



## Original Research Article

### Attitude on Human Papilloma Virus vaccination

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#### ABSTRACT

##### Keywords

Attitude;  
Human  
Papilloma  
Virus  
vaccination;  
health  
professionals;  
non health  
professionals.

A comparative study was conducted to assess the attitude on Human Papilloma Virus (HPV) Vaccination among health professionals and non health professionals in selected institutions of Manipal University, Manipal. The objectives were to assess the attitude on HPV vaccination and compare among health and non health professionals. A survey approach using comparative research design was used for the study. Stratified random sampling technique was used to select 45 samples to each group i.e health professional and non health professionals working in institutions of Manipal University by administering structured attitude questionnaire to collect the data. It was found that 80% of health professionals and 46.7% of non health professionals had positive attitude towards HPV vaccination. Health professional had highest attitude level which shows it is clinically significant but statistically there was no significance between attitude among health and non health professionals.

#### Introduction

Human papilloma virus (HPV) infection is estimated to be the most common sexually transmitted infection. Most cervical cancers and STDs are caused by human papilloma virus (HPV).

Cervical cancer is the second most common malignancy among women worldwide, with about 500,000 cases a year.<sup>1</sup> The incidence and mortality from this disease in developing countries is very high. India has a population of 366.58 million women ages 15 years and older

who are at risk of developing cervical cancer. Cervical cancer ranks as the 1<sup>st</sup> most frequent cancer among women in India, and the 1<sup>st</sup> most frequent cancer among women between 15 and 44 years of age.<sup>2</sup> Sexually transmitted disease (STD) is one of the most common causes of illness throughout the world. The World Health Organization (WHO) has estimated that 340 million cases of curable STDs occur every year. In 1990, it was estimated that there were 30 million new cases of human papilloma virus (HPV)

and 20 million new cases of genital herpes annually worldwide. Human Papilloma Virus (HPV) vaccine has undergone successful trials and has recently been approved for use for the primary prevention of cervical cancer. During 2008 and 2009 the United Kingdom has seen the widespread use of two new vaccines to prevent cancer of the cervix i.e. Gardasil and Cervarix. There are only few studies regarding HPV vaccine among health professionals who plays an important role in creating awareness to the public. To educate others health professionals should first aware of newly introduced vaccine for cervical cancer and sexually transmitted diseases.

### **Statement of the problem**

A comparative study to assess the attitude on Human Papilloma Virus (HPV) Vaccination among health professionals and non health professionals in selected institutions of Manipal University, Manipal, India.

### **Objectives of the study**

The objectives of the study were to:

Assess the attitude on HPV vaccination among health professionals and non health professionals by using structured knowledge questionnaire.

Compare the attitude on HPV Vaccination among health professionals and non health professionals.

### **Materials and Methods**

Comparative research design was used to determine attitude regarding HPV vaccination among health professionals and non health professionals. Stratified random sampling technique was used to

select 45 samples to each group i.e. health professionals and non health professionals those who are working in different (health professional and non health professional) institutions of Manipal University. Data collected by administering structured attitude questionnaire. Data collected after taken the administrative permission from selected Institutions and consent from the participants.

### **Result and Discussion**

The data was analyzed based on objectives and hypothesis by using descriptive and inferential statistics. The study revealed that majority of the sample in both groups (i.e health professionals and non health professionals) were in the age group of 31-40 years (42.2%) and (37.8%), males (77.8%) and (66.7%), Hindu religion (91.1%), (82.2%) and married (77.8%), (75%) respectively. Majority had doctoral qualification (44.4%) among health professional and (62.2%) post graduate among non health professionals and most of them were teaching faculty (53.3%), (100%) respectively on both groups. Majority samples had monthly income (in rupees) of more than Rs 25000/- (80%) and (82.2%), belongs to nuclear family (66.7%), (75.6%) and no family history of any STDs and cervical cancer, source of information from media (51.1%) and (24.4%) respectively. Majority of the health professionals and non health professionals were having 1-5 years of experience (46.7%) and (42.2%) respectively. Out of 45 health professionals, majority of them from surgery department (17.8%) and pharmacy (13.30%) and (2.2%) least from yoga department and among non health professionals, (55.6%) were from

**Table.1** Frequency and percentage distribution of sample characteristics among health professionals and non health professionals

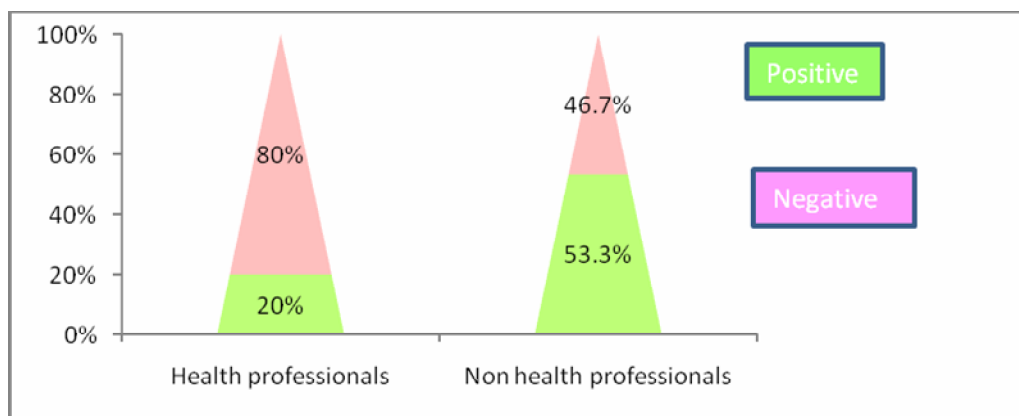
(n=45+45=90)

