National Cancer Council of Mongolia
Non-Governmental Organization

EVALUATION OF THE VACCINE EFFECTIVENESS ELEVEN YEARS AFTER 4VHPV VACCINATION AMONG YOUNG WOMEN IN MONGOLIA

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BACKGROUND

Mongolia has the highest rate of cervical cancer in the Asia-Pacific region. A pilot HPV vaccination introduced in 2012 was discontinued due to anti-vaccination sentiments. The Government is planning to reintroduce the HPV vaccination in 2024.

METHODS

This study aimed to assess the long-term effectiveness of the three-dose 4vHPV vaccine against high-risk HPV16/18 among women who participated in the 2012 pilot vaccination. The cohort study involved women aged 24-28 years who received the Gardasil vaccine. Participants completed an online questionnaire assessing their knowledge of HPV, cervical cancer, and the acceptability of self-sampling. Self-administered vaginal swabs (Copan, Italy) were tested for high-risk HPV genotypes using the GenExpert Xpert HPV Assay.

RESULTS

A total of 203 women—104 in the vaccine group and 99 in the control group—were included in the study. Vaccine effectiveness against vaccine-type HPV16/18 was high, at 88%. However, there was no cross-protection against other high-risk HPV types, with prevalence rates of 27.9% in the vaccine group and 24.2% in the control group. The majority of participants (95.1%) found the self-sampling technique using Copan Self Vaginal FLOQSwabs® easy to perform. The study revealed a low level of knowledge about HPV, with a mean score of 1.9 out of 6, and a moderate level of knowledge regarding cervical cancer risks, with a mean score of 3.7 out of 6.

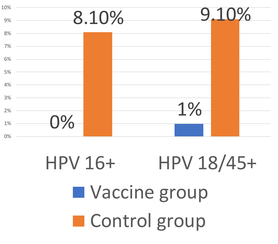

Figure 1. Prevalence of HPV 16 and 18/45 among vaccine and control groups

CONCLUSIONS

The study demonstrates the high effectiveness of the 4vHPV vaccine against HPV16/18 eleven years post-vaccination and a strong acceptance of self-sampling among young women. However, there is a significant need for improved awareness initiatives concerning HPV and cervical cancer, which is crucial before the reintroduction of the HPV vaccination in Mongolia.

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