Acceptance of human papillomavirus self-testing in cervical cancer prevention among rural Nigerian women

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SUMMARY

Background: *This study investigates the knowledge and acceptance of human papillomavirus (HPV) self-testing among rural women in Badagry, Lagos State, Nigeria, aiming to address the growing public health concern of cervical cancer. With 9,922 new cervical cancer cases annually in Nigeria, late diagnosis and suboptimal treatment contribute to high mortality rates.*

Methods: *The study involved 220 women who performed HPV self-sampling alongside physician-conducted visual inspection with acetic acid (VIA) and reported preference.*

Results: *The results reveal inadequate cervical cancer awareness (55.5%) and low HPV knowledge (20.9%), particularly among women with incomplete education. While 80.9% of women preferred VIA, only 49.1% found HPV self-sampling feasible. Notably, self-testing was more accepted among divorced, separated, and widowed women.*

Conclusion: *The efforts to improve education and awareness about the causative role of HPV in cervical cancer awareness are crucial to enhance its utilization and acceptance in rural settings.*

Keywords: *Papillomavirus Infections, Public Health, Self-Examination, Uterine Cervical Neoplasms, Rural Population, Africa South of the Sahara*

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INTRODUCTION

Cervical cancer ranks as the fourth most common cancer in women globally causing 342,000 deaths in 2020 (1). Ninety percent of deaths occurred in low and middle-income countries (LMICs) (2). Africa records 120,000 new cervical cancer cases yearly, representing 20% of the world's cervical cancer incidence (3). In Nigeria, 51.72 million women aged 15–49 are at risk of developing cervical cancer (4). Current findings indicate that 13,676 Nigerian women are diagnosed with cervical cancer annually, and 7,093 die from it, making it the second highest cause of cancer-related mortality in Nigeria (5).

The human papillomavirus (HPV), which has over 200 serotypes, is fundamental in the pathogenesis of cervical cancer, with HPV types 16 and 18 responsible for over 70% of cervical cancer cases (6,7). Cervical cancer secondary prevention involves screening for and treating pre-cancerous lesions of the cervix and is an essential strategy in eliminating cervical cancer (8). Over the years, cervical cancer screening methodologies have evolved from using pap smears in the 1970s to visual inspection with acetic acid, liquid-based cytology, and innovations with HPV testing since the late 1990s (9).

HPV testing began over two decades ago, in the late 1980s and early 1990s, to increase access to cervical screening for underserved populations, and is regarded as a tool to accelerate cervical cancer secondary prevention programs in LMICs (10,11). Sampling for HPV testing can be done by either a healthcare worker or self-collected by the patient. HPV primary screening involving gynaecological examination by a healthcare worker often deters women from participating in cervical screening tests due to embarrassment or discomfort with the procedure (12). In high-income countries, HPV self-sampling has demonstrated greater acceptance than healthcare worker-conducted cervical screening, mainly because HPV self-sampling is less intrusive. Fully integrated points-of-care for HPV self-collection, testing, and treatment continue to expand in HICs, demonstrating feasibility in low-resource settings (9,13,14).

HPV testing has a similar or higher sensitivity than cytology-based testing, offers more advanced capabilities for identifying women at higher risk for future disease, requires a lower technician skill level than cytology, and provides the option of self-collection (15,16). In sub-Saharan Africa, significant challenges to fully adopting HPV testing as the primary screening method are funding and logistics of implementation, specifically health care worker sampling, transportation, and lengthy turnover times for receiving testing reports, which result in loss to follow-up and disruptions in the continuum of care for cervical cancer prevention (17). Some personal barriers to self-sampling also exist among uneducated women, including poor knowledge about the method, low confidence in accurately conducting self-sampling, and consequent low confidence in the final result (17,18). Despite these shortcomings, self-sampling for HPV testing demonstrates the potential of reducing financial and logistical barriers to health systems and the patient, improving coverage rates for early cervical cancer detection, and lowering the dependence of cervical screening procedures on health workers (19).

