher Education	31.2%	9.35	4.77	26
	Degree	31.8%	9.53	7.89	19

**Table 3:** Depicting the distribution of knowledge levels among the study participants (N=50).

Level of Scores (obtained marks)	Percentage	Frequency
Poor knowledge (0-10)	68%	34
Average knowledge (11-30)	26%	13
Good knowledge (21-30)	6%	3

Maximum=30 minimum=0

**Table 4:** Presenting the descriptive statistical analysis of the study data (N=50).

Descriptive Statistics	Mean	Medias	S.D.	Maximum	minimum	Range	Mean%
Score Knowledge	9.14	7.5	6.18	26	0	26	30.47

Maximum=30 minimum=0

**Table 5:** Illustrating the association between participants' scores and their demographic variables

Demographic Data		Level (N-50)			Association with knowledge Score				
Variables	Options	Good	Average	Poor	Chi Test	P Value	df	Table	Result
Age	12-25 yrs	0	1	8	4.98%	0.546	6	12.592	Not Significant
	26-30 yrs	2	6	12					
	31-35 yrs	1	3	11					
	36-40 yrs	0	3	3					
Gender	Male	0	0	0	NA				
	Female	3	13	34					
Language Spoken	English	0	1	2	3.203	0.524	4	9.488	Not Significant
	Hindi	3	11	32					
	Panjabi	0	0	0					
	Urdu	0	1	0					
Marital Status	Single	0	1	5	4.188	0.651	6	12.592	Not Significant
	Married	3	11	28					
	Married / Separated	0	0	1					
	Divorced	0	0	0					
Qualification	Widowed	0	1	0	7.378	0.287	6	12.592	Not Significant
	No Qualification	0	0	1					
	Studying	0	2	2					
	Higher Education	0	8	18					
	Degree	3	3	13					

### Conclusion

Comprehensive and well-designed information, education, and communication (IEC) strategies are essential to enhance women's awareness regarding cervical cancer and the importance of vaccination prior to sexual debut. Implementing and prioritizing such preventive measures can substantially reduce the disease burden. The prevention of cervical cancer demands a multifaceted, participatory approach that engages individuals, communities, and health systems alike. Through a clear understanding of risk factors, adherence to recommended screening protocols, and adoption of informed lifestyle choices, women can markedly diminish their risk and exercise greater control over their reproductive health and overall well-being.

**Conflict of Interest:** Not available.

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