Willingness to pay for HPV vaccine among women living with HIV in Nigeria

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The Global Health Network

Published on: Jun 16, 2023

DOI: https://doi.org/10.21428/3d48c34a.e2cbde8b

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**Background:** Human papillomavirus (HPV) infection is a common sexually transmitted infection and is responsible for virtually all cervical cancer cases worldwide. Women living with HIV have higher rates of persistent HPV infection and HPV-associated disease. The development of safe and clinically effective HPV vaccines is a promising step toward reducing cervical cancer rates in the future. This study aimed to assess the level of knowledge of the HPV vaccine among women living with HIV and their willingness to pay for the HPV vaccine.

**Methods:** A facility-based, cross-sectional survey was conducted from June to July 2022 at the HIV treatment clinic, Nigerian Institute of Medical Research, Lagos. A total of 1,371 women living with HIV were interviewed using a structured questionnaire, which collected data on socio-demographic characteristics, knowledge of HPV, cervical cancer, and the HPV vaccine. Willingness to pay for the HPV vaccine was also assessed. Multivariable logistic regression models were developed to identify factors associated with willingness to pay for the HPV vaccine.

**Results:** The study found that a significant percentage of participants had poor knowledge of the HPV vaccine. Specifically, 79.1% of participants had not heard of the vaccine, and only 29.0% agreed that the HPV vaccine is highly effective in preventing cervical cancer. Furthermore, 68.3% of participants were not willing to pay for the vaccine, and the average amount they were willing to pay was US$7.46 ± US$9.17 (₦3221.15± 3963.950). Factors associated with the willingness to pay for the HPV vaccine included knowledge of HPV (cOR = 0.558; 95% CI 0.374-0.833), knowledge of HPV vaccine (cOR = 0.335; 95% CI 0.253-0.444), knowledge of cervical cancer (cOR = 0.658; 95% CI 0.63-1.19), and income status. The study also found that health workers were the most common source of information about HPV, cervical cancer, and the vaccine.

**Conclusion:** The study underscores the importance of ensuring that women living with HIV, who are at high risk for cervical cancer, are informed about the benefits of the HPV vaccine and are willing to receive it. By improving awareness and access to the vaccine, Nigeria can take steps to reduce the incidence of cervical cancer among women, and among the vulnerable population. Health workers play a crucial role in providing information about HPV, cervical cancer, and the HPV vaccine. Effective strategies to increase the uptake of the vaccine could include community outreach programs, school-based education programs, and targeted campaigns for women and parents. Further research is also necessary to explore other factors that may influence willingness to pay for the HPV vaccine in Nigeria.