

## CROSS SECTIONAL STUDY TO ESTIMATE THE KNOWLEDGE ON HUMAN PAPILLOMA VIRUS VACCINE FOR THE PREVENTION OF CERVICAL CANCER AMONG NURSING STUDENTS.

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### **ABSTRACT**

*Cervical cancer is the leading motive for most of the reproductive age institution ladies's mortality. Human papilloma virus vaccine is to be had to prevent cervical most cancers. A descriptive approach was used to estimate the extent of knowledge on human papilloma virus vaccine for the prevention of cervical cancer among nursing college students. Data was collected by using administering semi structured questionnaire includes socio-demographic variables; to assess the level of knowledge 30 MCQs were given. Every correct answer turned into given one mark. Facts analysis became performed by way of the usage of descriptive and inferential data. Among 30 students, 6 (20%) had inadequate knowledge, five (17%) had moderately good enough information, 19 (63%) had adequate expertise concerning HPV Vaccine in prevention of cervical most cancers. This study concluded that most of the students had adequate knowledge. So this is the nice time to provide proper knowledge to the students and advise them to take vaccines.*

**KEYWORDS:** Human Papilloma Virus, Cervical cancer, Nursing Students, Prevention, Knowledge

### **INTRODUCTION**

Cancer is situations in which some of the frame's cells develop out of manage and unfold to different body areas. (1). The decrease part of the uterus that connects to the vagina, the cervix, is in which cervical cancer develops. (2). In keeping with WHO, It estimates, there are 6, 04,000 new cases of cervical cancer and about 90% of the new cases and deaths global in 2020 befell in low- and center-earnings nations . More than one sexual partners, STDs, a weaker immune gadget, smoking, use of miscarriage prevention tablets, and so on. Cervical cancer is six times greater common in girls with HIV than in women without the virus, and about five% of cases are thought to be related to HIV. The human papillomavirus is essential reason for cervical most cancers (greater than ninety five% of instances) (HPV).(3)

In women with healthy immune systems, cervical most cancers takes 15 to twenty years to take area. In ladies with compromised immune systems, inclusive of these with untreated HIV infection, it is able to occur in best five to ten years. The most effective timing for HPV vaccinations is earlier than HPV publicity As a result, the WHO suggests immunizing ladies among the sometime of 9 and 14 to prevent from cervical cancers, a time while the general public have not however started out sexual interest. The food and Drug administration (FDA) of America authorised the first HPV vaccine for the primary prevention of Cervical cancers in 2006.(5)

The WHO has prequalified four vaccines that all provide safety in opposition to HPV types sixteen and 18, which

is probably regarded to be accountable for at least 70% of cervical malignancies. The final 5 oncogenic HPV types, which account for an extra 20% of cervical malignancies, are covered against via the 9-valent vaccine. Moreover, of the vaccines provide defence towards HPV strains 6 and 11, which might be accountable for genital warts. (6).

In keeping with the Centres for Disease Control and Prevention (CDC), cervical most cancers is the number one motive for most cancers-related deaths in girls in the US. The frequency of cervical most cancers cases and deaths has considerably declined over the past 40 years, nonetheless. (7)

There will be 28.4 million new instances of most cancers worldwide in 2040, up forty seven% from 2020, with rising countries seeing the best increase (64% to 95%) compared to industrialized nations (32% to 56%), means of enhancing the community's consciousness of and attitudes concerning HPV vaccine, dad and mom, and female college students, it is able to be possible to vaccinate all ladies.(8)

But, one of the maximum essential markers for the prevention and management of cervical cancers is raising awareness and influencing people to have a nice attitude in the direction of the HPV vaccine.(9) primary and secondary prevention are components of the cervical cancer manage strategy. Ordinary screenings with pap exams and HPV exams to identify any pre-cancers and deal with them can frequently prevent cervical cancer. Additionally, it can be averted by means of getting the HPV vaccine.(10) Any comprehensive cervical cancer prevention and manipulate programme pursuits to lower the disease's effect. To reduce cervical cancer, it is vital to lessen HPV infections, early detection and treatment of cervical pre-most cancers lesions, and activate prognosis and palliative take care of invasive cancer. (11)

In step with a look at, knowledge and perceptions of healthcare experts have a widespread impact on using those diagnostic modalities, and lack of awareness of the causal link among HPV infection and cervical most cancers in addition to massive hostility toward HPV vaccination and screening can be a extensive contributing aspect. Thus the present take a look at was undertaken to assess the information regarding HPV vaccination for the prevention of cervical cancer amongst nursing students in a specific nursing college at Trichy.

