

# To Assess Knowledge and Attitudes Concerning Cervical Cancer and HPV Vaccine among Health Care Personnel in a Selected Hospital of New Delhi

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## Abstract:

### ➤ Background:

Cervical cancer is the second most common malignancy among Indian women, as well as among women aged 15 to 44. The study's objectives were to investigate the degree of knowledge of cervical cancer and the HPV vaccine among health care personnel in a selected New Delhi hospital. To analyse health care providers attitudes on cervical cancer and the HPV vaccine at a selected New Delhi hospital. The purpose of this study was to determine the relationship between health care providers' knowledge and attitudes about cervical cancer and the HPV vaccine in a New Delhi hospital.

### ➤ Methods:

The current study took a quantitative research technique. A descriptive survey research design was implemented. A total of 160 samples were gathered using the purposive sampling technique. The study was conducted at the Holy Family Hospital in New Delhi. Data was examined using descriptive statistics.

### ➤ Result:

107 (66.9%) of the samples had average knowledge, 5 (3.1%) had poor knowledge, 108 (67.5%) had a positive attitude, and 52 (32.5%) had a neutral attitude about cervical cancer and the HPV vaccine. There was a weak positive connection ( $r = +0.4$ ) between healthcare professionals' knowledge and attitudes about cervical cancer and the HPV vaccine. Conclusion: The study found that the samples had average knowledge (66.9%) and a positive attitude (67.5%) about cervical cancer and the HPV vaccine.

**Keywords:** Cervical Cancer, HPV Vaccination, Health Care Personnel.

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## I. INTRODUCTION

Cervical cancer occurs in a woman's cervix (the uterine opening from the vagina). Almost all cervical cancer cases (99%) are caused by infection with high-risk human papillomaviruses (HPV), an exceedingly prevalent virus spread through sexual contact. While most infections caused by HPV heal naturally and generate no symptoms; however, persistent infection is associated with cervical cancer in women. When found early, cervical cancer is one of the most successfully curable types of cancer. The primary cause of

cervical cancer is high-risk HPV infections. HPV 16 and 18 account for more than 80% of cervical cancer in India. For primary prevention, two vaccinations, a quadrivalent (HPV 16, 18, 6, and 11) marketed under the brand name 'Gardasil' and a bivalent (HPV 19 and 18) 'cervarix', recently became available for vaccinating young teenage females aged 9-13 years and/or 13-26 years young adults. These two vaccines were licensed by the US Food and Drug Administration and are commercially available in India. However, despite the fact that these vaccines are well tolerated and highly effective at preventing HPV infection, they are not included in the

National Immunization Program. HPV vaccine is advised for children aged 11 to 12 years. HPV vaccines can be administered starting at age nine. HPV vaccination needs to be implemented for all preteens to prevent them from HPV infections, which can lead to cancer later in life. Teens and young adults up to the age of 26 who did not begin or complete the HPV vaccine series also require HPV immunization. The Centers for Disease Control and Prevention advises that 11- to 12-year-olds receive two doses of HPV vaccine, six to twelve months apart.

#### ➤ *Statement*

A study to assess knowledge and attitudes concerning cervical cancer and HPV vaccine among health care personnel in a selected hospital of New Delhi.

#### ➤ *Objectives*

- Assess health care providers knowledge of cervical cancer and HPV vaccine at a New Delhi hospital
- Assess health care providers' attitudes about cervical cancer and HPV vaccine at a New Delhi hospital.
- Assess the relationship between health care providers knowledge and attitudes concerning cervical cancer and the HPV vaccine in a New Delhi hospital.

## II. METHODOLOGY

- The study approach is quantitative.
- Descriptive study methodology design.
- Setting: Holy Family Hospital
- Sample: Healthcare professionals (Nursing personnel, Medical Laboratory technicians, Physiotherapists, Pharmacists and Radiologists.
- Sample size: 160

#### ➤ *Tool for Data Collection Procedure:*

- Demographic data
- Structure knowledge questionnaire
- Likert scale
- Validation: Tools were verified by seven experts.
- Ethical clearance has been obtained through the Holy Family Hospital's Ethical Committee of New Delhi.

#### ➤ *Data Collection Procedure:*

Permission to conduct the study was obtained from Holy Family hospital and the Principal of Holy Family College of Nursing, New Delhi. The data was collected from January 28<sup>th</sup> to February 4<sup>th</sup>, 2023 and each participant signed written consent. There was a total of 160 participants, and the samples were kept confidential and anonymous. 40 to 45 minutes. Each participant completed a structured questionnaire and a Likert scale to assess their knowledge and attitudes around cervical cancer and the HPV vaccine. The researcher collected 15-20 samples daily. All of the samples were amenable through data collection.

