

AWARENESS, KNOWLEDGE AND ACCEPTABILITY OF HPV VACCINATION AMONG WOMEN OF REPRODUCTIVE AGE IN UZBEKISTAN

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Abstract: Human papillomavirus (HPV) is one of the most common sexually transmitted infections and the leading cause of cervical cancer. In Uzbekistan, awareness and coverage of HPV vaccination remain low due to limited public health campaigns and social stigmatism. The objective of this study is to assess the awareness, knowledge and acceptability of HPV vaccination among women of reproductive age in Uzbekistan.

Keywords: human papillomavirus (HPV), cervical cancer, social stigmatism, public health.

INTRODUCTION

Cervical cancer remains a major public health problem, especially in low- and middle-income countries (World Health Organization [WHO], 2022). It is primarily caused by human papillomavirus (HPV), a common sexually transmitted infection (WHO, 2022). The introduction of HPV vaccines has been shown to be effective in reducing the incidence of cervical cancer in countries with high vaccination coverage (Bruni et al., 2019).

Despite the availability of effective vaccines, awareness and coverage in Central Asian countries, including Uzbekistan, remain critically low (Ferlay et al., 2020). Sociocultural stigma, lack of awareness-raising, and limited access to preventive services contribute to this problem (Mirzaeva et al., 2021).

Cervical cancer is one of the leading causes of cancer deaths among women in Uzbekistan. Therefore, understanding the level of awareness of the population about HPV vaccination is critical for developing targeted public health interventions (WHO, 2022).

OVERALL OBJECTIVE:

To assess the level of awareness, knowledge, and acceptability of HPV vaccination among women of reproductive age in Uzbekistan.

SPECIFIC OBJECTIVES:

1. To assess the level of knowledge about HPV and its association with cervical cancer.
2. To determine the level of awareness of the availability and benefits of HPV vaccination.
3. To identify factors associated with acceptability of HPV vaccine.
4. To assess the impact of socio-demographic factors on HPV awareness.

MATERIALS AND METHODS

A cross-sectional study was conducted from February to April 2025 in Tashkent and Samarkand, Uzbekistan. Women aged 18–45 years visiting gynecological outpatient clinics and public health centers were invited to participate. A total of 200 participants were recruited using convenience sampling.

A structured questionnaire was developed, including demographic data, HPV knowledge, vaccine awareness, attitude towards vaccination, and barriers to acceptance. The questionnaire was pre-tested on 20 women to assess clarity and reliability.

Data analysis was performed using SPSS version 26. Descriptive statistics were used to describe the characteristics of the participants. Chi-square tests assessed the relationships between awareness and socio-demographic variables. Oral informed consent was obtained from all participants. The study was approved by the ethical committee (name of the committee not provided).

RESULTS

Of the 200 participants, 62% lived in urban areas and 38% in rural areas. The majority (56%) were between 25 and 35 years old. Only 35% of women had heard of HPV, and only 29% knew of its link to cervical cancer. Only 18% knew of the HPV vaccine.

The majority (72%) had never heard of the vaccine, and 10% had misconceptions, believing that the vaccine was intended to prevent other STIs. Of those who knew of the vaccine, only 12% had been vaccinated, and 24% expressed willingness to be vaccinated if available.

The main barriers included:

- lack of information (72%),

- fear of side effects (41%),

- cultural and religious beliefs (28%).

Higher education level was found to be statistically significantly associated with better awareness ($p = 0.003$).

DISCUSSION

This study demonstrates alarmingly low awareness of HPV and the vaccine among women of reproductive age in Uzbekistan, which is consistent with findings in other Central Asian countries (Ferlay et al., 2020; Mirzaeva et al., 2021).

Education level was found to be a significant predictor of awareness, highlighting the need to introduce HPV education programs in schools and universities.

High levels of misinformation and cultural barriers indicate the need for culturally tailored information campaigns. The findings highlight the urgent need to implement national immunization programs and large-scale mass media campaigns to increase HPV vaccination coverage, as successfully implemented in other low- and middle-income countries (Bruni et al., 2019).

CONCLUSION

Awareness and acceptability of HPV vaccination remain low among women of reproductive age in Uzbekistan. Targeted public health interventions to address information gaps and cultural misconceptions are needed to reduce cervical cancer incidence.

RECOMMENDATIONS

1. Implement national HPV vaccination programs.
2. Conduct culturally appropriate information campaigns.
3. Introduce HPV education programs in schools, universities, and health facilities.
4. Conduct larger-scale research to support national health policies.