HPV DNA testing is globally recommended as the gold standard test for cervical cancer screening and is being gradually adopted in low-resource settings (12). The American College of Obstetricians and Gynecologists

recommends a combination of cytology with HPV testing as a screening protocol for women 21–65 years to save resources, decrease unnecessary clinic appointments, and achieve appropriate referrals of high-grade cervical lesions (20). In low-resource settings, the HPV test is recommended as the first screening test, followed by visual inspection with acetic acid if positive, and an appropriate ablation treatment as needed (8). In Nigeria, the Society of Gynaecology & Obstetrics of Nigeria (SOGON) recommends the adoption of HPV testing every five years as the primary method of screening (21). In cases where HPV testing is not readily available, five-yearly VIAs or cytology in year one, followed by HPV testing in year two, is recommended (21).

In rural Nigeria, poor health-seeking practices, aversion to pelvic examinations, transportation costs to hospitals to access cervical screening, embarrassment about the procedure, and the gender of the healthcare worker performing the test are some of the factors that continue to impact the uptake of cervical cancer screening negatively (22–25). Introducing self-sampling in Nigeria may improve uptake by eliminating the need for hospital-based, healthcare worker-conducted cervical screening (22). However, the acceptance of self-sampling for HPV testing over healthcare worker collection has not been sufficiently studied to influence the guidelines on cervical screening in Nigeria. This study explored the acceptance of HPV self-sampling for cervical cancer prevention among rural women in Badagry, South-West Nigeria. The findings from this study will inform programming strategies to scale up self-sampling for HPV testing in low-resource and rural communities of Nigeria.

MATERIALS AND METHODS

Lagos State has an estimated population of 8,437,901 women; it is the most populous state in Nigeria, with a projected population of over 17 million people (26). Badagry is a coastal town with a population of 351,900, of which 117,910 are estimated to be female (27). The livelihoods of locals in Badagry are Fishing, Farming, cane weaving, and trading (28). Badagry has one General Hospital and eleven Primary Health Centres, with cervical cancer screening services routinely provided at Ajara, Apa, and Ilado PHCs and through occasional organized community-based screenings. Badagry shows a relatively high health facility density compared to other LGAs, with most facilities providing primary care services. Private facilities account for about two-thirds of all health centres, while public facilities represent a smaller share, highlighting reliance on community-based and privately delivered healthcare (29).

A descriptive cross-sectional study was conducted to determine the knowledge and acceptance of HPV self-testing. The sample size was determined using the formula for prevalence studies ($n=Z^2(1-P)/d^2$). Fourteen percent was applied as the proportion (P), representing the percentage of women who found self-sampling acceptable, based on a previous pilot study conducted in Sub-Saharan Africa (30). Using a non-response rate of 20%, the sample size came to 231. Multistage sampling was used to select 230 women from the community. Women who met the criteria within the sampled houses at the community level were invited to Ajara PHC to participate in the study. The selected women had lived in the community for at least 1 year and were aged 15 years or older. Of the 230 invited community women, 220 consented to participate in the study, resulting in a response rate of 95%.

A pretested, structured, interviewer-administered questionnaire (added in Appendix) was used to collect the data on socio-demographic characteristics, gynecological and medical history, and knowledge about cervical cancer prior to screening. The questionnaire was adapted from the Nigerian market-women KAP tool and the Mexican HPV self-collection acceptability study tool (31,32).

After the pre-screening survey, the respondents were educated in groups of 10-20 about cervical cancer prevention; the education sessions covered HPV as a causative factor, available cervical screening options in Nigeria, and self-sampling for HPV. Each respondent was then taken through a visual step-by-step procedure demonstration of self-sampling by a trained HCW. The procedure was verbally explained, with the appropriate squat position and rotation technique to collect a good sample demonstrated. Each respondent then proceeded to take their self-sample, in private, behind a medical screen, with self-sampling visual aids posted up within the procedure space to further guide them. After self-sampling, each respondent received an HCW-conducted VIA. After completing both procedures, the participants completed a post-screening questionnaire. The post-screening section of the questionnaire consisted of questions on the acceptability and preference of HPV self-sampling compared to health worker-conducted VIA screening.

