

Assessing cervical cancer screening outcomes with HPV DNA testing: A descriptive study across three districts of Rwanda

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Introduction: Cervical cancer (CxCa) remains the fourth most common cancer globally despite being preventable. In Rwanda, HPV DNA testing was initiated in 2013-2014 and renewed in 2020; there is limited data on HPV positivity among women. This study assessed HPV DNA positivity and associated risk factors among women screened in a national CxCa screening and treatment program that was initiated.

Material and Methods: A retrospective cross-sectional study was conducted on data from women aged 30-49 years who participated in the national cervical cancer screening program between January-December 2021 in threefold district with high screening rates: Gasabo, Musanze, and Nyagatare. Independent variables included age, place of residence, HIV-status and history of screening. Descriptive statistics and bivariate - analysis were performed.

Results: Of the 29,771 women screened, 5,954.2 (20%) tested positive for HPV. 52.5% screened at primary care health posts compared to health centers or hospitals. Remarkably, 98% had never undergone CxCa screening before. The overall HPV positivity rate was 20%, higher among HIVpositive women (36%). Women aged 40-44 years (OR: 1.22, 95% CI: 1.111-1.340) and 45-49 years (OR: 1.358, 95% CI: 1.222-1.510) were more likely to test positive compared to those aged 30-39 years. Breastfeeding (aOR 1.23, 95% CI: 1.10-1.38), and provider-collected samples (aOR 1.59, 95% CI: 1.43-1.76) were also associated with increased odds of HPV positivity. Women residing in Musanze and Nyagatare districts had higher odds of HPV positivity compared to those in Gasabo district.

Conclusion: These findings indicate a high HPV Positivity and reluctance to Cxca screening. Which underscores the need for comprehensive communitybased awareness-raising, prioritizing first-time screenings, targeted interventions for high-risk-groups, and multi-sectoral collaboration as key strategies to achieve the national and global Cxca agenda. Hence, we call to establish the cervical cancer screening point-of-care service (CxCPSC) as a client-friendly model that combines all the above-proposed interventions.

Biography

Jeanine Nyinawabega has expertised in cervical cancer prevention and treatment, and passion in improving women health and wellbeing. She was experienced in different research like trial clinics on HIV among women, social well-being, women nutrition as well as women cancers, especially cervical cancer. Her role is to assist the stakeholders by providing analytical assistance to ensure evidence-based programming. Her role is to work with the leaders of hospitals and health centers to enhance the program.

Received: November 12, 2024; **Accepted:** November 13, 2024; **Published:** April 08, 2025