## III. MAJOR FINDINGS

### ➤ *SECTION I: Demographic Data of Samples*

- Majority of samples i.e., 57 (35.6%) are between 23-27 years of age.
- Majority of samples that is 86 (53.8%) are Hindu.
- Majority of samples i.e., 98 (61.2%) are unmarried.
- Majority of samples i.e., 59 (36.8%) are nursing personnel, 32 (20%) of them are from Medical Laboratory, 39 (24.4%) are from radiology and 15 (9.4%) each from physiotherapy and pharmacy.
- There were 133 (83.1%) samples have heard about HPV vaccine.
- 81 (50.6%) of the respondents learned about cervical cancer and HPV vaccine via classrooms, hospitals, or workplaces.
- 99.3% of the samples (159) showed no family history of cervical cancer.

### ➤ *SECTION II: The Findings Related to Assessment of Knowledge of Cervical Cancer and HPV Vaccine.*

- A total of 107 (66.9%) samples had average understanding, 48 (30%) had strong knowledge, and 5 (3.1%) had low awareness concerning HPV vaccine and the development of cervical cancer.
- The average degree of expertise is 15.1 with a standard deviation of 3.3.

Table 1: Mean, Median and Standard Deviation of the Level of Knowledge of the Healthcare Professionals

Knowledge Level	Mean	Median	SD
Knowledge Scores	15.1	15.5	3.3

### ➤ *SECTION III: Findings Related to Attitude Score*

- 108 (67.5%) of the samples had a positive attitude toward cervical cancer and the HPV vaccine, while 52 (32.5%) had a fair attitude.
- The samples mean attitude level is 34.8, with a median of 36 and a standard deviation of 6.2.

Table 2: Mean, Median and Standard Deviation of the Attitude Scores of Healthcare Professionals

Attribute	Mean	Median	SD
Attitude	34.8	36	6.2

### ➤ *SECTION IV: Findings Showing the Relationship with the Level of Knowledge and Attitude of Health Care Professionals.*

Table 3: Correlation between Cervical Cancer Knowledge and Attitudes toward the HPV Vaccine

Attribute	Mean	MD	SD	Correlation (R)
Knowledge	15.1	19.7	3.3	+0.4

- Health care workers' knowledge and attitude levels varied by an average of 19.7.
- The 'r' value of +0.4 indicates a weak positive connection between health care providers' knowledge and attitudes towards the HPV vaccine and cervical cancer.

➤ *SECTION V: The Findings Relate to the Level of Knowledge and Attitude among Healthcare Workers Representing Various Departments.*

- Healthcare personnel across department share similar knowledge and attitudes.
- Nursing personnel have the greatest degree of knowledge and attitude (36% and 35%), whereas pharmacists possess the least percentage (9% and 10%, respectively).

#### IV. SUMMARY

The current study was carried out to assess health care providers' knowledge and attitudes around cervical cancer and the HPV vaccine at a selected Delhi hospital. The current investigation used a quantitative research approach, with a descriptive survey design. A total of 160 samples were chosen using the purposive sampling technique. The study's tools included demographic data from the samples, a Structured Understanding Questionnaire to test knowledge about cervical cancer and the HPV vaccine, and a Likert scale to examine health care workers' attitudes toward cervical cancer and HPV vaccine. It took 7 days to acquire the data. Each participant took 40-45 minutes to complete the tool, which included a structured questionnaire and a Likert scale to assess their knowledge and attitudes on cervical cancer and the HPV vaccine.

#### V. IMPLICATIONS

- **NURSING PRACTICE:** Healthcare professionals should have knowledge and attitude towards cervical cancer and the HPV vaccine. They should be able to provide education and awareness relating to cervical cancer and the HPV vaccine.
- **NURSING EDUCATION:** nursing education department can include the awareness related to cervical cancer and HPV vaccines through various educational programs like CNE's, Webinar, workshop, etc.
- **NURSING ADMINISTRATION:** Nurse Manager can update information on HPV vaccines and coordinate with the management to arrange for the provision of the vaccines for public and staffs.
- **NURSING RESEARCH:** The findings of the present study have added knowledge to the already existing literature and implications for nursing research. This study can provide insight and help to conduct more research on Cervical cancer and HPV vaccine.

#### ➤ Recommendations

- The studies can be replicated on larger samples to validate the finding and for broader generalization.
- A comparative study can be done among students of different courses.
- A follow up study can be done to assess the knowledge and administration of HPV vaccine.
- A study can be conducted to assess the effectiveness of the HPV vaccine in preventing the incidence of cervical cancer

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