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A Descriptive Study to Assess the Level of Knowledge Regarding HPV Vaccination Among Early Adolescent Girls in Selected School, Greater Noida, U.P.

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ABSTRACT

HPV is the "most common sexually transmitted infection," with approximately four out of five sexually active individuals getting infected at some point in their life. Cancers of the throat, mouth, cervix, anus, penis, and vagina have all been linked to HPV infections. This study was conducted using descriptive, cross-sectional research design. A convenience sampling technique was used to select 60 samples for the study. A structured knowledge questionnaire was prepared to assess the knowledge regarding HPV vaccination. Both descriptive and inferential statistics were used to analyze the data. Findings of the study revealed that the Majority of early adolescent had good knowledge i.e. 28(46.67%), 24(40%) had average knowledge, 6(10%) had poor knowledge and only 2(3.34%) had excellent knowledge. Mean value was 13.32. Standard deviation value was 4.02. The study highlights the urgent need for structured educational interventions to increase awareness about HPV and cervical cancer prevention. It also emphasizes the importance of vaccination awareness programs, which should be implemented in schools through healthcare professionals.

Keywords: *Assess, knowledge, HPV vaccination, early adolescent*

INTRODUCTION

Cervical cancer is a significant public health concern, especially in developing countries. Globally, it ranks as the fourth most common cancer among women, with an estimated 604,000 new cases and 342,000 deaths in 2020, according to the World Health Organization (WHO).[1] In India, according to the Indian Council of Medical Research (ICMR), approximately 122,844 women are diagnosed with cervical cancer annually, and around 67,477 women die from the disease each year. These numbers highlight the urgent need for effective preventive strategies. [1]

The primary cause of cervical cancer is persistent infection with the Human Papillomavirus (HPV), a common virus transmitted through sexual contact. Among the many types of HPV, types 16 and 18 are considered high-risk and are responsible for approximately 70% of cervical cancer cases. While HPV infections are usually asymptomatic and may clear on their own, in some cases, they progress to precancerous lesions and eventually cancer if left untreated. [2]

The World Health Organization and many national health programs have recommended the integration of HPV vaccination into routine immunization schedules. [3]

Adolescent girls represent a vital population for HPV vaccination programs. Schools offer an ideal setting for providing health education

and vaccination services. However, several studies conducted in different parts of the world have shown that knowledge regarding HPV and its vaccine among adolescent girls is insufficient. Poor knowledge is directly linked to negative attitudes and low vaccine acceptance. [4]

Despite these recommendations, the uptake of the HPV vaccine remains low in many regions due to various barriers such as lack of awareness, misconceptions about the vaccine, fear of side effects, cultural beliefs, limited access to healthcare services, and inadequate health education. [5] Adolescents and their parents often lack accurate information about the importance, safety, and effectiveness of the HPV vaccine.

OBJECTIVES

1. To assess the level of knowledge regarding the Human Papillomavirus (HPV) vaccine and cervical cancer among the target population.
2. To find out the association between knowledge score and their selected demographic variable.
3. To develop and distribute comprehensive pamphlet on key information about HPV vaccination.

METHODOLOGY

A non-experimental one group pre-test only design was adopted for this study. Data was collected from 60 samples using non-probability convenient sampling technique. The tool used for data collection was self-structured knowledge questionnaire. Data was analyzed using descriptive and inferential statistics.

Tool Used

The tool was divided into two sections. Section:1 consisted of demographic data i.e. age (in years), area of residence, mother's education, father's education, family annual income, religion, occupation of mother, occupation of father, previous knowledge about HPV vaccination, opinion towards HPV vaccination. Section 2 consisted of self-structured knowledge questionnaires that include 20 questions. The tools were validated by expert nursing faculties. The reliability of the tool was calculated by Karl Pearson correlation coefficient formula it was found to be = 0.70. The knowledge level was divided into four categories based on adolescent girls knowledge score Excellent 16-20, Good 11-15, Average 6-8, poor 0-5. Permission was taken from Principal, Deshraj Public School, Bisrakh. Informed consent was taken from participants. Pilot study was conducted before conducting main study.

Results

The majority of early adolescent girls scored good marks, i.e., 28 (46.67%); 24 (40%) scored average marks; 6 (10%) scored poor marks; and only 2 (3.34%) scored excellent marks.

The mean score on level of knowledge was 10.34. The standard deviation was 3.14.

Among all the demographic variables, only religion through various sources showed a statistically significant association with the level of knowledge ($p<0.05$).

