



Knowledge, Attitude and Practice Regarding HPV Vaccination Among Young Adults in Selected Schools of Nursing, Kozhikode

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ABSTRACT

Human Papillomavirus (HPV) infection is the primary cause of cervical cancer, which is the second most common cancer among women in India. HPV vaccination is a safe and effective primary prevention, yet uptake remains poor. The present study aims to assess knowledge, attitude and practice regarding HPV vaccination among young adults. The objectives were: to assess knowledge, attitude and practice regarding HPV vaccination among young adults, to find association between knowledge, attitude and selected demographic variables. The conceptual framework was based on Health Belief Model. The tools used included sociodemographic proforma, self-structured knowledge questionnaire, attitude rating scale and practice checklist. A pilot study was conducted, followed by data collection among 80 young adults selected from Schools of Nursing, Kozhikode. Data collection began with administration of socio-demographic proforma, followed by knowledge questionnaire, attitude scale and practice checklist. Data were tabulated and analysed. The findings showed that 45 (56%) had good knowledge, 26 (33%) had moderate knowledge and 9 (11%) had poor knowledge. Regarding attitude, 44 (55%) had positive attitude, 30 (37.5%) had moderate attitude and 6 (7.5%) had negative attitude. Regarding practice, 5 (6.25%) had good practice, 10 (12.5%) had moderate practice and 65 (81.25%) had poor practice. There was significant association between knowledge and year of study ($\chi^2=15.51$, $p<0.001$) and no significant association between attitude and demographic variables.

Keywords -Knowledge, attitude, practice, HPV vaccination, young adults, cervical cancer

INTRODUCTION

Cervical cancer is a major public health problem worldwide. Globally, 604,000 new cases and 342,000 deaths reported in 2020. In India, 123,907 new cases and 77,348 deaths annually, making it second leading cause of cancer deaths among women. Human Papillomavirus type 16 and 18 responsible for 70% of cervical cancers. HPV also causes anogenital warts and other cancers.

HPV vaccine is highly effective with 90% efficacy if given at 9-26 years. WHO recommends vaccination for girls 9-14 years. India introduced HPV vaccine in 2023 but not yet included in Universal Immunization Programme. Vaccine uptake remains low due to high cost Rs.2000-4000 per dose, lack of awareness, misconceptions, need for parental consent and stigma related to sexually transmitted infection vaccine.

Nursing students are future health educators and play key role in prevention. Hence assessing their KAP is crucial. Given these concerns, the current study seeks to evaluate knowledge, attitude and practice regarding HPV vaccination among young adults.

Problem statement

A study to assess knowledge, attitude and practice regarding HPV vaccination among young adults in selected Schools of Nursing, Kozhikode.

Objectives

- To assess the knowledge regarding HPV vaccination among young adults.
- To assess the attitude towards HPV vaccination among young adults.
- To assess the practice regarding HPV vaccination among young adults.
- To find the association between knowledge regarding HPV vaccination and selected demographic variables.
- To find the association between attitude towards HPV vaccination and selected demographic variables.

Hypothesis

H1- there is a significant relationship between knowledge regarding HPV vaccination among young adults and selected demographic variables

H2- there is a significant relationship between attitude towards HPV vaccination among young adults and selected demographic variables

CONCEPTUAL FRAMEWORK

The study was based on the health belief model.

METHODOLOGY

Research approach- Quantitative research approach

Research design-A: Non-experimental research design (descriptive design).

Population-The Population selected for the present study was Young adults in selected Schools of Nursing, Kozhikode

Sample Size: 80

Sampling technique: Non-probability convenience sampling technique

Settings of the study: Selected Schools of Nursing, Kozhikode

Variables: Knowledge, attitude and practice regarding HPV vaccination

Demographic variables: Age, gender, religion, year of study, previous knowledge regarding HPV vaccination, source of information.

TOOL

*Section A- Demographic proforma

It consists of 6 questions to collect Age, gender, religion, year of study, previous knowledge regarding HPV vaccination, source of information.

*Section B – Self-Structured Knowledge Questionnaire

It consists of 15 questions to assess knowledge regarding HPV vaccination among young adults. Score range 0-15. 11-15 Good, 6-10 Moderate, 0-5 Poor.

*Section C – Likert Scale for Attitude

It consists of 10 items to assess attitude towards HPV vaccination. 5-point Likert scale. Score 10-50. 36-50 Positive, 21-35 Moderate, 10-20 Negative.

*Section D – Checklist for Practice

It consists of 5 items to assess practice regarding HPV vaccination. Score 0-5. 4-5 Good, 2-3 Moderate, 0-1 Poor.

Data collection

Data collection was started after obtaining ethics committee clearance and permission from ethical authorities at KMCT College of Nursing. The subjects were selected by nonprobability convenience sampling.

Ethical considerations

The research proposal was presented in front of research committee of KMCT College of Nursing and approval was obtained. Ethical clearance for the study was obtained. Informed consent was obtained from the subjects.

