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A Study to Assess the Level of Knowledge on HPV Vaccination Among Undergraduate Students in the Selected College, Kannur District

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Abstract: Human Papilloma virus (HPV) is a leading cause of cervical cancer, yet awareness regarding its vaccination remains limited among young adults. This study aimed to assess the level of knowledge regarding HPV vaccination among undergraduate students and to determine its association with selected demographic variables. A quantitative cross-sectional study was conducted among 190 students using a structured questionnaire. The results revealed that 64% of students had moderate knowledge, 27% had adequate knowledge, and 9% had inadequate knowledge. A significant association was found between knowledge level and age as well as lifestyle ($p < 0.05$), while no significant association was observed with other variables. The study concludes that knowledge regarding HPV vaccination is insufficient, indicating the need for educational interventions.

Keywords: *HPV Vaccination, Knowledge, Undergraduate Students, Cervical Cancer.*

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I. INTRODUCTION

Human Papilloma virus (HPV) is responsible for nearly all cases of cervical cancer, which remains a major public health issue worldwide, particularly in developing countries like India. Despite the availability of effective vaccines, the uptake remains low due to inadequate awareness and misconceptions.

HPV vaccination plays a crucial role in primary prevention. HPV vaccination is an evidence-based, cost-effective primary prevention strategy that offers long-term protection against high-risk HPV infections and subsequent development of cervical cancer. The World Health Organization advocates the inclusion of HPV vaccination in national immunization programs, targeting adolescent girls and young women before exposure to the virus. In recent years, India has also taken significant steps toward cervical cancer prevention through the introduction of indigenously developed HPV vaccines and pilot implementation programs. However, knowledge and acceptance among young adults, especially undergraduate students, are essential for improving vaccination coverage.

➢ *Objectives*

- To assess the level of knowledge on HPV vaccination.
- To find the association between level of knowledge with their selected socio demographic variables

➢ *Hypothesis*

All hypothesis will be tested at 0.05 level of significance

- -H0: There is no significant change between level of knowledge regarding HPV vaccination.
- -H1: There is significant association between level of knowledge regarding HPV vaccination and selected demographic variables.

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II. METHODOLOGY

A quantitative approach with a non-experimental cross-sectional design was adopted for the study. The study was conducted in a selected college in Kannur district among undergraduate students aged 18 to 25 years. A total of 190 students were selected using convenience sampling technique.

Data were collected using a structured knowledge questionnaire. The collected data were analyzed using descriptive statistics such as frequency and percentage, and inferential statistics using chi-square test.

III. DESCRIPTION OF TOOL

- *Part A: Socio Demographic variable*

This section sort information like age, type of family, religion, area/place of residence, type of lifestyle, age of menarche, family members working in medical field, family diagnosed with cancer, source of information. The tool was prepared after review of relevant topics and discussion with the guide.

- *Part B: Structured knowledge questionnaire*

It's a modified tool to assess the level of knowledge on HPV vaccination, which has one point and total 25 items. Points were wrong (0), correct (1). Total score is 25.

Table 1: Arbitrary Grading of Knowledge Score

LEVEL OF KNOWLEDGE	SCORE	PERCENTAGE (%)
Inadequate	0-8	9%
Moderate	9-17	64%
adequate	18-25	27%