## **STATEMENT OF THE PROBLEM**

Cross sectional study to estimate the knowledge on human papilloma virus vaccine for the prevention of cervical cancer among Nursing Students.

## **OBJECTIVES OF THE STUDY**

- To estimate the knowledge on HPV vaccine for prevention of cervical cancer.
- To find out the association between level of knowledge and their selected socio-demographic variables.

## **RESEARCH METHODOLOGY**

- **Research Approach:** Quantitative approach
- **Research Design:** Descriptive design
- **Setting:** SRM Trichy College of Nursing, Trichy.
- **Population:** B.Sc (Nursing) students studying at SRM Trichy College of Nursing.

- **Sample:** 3<sup>rd</sup> year B.SC Nursing Students.

## **CRITERIA FOR SAMPLE SELECTION**

### **Inclusion Criteria**

- Students inclined to participate in the study
- Students available during data collection

### **Exclusion Criteria**

- Students who are unwell at the time of data collection.
- Students who are already vaccinated
  - **Sample Size:** 30 samples
  - **Sampling Technique:** Convenient sampling technique

## **DATA COLLECTION TOOL**

- Instrument consisted of two parts, part 1 & 2.

## **SECTION: 1 DEMOGRAPHIC VARIABLE**

- It included the demographic variables such as Religion, BMI, Area of living, Age of Menarche and Menstruation Cycle.

## **SECTION: 2 STRUCTURED QUESTIONNAIRE**

MCQs had been used to evaluate the extent of knowledge regarding HPV Vaccine and prevention of cervical cancer.. It consists of 30 questions. Each right solution carried one mark.. The total score was 30. The score was converted into percentage and interpreted as follows,

- Below 50 %-Inadequate
- 51–75 %-Moderately Adequate
- 76–100 %-Adequate.

## **VALIDITY**

Validity of the tool became mounted after consulting with Nursing experts. Primarily based on advice given by using the professionals on diverse gadgets inside the questionnaire, corrections were made and the tool became modified.

## **RELIABILITY**

Reliability of the device became determined with the aid of assessing the quality and adequacy of the device the use of take a look at-retest method. The reliability become  $r=0.80$ . For this reason the device turned into observed to be statistically dependable for the take a look at.

## **DATA COLLECTION PROCEDURE**

The study was performed in SRM Trichy university of Nursing. The earlier permission becomes obtained from the top of institution to gather the information from the samples. The self-advent and the motive of the look at have been defined to the participants and set up rapport with the samples. Self-administered questionnaire was used to gather the statistics from the samples. It took approximately 30 minutes to accumulate the records from the samples.

## DATA ANALYSIS

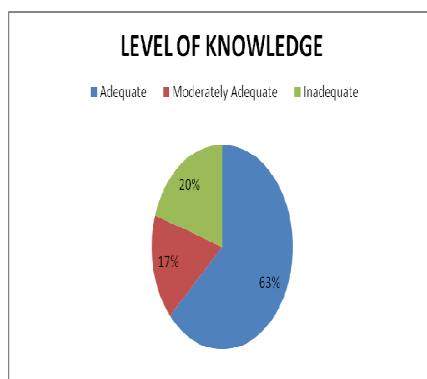
The data analysis was done using descriptive and inferential statistics.

