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Knowledge on Human Papilloma Virus Vaccination

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ABSTRACT

A comparative study was conducted to assess the knowledge 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 knowledge on HPV vaccination and compare among health and non health professionals. Methods and materials: 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 professionals and non health professionals working in institutions of Manipal University by administering structured knowledge questionnaire to collect the data. It was found that health professional had average knowledge (55.6%) and 2.2% had good knowledge and among non health professionals majority shows poor knowledge (80%). Conclusion: Health professional had highest level knowledge which shows it is clinically significant but statistically there was no significance between knowledge among health and non health professionals.

Keywords: knowledge, human papilloma virus vaccination, health professionals, non health professionals.

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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 [1]. 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 1st most frequent cancer among women in India, and the 1st most frequent cancer among women between 15 and 44 years of age [2]. 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 [3]. 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 [4]. There are only few studies regarding HPV vaccine among health professionals who plays an important role in making 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 knowledge on Human Papilloma Virus (HPV) Vaccination among health professionals and non health professionals in selected institutions of Manipal University, Manipal"

Objectives of the study

The objectives of the study were to:

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

MATERIALS AND METHODS

Comparative research design was used to determine knowledge 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 working in different (health professional and non health professional)

institutions of Manipal University by administering structured knowledge questionnaire to collect the data. Data were collected after taken the administrative permission from selected Institutions and consent from the participants.

RESULTS

The data was analyzed based on objectives and hypothesis by using descriptive and inferential statistics. Descriptive statistics used were frequency, percentage for demographic characteristics and paired 't' test was used to test the significance of difference in the mean knowledge between health professionals and non health professionals . The study revealed that majority of the sample in both groups 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%). Majority had doctoral qualification (44.4%) among health professional and (62.2%) post graduate among non health professionals and majority 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 information technology, (37.80%) were from management department and only (6.7%) from philosophy and humanities department (Table 1)

Table 1: Frequency and percentage distribution of sample characteristics among health professionals and non health professionals (n=45+45=90)

	Sample characteristics	Health professionals		Non health professionals	
		f	%	f	%
1	**Age in years**				
	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	**Gender**				
	Male	35	77.8	30	66.7
	Female	10	22.2	15	33.3
3	**Religion**				
	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	**Marital status**				
	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	**Education**				
	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	**Occupation**				
	Doctors	15	33.3	00	00
	Pharmacists	06	13.4	00	00
	Teaching faculty	24	53.3	45	100
7	**Monthly income in rupees**				
	< 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	**Type of family**				
	Nuclear	30	66.7	34	75.6
	Joint	14	33.3	11	24.4
9	**Family history**				
	No	45	100.0	44	97.7
	Genital warts	00	00	01	02.2
10	**Source of information**				
	Family members				
	yes	05	11.1	02	04.4
	no	40	88.9	43	95.6
	Health personnel				
	yes	12	73.3	07	15.6
	no	33	26.7	38	84.4
	Friends				
	yes	07	15.6	04	08.9
	no	38	84.4	41	91.1
	Media				
	yes	23	51.1	11	24.4
	no	22	48.9	34	75.6
	Others				
	yes	11	24.4	03	06.7
	no	34	75.6	42	93.3
11	**Years of experience**				
	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
12.	**Area of working**				
	Ayurveda	3	6.7	NA	-
	Bioinformatics	2	4.4	NA	-
	Biological research	2	4.4	NA	-

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	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

Majority of the samples from health professional had average knowledge (55.6%) and (2.2%) had good knowledge and among non health professionals majority shows poor knowledge (80%) (Fig 1) n=90 (45+45)

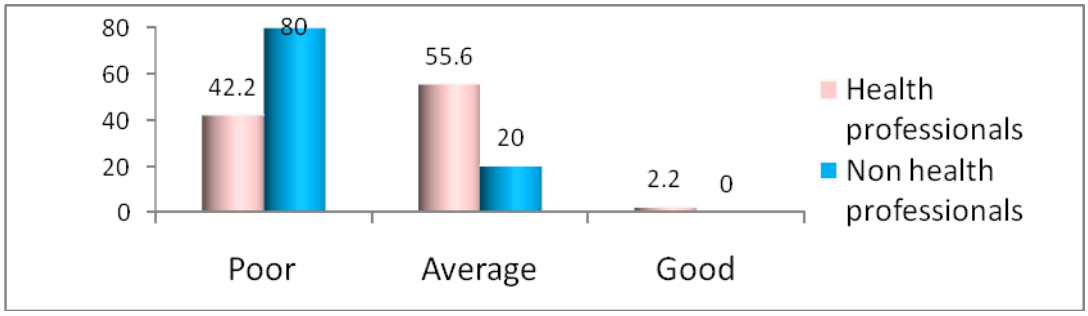

Fig 1: Bar diagram Percentage distribution of knowledge score on HPV vaccination

The independent 't' value showed that the mean knowledge score of health professional (6.49) and non health professionals (3.71). Since the p values was (.609), the difference between health and non health professionals were statistically not significant (p value >0.05) (Table 2).

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

Variables	Health professionals		Non health professionals		t-Value	p value
	Mean	SD	Mean	SD		
Knowledge	6.49	3.55	3.71	3.307	3.839	.609

DISCUSSION

The current study revealed that the knowledge on HPV vaccination was high among health professionals than non health professionals. A study conducted in the three urban areas of Birmingham in UK by Walsh.C, Gera.A and colleagues (2008) with the purpose to determine public awareness on HPV vaccination and found that there were poor knowledge (81%) on HPV vaccination [5].

A study on awareness on human papillomvirus vaccine among Medical students was conducted in a Premier Medical School by Manipal University in which 618 MBBS students were surveyed. The result found as (75.6%) were aware regarding the vaccine. 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 [6].

CONCLUSION

Out of 45 health professionals 55.6% had average knowledge and among 45 non health professionals, 80% showed poor knowledge. In comparing, health professional had highest level knowledge clinically but statistically there was no significant different in knowledge among health and non health professionals. Accurate and adequate information of health professionals will help to improve the knowledge and 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 and reduce mortality due to cervical cancer, STDs and other HPV infections in future.

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