S.No.	Sample characteristics	Health professionals		Non health professionals	
		f	%	f	%
1	<b>Age in years</b>				
	21-30	16	35.6	13	28.8
	31-40	19	42.2	17	37.8
	41-50	08	17.8	12	26.7
	51-60	02	04.4	03	06.7
2	<b>Gender</b>				
	Male	35	77.8	30	66.7
	Female	10	22.2	15	33.3
3	<b>Religion</b>				
	Christian	03	06.7	06	13.3
	Hindu	41	91.1	37	82.3
	Muslim	01	02.2	00	00
	Other	00	00	02	04.4
4	<b>Marital status</b>				
	Single	09	20.0	11	24.4
	Married	35	77.8	33	75.0
	Separated	01	02.2	00	00
	Divorced	00	00	01	02.3
5	<b>Education</b>				
	Diploma	01	02.2	00	00
	Graduate	03	06.7	03	06.7
	Post graduate	17	37.8	28	62.2
	Doctoral	20	44.4	12	26.7
	Post doctoral	04	08.9	02	04.4
6	<b>Occupation</b>				
	Doctors	15	33.3	00	00
	Pharmacists	06	13.4	00	00
	Teaching faculty	24	53.3	45	100
7	<b>Monthly income in rupees</b>				
	< 10000	00	00	00	00
	10001-15000	01	02.2	02	04.4
	15001-20000	02	04.4	01	02.2
	20001-25000	06	13.4	05	11.1
	>25000	36	80.0	37	82.3
8	<b>Type of family</b>				
	Nuclear	30	66.7	34	75.6
	Joint	14	33.3	11	24.4

<b>9</b>	<b>Family history</b>				
	No	45	100.0	44	97.7
	Genital warts	00	00	01	02.2
<b>10</b>	<b>Source of information</b>				
	<b>Family members</b>				
	yes	05	11.1	02	04.4
	no	40	88.9	43	95.6
	<b>Health personnel</b>				
	yes	12	73.3	07	15.6
	no	33	26.7	38	84.4
	<b>Friends</b>				
	yes	07	15.6	04	08.9
	no	38	84.4	41	91.1
	<b>Media</b>				
	yes	23	51.1	11	24.4
no	22	48.9	34	75.6	
<b>Others</b>					
yes	11	24.4	03	06.7	
no	34	75.6	42	93.3	
<b>11</b>	<b>Years of experience</b>				
	1-5	21	46.7	19	42.2
	6-10	13	28.9	14	31.1
	11-15	05	11.1	04	08.9
	16-20	20	04.4	06	13.4
	21-25	03	06.7	00	00
	26-30	01	02.2	02	04.4
<b>12</b>	<b>Area of working</b>				
	Ayurveda	3	6.7	NA	-
	Bioinformatics	2	4.4	NA	-
	Biological research	2	4.4	NA	-
	Biotechnology	4	8.9	NA	-
	Medicine	5	11.1	NA	-
	Pharmacy	6	13.3	NA	-
	Radiation oncology	3	8.9	NA	-
	Research	5	11.1	NA	-
	Surgery	8	17.9	NA	-
	Urology	5	11.1	NA	-
	Yoga	1	2.2	NA	-
	Information technology	NA	-	25	55.6
	Management	NA	-	17	37.8
Philosophy	NA	-	03	06.7	

\*NA – not applicable

**Fig.1** Bar diagram Percentage distribution of attitude score on HPV vaccination  
n=90(45+45)



**Table.2** Mean and standard deviation on attitude of both health and non health professionals.  
n= (45+45) 90

Variables	Health professionals		Non health professionals		t-Value	p value
	Mean	SD	Mean	SD		
Attitude	59.04	8.11	51.78	9.95	3.795	.393

information technology, (37.80%) were from management department and only (6.7%) from philosophy and humanities department (Table 1).

Figure.1 shows the percentage distribution of attitude score among health professionals and non health professional. Result shows 80% had positive attitude towards HPV vaccination and (46.7%) among non health professionals.

Results further reveals that the mean attitude score among health professionals (59.04) and non health professionals (51.78). Since the p values was (.393), the difference between health and non health professionals were statistically not significant (p value >0.05). There is no significant difference in the mean attitude scores on HPV vaccination among health

professionals and non health professionals (Table 2).

In the current study, attitude on HPV vaccination, health professional had more positive attitude (80%) as compared to non health professionals (46.7%). A study conducted in the three urban areas of Birmingham in UK with the purpose to assess the attitudes towards, HPV vaccination and to determine the effect of social class and ethnicity on attitudes towards the HPV vaccine and found that majority (88%) of participants were in favour of vaccination, with 83.6% indicating that they would allow a child under their care to be vaccinated. In a study, it was found that overall acceptance of HPV vaccine among the population studied was 67.8%. Majority of participants agreed that the most important

obstacle in implementation of HPV vaccination program in our country is inadequate information and 86.2% wanted to be educated by experts.

Out of 45 health professionals 80% had positive attitude and among 45 non health professionals, 46.7% showed good attitude. In comparing, health professional had highest level attitude clinically but statistically there was no significant difference in knowledge and attitude among health and non health professionals. Accurate and adequate information of health professionals will help to improve the knowledge as well as attitude on HPV vaccination, a newly introduced vaccine for HPV infections which guides them in creating awareness to the general public about the vaccine and helps in the prevention, reduction in mortality of cervical cancer, STDs and other HPV infections in future.

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