The cervical samples were tested using the Roche cobas 4800 PCR-based HPV screening and partial genotyping assay. The respondents who tested positive for VIA or HPV were informed and scheduled for appropriate follow-up visits to receive either ablation therapy at the PHC or linkage to higher levels of care.

The data collected was entered into Microsoft Excel 2007, imported, and analyzed using SPSS version 20. Associations between socio-demographic characteristics, other characteristics and acceptance of HPV self-testing were done using Chi-square, and statistical significance reported at a p-value <0.05.

RESULTS

The mean age of the respondents was 39.6+12.3 years, representing women within the reproductive age group and at most risk of cervical cancer. Most of them were married (65.5%), with 28.2% single and 6.4% separated, divorced or widowed. Approximately 45% of the respondents had a secondary school education level or lower, with 57.8% employed as semi-skilled workers (Table 1).

Table 1. Socio-demographic characteristics of the respondents (n=220).

Variables	Frequency	Percentage (%)
Age (year)		
<20	7	3.2
20-39	114	51.8
40-59	85	38.7
≥60	14	6.4
Total	220	100.0
Mean age = 39.6+12.3 years		
Marital status		
Single	62	28.2
Married	144	65.5
Separated/Divorced/widowed	14	6.4
Total	220	100.0
Education		
No formal education	24	10.9
Primary	29	13.2
Secondary	45	20.5
> Secondary	122	55.5
Total	220	100.0
Religion		
Christian	200	90.9
Islam	20	9.1
Total	220	100.0
Occupation level		
Skilled	78	35.4
Semi-Skilled	127	57.8
Unskilled	2	0.9
Unemployed	13	5.9
Total	220	100.0

The mean parity was 6.0+3.32 and the mean age at first coitus was 22.8+7.11. Fifteen percent of the respondents had a parity of >5. There was also a high level (51.45%) of non-specific complaints related to vaginal/pelvic infection, with 37.2% of women reporting symptoms of pelvic pain (Table 2).

Table 2. Gynaecological and medical history of the respondents (n=220).

Variables	Frequency	Percentage (%)
Parity		
None	71	32.3
1	12	5.5
2	29	13.2
3	23	10.5
4	31	14.1
5	21	9.5
>5	24	15.0
Total	220	100.0
Mean number of pregnancy = 6.0+3.32		
Current symptoms related to vaginal/ pelvic infection		
Yes	113	51.4
No	107	48.6
Total	220	100.0
Symptoms of vaginal/pelvic infection		
Excessive vaginal discharge	17	15.0
Itching in the external vulva/vagina	42	37.2
Lower abdominal pain	45	39.8
Pain during sexual intercourse	12	10.6
Bleeding after sexual intercourse	0	0.0
Wounds on external vulva/vagina	8	7.1
Lower back ache	56	49.6
Bleeding in between your period	10	8.8
Age of first sexual intercourse		
11-15	12	5.5
16-20	67	30.5
21-25	40	18.2
26-30	21	9.5
>30	10	4.5
Don't know	70	31.8
Total	220	100.0
Mean age of first coitus 22.8+7.11		

The awareness of cervical cancer among the respondents was 55.5%. Television and radio (37.7%) were the main sources of information, while 32.8% received information from hospitals. Most respondents (45.1%) knew that all sexually active women were at risk of cervical cancer, but 28.7% of the respondents thought that cervical cancer was caused by poor hygiene. Only 20.9% of women were aware of HPV as causative in the pathogenesis of cervical cancer (Table 3).

Table 3. Knowledge about the respondents about cervical cancer (n=220).