Table 4.1 Frequency and percentage distribution of demographic variables **N = 60**

S. No.	Demographic variables	Frequency (n)	Percentage (%)
1.	**Age**		
	a. 10 years	21	35
	b. 11 years	17	28.3
	c. 12 years	15	25
	d. 13 years	7	11.7
2.	**Area of residence**		
	a. Urban	46	76.7
	b. Rural	14	23.3

3.	**Mother's education**		
	a. 10th pass	19	31.7
	b. 12th pass	26	43.3
	c. Graduation	14	23.3
	d. Illiterate	1	1.7
4.	**Father's education**		
	a. 10th pass	13	21.7
	b. 12th pass	24	40
	c. Graduation	21	35
	d. Illiterate	2	3.3
5.	**Family annual income**		
	a. 10,000-20,000	5	8.4
	b. 20,000-30,000	23	38.3
	c. 30,000-40,000	17	28.3
	d. 40,000 or more	15	25
6.	**Religion**		
	a. Hindu	56	93.34
	b. Muslim	2	3.33
	c. Sikh	2	3.30
	d. Other	0	0
7.	**Occupation of mother**		
	a. Housemaker	51	85
	b. Private job	8	13.34
	c. Government job	0	0
	d. Business	1	1.66
8.	**Occupation of father**		
	a. Business	23	38.34
	b. Private job	24	40
	c. Government job	3	5
	d. Other	10	16.66
9.	**Previous knowledge regarding HPV vaccination**		
	a. Yes, specify	9	15
	b. No	51	83.34

Table 4.2. Frequency and Percentage distribution, mean and standard deviation of knowledge score of early adolescent girls **N=60**

Score	Grading	Knowledge Score		Mean	Standard Deviation
		Frequency	Percentage		
16-20	Excellent	2	3.3	10.34	3.14
11-15	Good	28	46.7		
6-8	Average	24	40		
0-5	Poor	6	10		

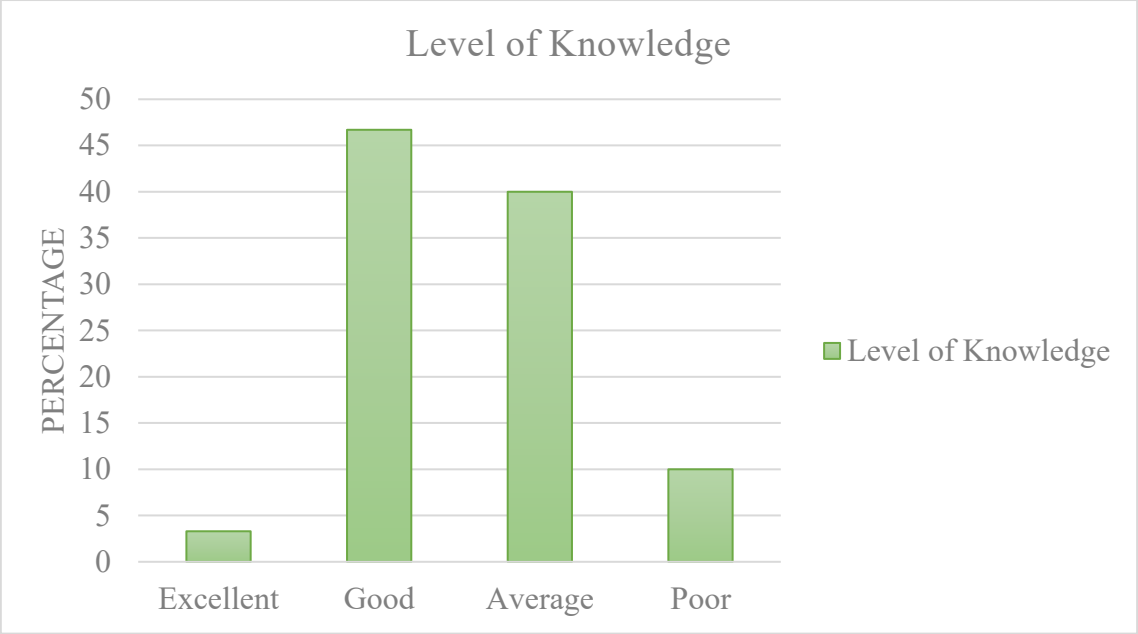

Figure. 1: Frequency and Percentage Distribution of sample on the basis of their level of knowledge.

DISCUSSION

The result of the current research study shows that majority of early adolescent girls scored good marks, i.e., 28 (46.67%); 24 (40%) scored average marks; 6 (10%) scored poor marks; and only 2 (3.34%) scored excellent marks. A similar study shows that the level of knowledge regarding ill effects of tobacco consumption on health among adolescents. Out of 100 adolescents, 4 (4%) had inadequate knowledge, 87 (87%) had moderate knowledge, and 9(9%) had adequate knowledge about the ill effects of tobacco consumption. A similar study revealed that despite ongoing global and national health campaigns, only 28% of the adolescent participants had heard of HPV, and among them, just 15% could accurately associate it with cervical cancer. [6]

CONCLUSION

The study highlights that knowledge regarding HPV vaccination among early adolescent girls in the selected school, greater Noida, UP. A large proportion of participants had no prior knowledge of HPV vaccination, and misconception were common. The findings of this study reveal that the majority of adolescent girls have limited knowledge regarding the HPV vaccination, the findings indicates that while a majority of participants 75% believes HPV vaccination is beneficial, 83.34% girls have no prior knowledge of HPV vaccination.

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