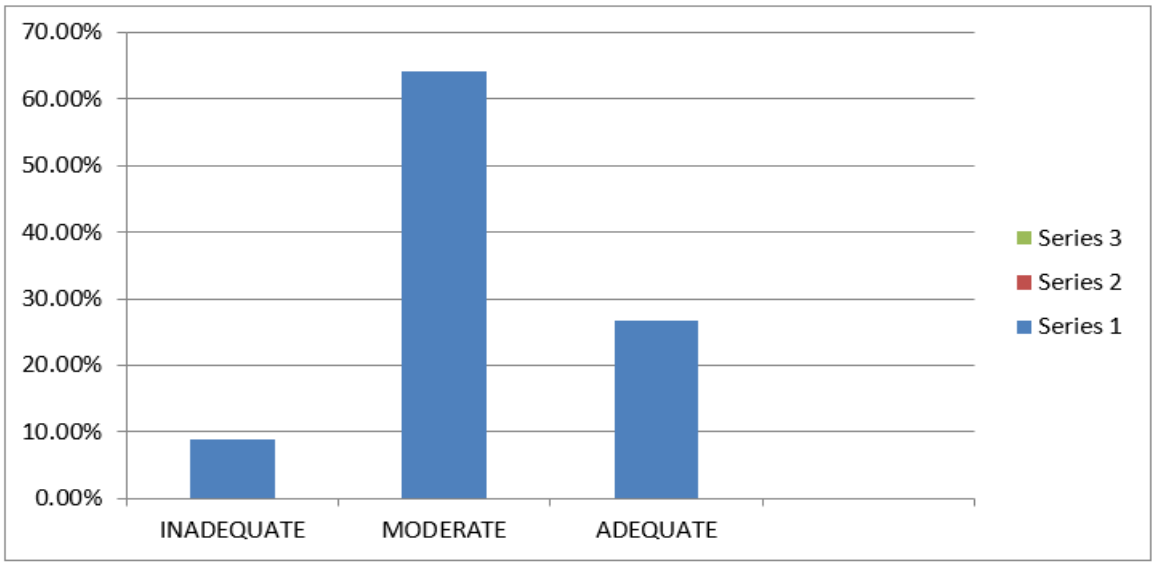

Fig 1: Level of Knowledge on HPV Vaccination

IV. RESULTS

The findings of the study revealed that out of 190 undergraduate students, 64% had moderate knowledge regarding HPV vaccination, 27% had adequate knowledge, and 9% had inadequate knowledge With regard to association, a statistically significant relationship was found between knowledge level and age, as well as lifestyle ($p < 0.05$). However, no significant association was found between knowledge level and other demographic variables such as type of family, religion, residence, age at menarche, parental occupation in the medical field, family history of cancer, and source of information ($p > 0.05$).

Table 2: Association Between Level of Knowledge Regarding HPV Vaccination Among Undergraduate Students and Selected Socio Demographic Variables Among Undergraduate Students.

SL NO	DEMOGRAPHIC VARIABLES	df	CHI-SQUARE VALUE	P-VALUE	INFERENCE
1	Age	6	22.50	0.001	**S**
2	Type of family	4	2.22	0.69	**NS**
3	Religion	4	2.51	0.64	**NS**
4	Place of residence	4	3.94	0.414	**NS**

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5	Type of lifestyle	6	24.42	0.00044	**S**
6	Age of menarche	4	4.02	0.40	**NS**
7	Parents at medical field	6	10.72	0.097	**NS**
8	Family diagnosed with cancer	2	0.67	0.71	**NS**
9	Source of information	2	3.27	0.19	**NS**

S – Significant NS - Non significant

V. DISCUSSION

The finding of the study have been discussed in terms of objectives, hypotheses and also made comparisons with findings of similar studies. The study undertaken to evaluate the level of knowledge on HPV vaccination among undergraduate students in a selected college at Kannur District. The study findings indicate that the majority of undergraduate students possess only moderate knowledge regarding HPV vaccination. This suggests that although students may have some awareness, their understanding is not comprehensive.

The significant association between knowledge level and age indicates that knowledge improves with increasing age and exposure. Similarly, lifestyle factors may influence awareness due to differences in health behavior and information access. The lack of association with other demographic variables suggests that knowledge gaps are prevalent across different groups, highlighting the need for widespread educational interventions.

VI. CONCLUSION

The current study was an attempt to estimate the level of knowledge on HPV vaccination among undergraduate students. The findings of the study showed that majority of college student (64%) had average level of knowledge on HPV vaccination.27% had adequate knowledge and 9% had inadequate knowledge on HPV vaccination. The study concludes that most undergraduate students have moderate knowledge regarding HPV vaccination, with only a small proportion having adequate knowledge. There is a clear need for educational programs to improve awareness and promote vaccination uptake.

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