

**PERCEPTIONS, PREFERENCES, AND
FEASIBILITY OF HPV DNA TESTING VS. PAP
SMEAR FOR CERVICAL CANCER SCREENING
AMONG HEALTH PROFESSIONALS IN
SOUTHWEST NIGERIA:
A CROSS-SECTIONAL STUDY**

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**FOR: BEYOND BORDERS: RECLAIMING VOICES IN GLOBAL
STI & HIV PREVENTION.**

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INTRODUCTION

Cervical cancer remains a major public health issue in LMICs despite the availability of effective screening methods like Pap smears and HPV DNA testing.

High incidence and mortality persist due to limited screening access, low awareness, weak healthcare systems, and poor follow-up for abnormal results.

Additional barriers include sociocultural factors, absence of national screening programs, and low HPV vaccination uptake.



INTRODUCTION

While Pap smears have reduced cervical cancer rates, they have limitations in sensitivity and follow-up.

HPV DNA testing is more sensitive and allows for longer intervals between screenings but faces cost and logistical challenges in low-resource settings. Without expanding HPV DNA testing and improving follow-up care, Nigeria may miss the WHO target for cervical cancer elimination.

This study will generate evidence to inform national strategies, improve early detection, reduce late-stage presentation, and ultimately lower the cervical cancer burden in Nigeria.

MAIN OBJECTIVE

To evaluate the perceptions, preferences, and feasibility of HPV DNA testing compared to Pap smear for cervical cancer screening among health professionals in Nigeria.



METHODS

A cross-sectional survey of 100 health professionals in Southwest Nigeria was conducted using a structured questionnaire.

Data on sociodemographics, screening knowledge, perceptions, feasibility ratings, barriers, and preferences were analysed descriptively, with chi-square tests for associations between preferences and demographics.



METHODS

Design: Cross-sectional survey

Setting: Health facilities in South-West Nigeria
(primary, secondary, tertiary; government, private,
NGO)

Population: Licensed healthcare professionals
(doctors, nurses, midwives, lab scientists,
CHOs/CHEWs, program managers)

Inclusion: ≥ 6 months practice, consent obtained

Exclusion: Interns, trainees, unavailable staff, non-
consenting.

Sample size: 100 participants

Sampling: Convenience & proportionate
sampling across facilities

Tool: Structured self-administered
questionnaire

Sections: demographics, perceptions,
preferences, feasibility, challenges

Analysis: Descriptive stats + chi-square for
associations ($p < 0.05$ significant)

RESULTS

Mean respondent age was 38.5 ± 8.4 years; 66.0% were female. Professional groups included doctors (34.0%), nurses (26.0%), and medical laboratory scientists (25.0%).

Support for replacing Pap smear with HPV DNA testing was 61.0%, with 19.0% unsure and 20.0% opposed.

Feasibility scores (lower = stronger agreement) were: nationwide scale-up (2.31 ± 1.35), government funding (2.19 ± 1.48), healthcare worker training (2.16 ± 1.52), HPV self-sampling in rural areas (2.66 ± 1.37), and integration with maternal health programs (2.28 ± 1.42).

Main barriers were inadequate laboratory infrastructure (28.4%), limited staff training (23.5%), patient reluctance (17.2%), supply chain issues (17.2%), and delayed results (12.6%).

Preference was not significantly associated with gender ($p = 0.969$) or profession ($p = 0.090$).

DISCUSSION

Majority (61%) supported replacing Pap smear with HPV DNA testing → shows growing professional confidence in its sensitivity.

High feasibility ratings for government funding (2.19), healthcare worker training (2.16), and integration with maternal health programs (2.28) → indicates readiness if systemic support is provided.

HPV self-sampling (2.66) viewed as feasible → could improve uptake, especially in rural communities.

Main barriers: laboratory infrastructure (28.4%), staff training (23.5%), patient reluctance (17.2%), and supply chain issues (17.2%).

Preferences were not influenced by gender or profession → shows a generally uniform perception across health professionals.

Overall: Professionals recognize HPV DNA testing as superior, but adoption hinges on addressing structural and resource-related challenges.



CONCLUSION

There is strong support for transitioning to HPV DNA testing among health professionals in Southwest Nigeria.

Cost, infrastructure gaps, and inadequate training remain the key barriers to adoption.

Government investment, improved lab systems, and training programs are critical for feasibility.

HPV self-sampling and integration into maternal health services can accelerate uptake.

Aligning professional preferences with systemic reforms is essential to achieving sustainable cervical cancer prevention in Nigeria.

RECOMMENDATIONS

- Government funding & subsidies to reduce the cost of HPV DNA testing.
- Strengthen laboratory infrastructure to support nationwide scale-up.

- Comprehensive training programs for healthcare workers on HPV testing and self-sampling.
- Promote HPV self-sampling to improve uptake, especially in rural and hard-to-reach areas.
- Integrate HPV DNA testing into existing maternal & reproductive health programs for wider reach.

- Strengthen supply chain systems to prevent stockouts and delays.
- Awareness campaigns to address patient reluctance and misconceptions.

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THANK YOU!