## RESULTS

**Table: 1 Frequency and Percentage Distribution of Demographic Variables (N=30)**

S.NO	Demographic variables	Frequency	Percentage (%)
1.	<b>Religion</b>		
	a) Hindu	25	83.3
	b) Christian	05	16.7
2.	<b>BMI</b>		
	a) Under Weight	05	16.7
	b) Normal	23	76.7
3.	<b>Area of Living</b>		
	a) Rural	10	33.3
4.	<b>Age of Menarche</b>		
	a) 10–12 Years	02	06.7
	b) 12–15 Years	26	86.6
5.	<b>Menstruation Cycle</b>		
	a) Regular	27	90.0
	b) Irregular	03	10.0

Table 1 showed that most of the participants 25 (83.3 %) belong to Hindu religion where others 5 (26.7%) belong to Christian religion. In BMI, Many participants 23 (76.7%) were normal weight, some 5 (16.7%) were under weight and 2 (06.6%) were overweight. 20 students were living in Urban, 10 students were living in Rural. Majority of the students 26 (86.6%) attained Menarche at age between 12 – 15 years. Most of the participants 27 (90%) have regular cycle and only very few 3 (10%) have irregular cycle.



**Figure 1: Level of knowledge on HPV Vaccination and prevention of cervical cancer.**

Figure: 1 showed that 6 (20%) had inadequate knowledge, 5 (17%) had moderately adequate knowledge, 19 (63%) had adequate knowledge regarding HPV Vaccination and prevention of cervical cancer.

**Table 2: Association Between Level of Knowledge and Socio-Demographic Variables (N=30)**

S.NO	Demographic Variables	LEVEL OF KNOWLEDGE			Chi-Square Value	P Value
		Inadequate	Moderately Adequate	Adequate		
1.	<b>Religion</b>				22.28	<b>000176 (S*)</b>
	a) Hindu	0	04	21		
	b) Christian	02	01	02		
	c) Muslim	0	0	0		
2.	<b>BMI</b>				11.24	<b>023995 (S*)</b>
	a) Underweight	02	0	03		
	b) Normal	02	06	15		
	c) Over Weight	0	0	02		
3.	<b>Area of Living</b>				4.8	<b>187042 (NS)</b>
	a) Rural	0	03	07		
	b) Urban	06	02	12		
4.	<b>Age of Menarche</b>				10.37	<b>034636 (NS)</b>
	a) 10–12Years	0	01	01		
	b) 12–15Years	06	05	15		
	c) 15–18Years	0	0	02		
5.	<b>Menstruation Cycle</b>				11.87	<b>007842 (S*)</b>
	a) Regular	05	05	17		
	b) Irregular	01	0	02		

(NS–Non-Significance, S-Significance at P=0.05 Level)

Table 2 showed the Chi – square values of association between knowledge among nursing students with their demographic variables like Religion, BMI, Area of living, Age of Menarche and Menstruation cycle. The findings revealed that there was Significant association between knowledge scores of Nursing students with their demographic variables such as Religion (p = 0.000176), BMI (P=0.023995) and Menstruation cycle (p=0.007842).

## DISCUSSIONS

- **The primary objective** of the observe turned into to estimate the level of understanding of Nursing students on HPV Vaccine for the prevention of cervical most cancers. The records analysis showed that 6 (20%) had inadequate expertise, five (17%) had moderately ok knowledge, 19 (sixty three%) had good expertise. It revealed that Nursing college students have adequate understanding and some college students also should be trained concerning significance of HPV Vaccine for the prevention of cervical cancer. The study findings had helping views in the research engaged through Ramesh Kumari et al survey document showed that amongst 367 a few of the Nursing students 54 % had properly know-how regarding HPV vaccine in prevention of cervical most cancers.(12)
- **The second objective** was to find the association between the level of knowledge with their selected demographic variables. The findings revealed that there was Significant association between knowledge scores of Nursing students with their demographic variables such as Religion (p = 0.000176), BMI (P=0.023995) and Menstruation cycle (p=0.007842). The study findings are supported by the following study conducted by Anayawa Nyambe et

al conducted a study to Assess knowledge, attitude and practices of cervical cancer prevention. The result showed that there was a strong association between having awareness of cervical cancer and practicing screening with religion and vaccination with menstrual cycle. Social interactions were also found to greatly influence screening and vaccination behaviours. (13)

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