RESULTS

Section 1

Demographic variables: according to age, among 80 sample, 12 (15%) were 18-19 years, 53 (66.3%) were 20-22 years, 15 (18.7%) were 23-24 years. According to gender, 17 (21.2%) were male, 63 (78.8%) were female. According to religion, 28 (35%) were Hindu, 43 (53.8%) Muslim, 9 (11.2%) Christian. According to year of study, 5 (6.2%) were 1st year, 73 (91.3%) were 2nd year, 2 (2.5%) were 3rd year. According to previous knowledge, 39 (48.8%) had yes, 41 (51.2%) had no. Among those with previous knowledge, 21 (53.8%) had source as academic curriculum, 10 (25.6%) social media, 6 (15.4%) health professionals, 2 (5.2%) family/friends.

Table 1: Frequency (percentage) distribution of sociodemographic characteristics

SL NO.	DEMOGRAPHIC VARIABLES	FREQUENCY	PERCENTAGE
1	AGE		
	17-19	22	27.5%
	20-22	53	66.3%
	23-25	3	3.7%
	26-28	2	2.5%
2	GENDER		
	MALE	17	21.2%
	FEMALE	63	78.8%
	OTHERS	0	0%
3	RELIGION		
	HINDU	32	40%
	MUSLIM	43	53.8%
	CHRISTIAN	5	6.3%
	OTHERS	0	0%
4	YEAR OF STUDY		
	FIRST YEAR	0	0%
	SECOND YEAR	73	91.7%
	THIRD YEAR	7	8.7%
5	PREVIOUS KNOWELDGE		
	YES	39	48.8%
	NO	41	51.2%

*Section 2

The study shows that 45 (56%) had good knowledge, 26 (33%) had moderate knowledge and 9 (11%) had poor knowledge regarding HPV vaccination.

*Table 2: Frequency distribution of knowledge level

Level of knowledge	Frequency(f)	Percentage(%)
Good	45	56%
Moderate	26	33%
Poor	9	11%

*Section 3:

The study shows that 44 (55%) had positive attitude, 30 (37.5%) had moderate attitude and 6 (7.5%) had negative attitude towards HPV vaccination.

Table 3: Frequency distribution of attitude level

Level of Attitude	Frequency(f)	Percentage(%)
Positive	44	55%
Moderate	30	37.5%
Negative	6	7.5%

Fig.1. The figure shows distribution according to attitude. [Bar Diagram: Positive 55%, Moderate 37.5%, Negative 7.5%]

Section 4: Practice

The study shows that 5 (6.25%) had good practice, 10 (12.5%) had moderate practice and 65 (81.25%) had poor practice regarding HPV vaccination.

Table 4: Frequency distribution of practice level

Level of Practice	Frequency(f)	Percentage(%)
Good	5	6.25%
Moderate	10	12.5%
Poor	65	81.25%

*Section 5: Association

There was significant association between knowledge and year of study ($\chi^2=15.51$, $p<0.001$).

No significant association between knowledge and age, gender, religion, previous knowledge.

*Section 6:

There was no significant association between attitude and any selected demographic variables such as age, gender, religion, year of study, previous knowledge ($p>0.05$).

DISCUSSION

A similar study was conducted in 2025 by P.V., Vignesh Kannan Balaji, Vidyaa Nayaki Supplish, G. Sridhar on assessing knowledge, attitude and practice regarding HPV infection and vaccination among women. This study assessed KAP among 420 women aged more than 30 using structured questionnaire. Hospital based cross-sectional study revealed knowledge was moderate (55-65%), attitude was generally positive (65-75%) and practice was poor (10-20%). The study concluded improving knowledge and accessibility is essential to bridge gap between attitude and practice.

Present study findings are consistent: 56% good knowledge (vs 55-65%), 55% positive attitude (vs 65-75%) and 81.25% poor practice (vs 10-20% poor practice - even poorer in our study). This shows KAP gap exists across age groups. Knowledge and positive attitude not translating into vaccination due to cost, fear, availability barriers as explained by Health Belief Model.

RECOMMENDATIONS

1. A similar study can be replicated as a large sample and in other settings including Arts colleges and general population.
2. A similar study can be conducted by using quasi-experimental design to assess effectiveness of structured teaching programme on HPV vaccination.
3. The follow-up study can be done to assess barriers affecting HPV vaccine uptake.
4. A comparative study can be conducted among nursing and non-nursing students.

CONCLUSION

The present study assessed knowledge, attitude and practice regarding HPV vaccination among young adults in selected Schools of Nursing. Utilizing descriptive research design and non-probability convenience sampling technique, sample size was 80. Data were collected using demographic proforma, structured knowledge questionnaire, attitude rating scale and practice checklist. Findings revealed 45 (56%) had good knowledge, 26 (33%) moderate, 9 (11%) poor. Regarding attitude, 44 (55%) positive, 30 (37.5%) moderate, 6 (7.5%) negative. Regarding practice, 5 (6.25%) good, 10 (12.5%) moderate, 65 (81.25%) poor. There was significant association between knowledge and year of study ($\chi^2=15.51$, $p<0.001$) and no association between attitude and demographic variables.

Overall, study concludes that although majority have good knowledge and positive attitude, practice is poor. Efforts needed to improve vaccine acceptance through health education and affordable vaccination campaigns.

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