

Awareness and Perceptions of HPV and Cervical Cancer Prevention among School Adolescents: A Cross-Sectional Survey

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ABSTRACT

Background: Cervical cancer remains a leading cause of cancer-related mortality among women in India. Despite the availability of effective vaccines against Human Papillomavirus (HPV), the uptake remains low due to a lack of awareness and misinformation. **Objectives:** To assess the level of awareness, knowledge, and perceptions regarding cervical cancer and the HPV vaccine among school-going adolescents. **Methods:** A cross-sectional survey was conducted among students during a school health sensitization program. Structured questionnaires assessed knowledge of cervical cancer, awareness of HPV and its vaccine, vaccination status, and perceived barriers. Data were analyzed descriptively. Sample size 554 girls aged between 11 to 14 years as a part of awareness programme prior to school based HPV vaccination. **Results:** All participants (100%) were aware of the cervix and 95% had heard of cervical cancer. However, only ~5% correctly identified HPV infection as the most common cause, with 42 respondents stating "don't know." Only 13% had heard of the HPV vaccine, and just 20% had been vaccinated. All respondents agreed girls need HPV vaccination, and 50% correctly identified sexual contact as the mode of HPV transmission. Importantly, 100% expressed willingness to learn more. Notably, 75% were unsure of the recommended vaccination age. Lack of awareness (90%) and concerns about pain and side effects (55%) were the most cited barriers. Preferred channels for receiving information included school awareness programs and social media (80%). **Conclusions:** Despite high awareness of cervical cancer, there are significant gaps in knowledge about HPV and its vaccine. School-based awareness campaigns and adolescent-friendly communication strategies are urgently needed to improve vaccine literacy and uptake.

Keywords: HPV vaccine, cervical cancer, adolescent health, vaccine awareness, school-based intervention

INTRODUCTION

Cervical cancer is the fourth most common cancer among women globally and a major public health concern in India. Persistent infection with high-risk types of Human Papillomavirus (HPV) is the primary cause. Although prophylactic HPV vaccines have demonstrated high efficacy, uptake remains limited, especially in low- and middle-income settings, due to inadequate awareness and cultural factors [1][2].

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OBJECTIVE

This study aims to explore the knowledge, perceptions, and attitudes of school-going adolescents toward cervical cancer and HPV vaccination, and identify potential barriers and preferred educational modalities.

METHODS

A cross-sectional survey was administered to students participating in a school health sensitization session. The questionnaire included multiple-choice and open-ended questions covering:

- Awareness of the cervix and cervical cancer
- Knowledge of HPV and its transmission
- HPV vaccine awareness and status
- Perceptions of who needs the vaccine
- Barriers to vaccination
- Preferred communication methods

Data were entered and analyzed using descriptive statistics. Percentages were calculated to reflect response distributions.

RESULTS

Survey Item	Response (%)
Awareness of the cervix	100%
Heard of cervical cancer	95%
Knew HPV is the cause of cervical cancer	~5%
Heard of HPV vaccine	13%
Belief that girls need HPV vaccination	100%
Correctly identified mode of transmission	50%
Willing to learn more about HPV vaccine	100%
Unsure of the recommended age for vaccination	75%
Already vaccinated	20%
Concern: Lack of awareness	90%
Concern: Pain/side effects	55%
Preferred mode of awareness: school & social media	80%

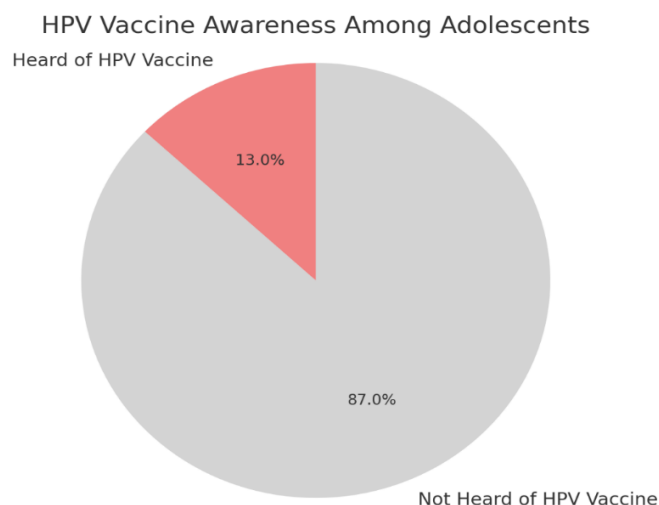


Figure 1: Awareness of HPV Vaccine Among School Adolescents

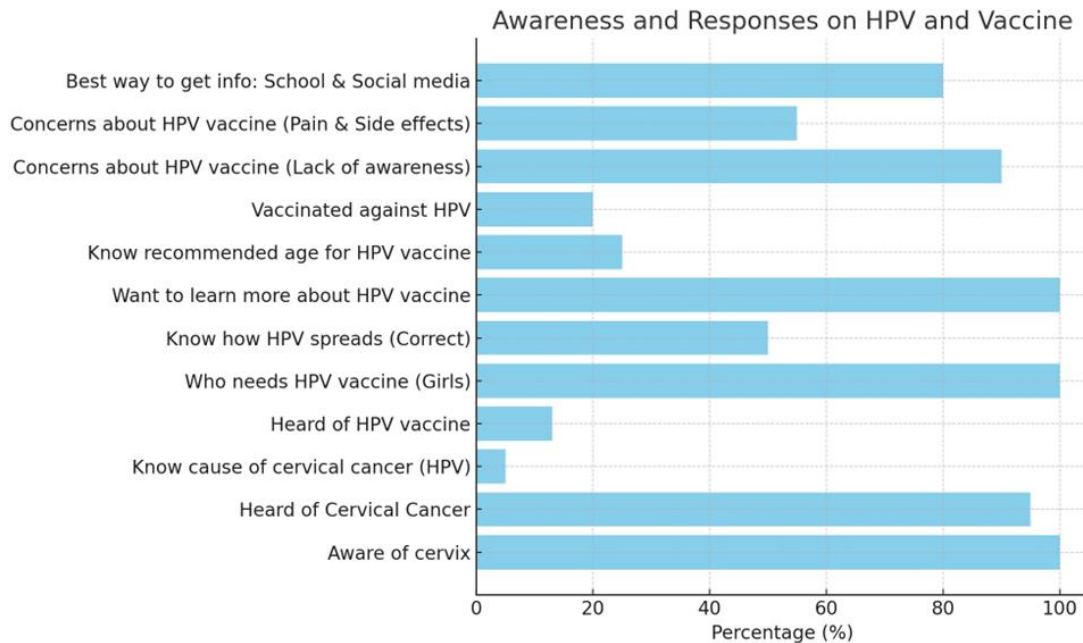


Figure 2: Bar Chart - Key Awareness and Response Rates

DISCUSSION

The study highlights a significant gap between general awareness of cervical cancer and specific knowledge about its prevention through HPV vaccination. Despite the low levels of vaccine knowledge, the overwhelming interest in learning more offers a promising opportunity for public health initiatives. School-based education and digital engagement strategies must be scaled to close the knowledge gap and increase uptake.

CONCLUSION

This study underscores the urgent need for structured, school-based HPV education and vaccine promotion campaigns. Addressing misconceptions and logistical barriers can significantly enhance vaccination coverage among adolescents.

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References

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