Variables	Frequency	Percentage (%)
Awareness of cervical cancer		
Yes	122	55.5
No	98	44.5
Total	220	100
Source of information		
Hospital	40	32.8
Friends or family	23	18.9
Radio or TV	46	37.7
Others (book, church, seminar, etc)	12	10.7
Total	122	100.0
Knowledge about risk factors for cervical cancer (Multiple responses allowed)		
Sexually transmitted infections	53	43.4
Multiple sexual partners	38	31.1
Early age of first coitus	32	26.2
Smoking	31	25.4
Use of contraceptive pills	24	19.7
Poor hygiene	35	28.7
Hereditary	23	18.9
Knowledge about cervical cancer risk		
Young women	1	0.8
Middle-aged women	12	9.8
Elderly women	8	6.6
All sexually active women	55	45.1
Don't know	46	37.7
Total	122	100.0
HPV Awareness		
Yes	46	20.9
No	174	79.1
Total	220	100.0
Source of information (n=46)		
Hospital	23	50.0
Friends or family	8	17.4
Radio or TV	10	21.7
Others (church, training etc.)	5	10.9
Total	46	100.0
HPV Transmission route (n=49)		
Incorrect responses	32	63.0
Correct responses	17	37.0
HPV prevention (n=58)		
Condom use	10	21.7
Abstinence	23	50.0
Vaccination	19	41.3
Good hygiene	6	13.0

Overall, 39.1% of the respondents thought that self-testing for HPV was challenging to carry out, and 80.9% of them preferred HCW-conducted VIA screening to HPV self-testing. The predominant reason for the preference was having more confidence in the outcome of VIA testing performed by a healthcare worker (67.8%). However, 57.2% of the respondents would still recommend HPV self-testing to women (Table 4).

Table 4. Acceptance and preference for HPV self-testing.

Variables	Frequency	Percentage (%)
Difficulty performing HPV self-test		
Agree	86	39.1
Undecided	26	11.8
Disagree	108	49.1
Total	220	100.0
Would recommend HPV self-testing to other women		
Agree	126	57.2
Undecided	47	21.4
Disagree	47	21.4
Total	220	100.0
Preferred test method		
HCW-conducted VIA	178	80.9
HPV self-testing	42	19.1
Reasons for choice		
No preference	18	8.2
HCW-conducted was embarrassing	22	10.0
Not confident about self-sampling skill	10	4.5
More confident about HCW-conducted	149	67.8
Undecided	21	9.5
Total	220	100.0

There was a statistically significant association between marital status and acceptance for HPV self-testing, with the highest acceptance seen amongst divorced/separated/widowed respondents (71.4%). The highest acceptance of HPV self-sampling was observed in the respondents who had completed primary school education (75.9%), and acceptance increased with the respondents' advancing age (Table 5).

Table 5. Association between the socio-demographic characteristics and acceptance of HPV self-testing among the respondents (n=220).

		Acceptance Freq (%)		Total	X^2	df	P value
		Poor	Good				
Age	<20	3(100.0%)	0(.0%)	3(100.0%)	6.27	3	0.099
	20-39	46(41.4%)	65(58.6%)	111(100.0%)			
	40-59	30(34.9%)	56(65.1%)	86(100.0%)			
	≥ 60	6(30.0%)	14(70.0%)	20(100.0%)			
Total		85(38.6%)	135(61.4%)	220(100.0%)			
Marital status	Single	32(51.6%)	30(48.4%)	62(100.0%)	6.29	2	0.043*
	Married	49(34.0%)	95(66.0%)	144(100.0%)			
	Divorced/ separated/widowed	4(28.6%)	10(71.4%)	14(100.0%)			
Total		85(38.6%)	135(61.4%)	220(100.0%)			
Education	No formal	10(41.7%)	14(58.3%)	24(100.0%)	2.81	3	0.42
	Primary	7(24.1%)	22(75.9%)	29(100.0%)			
	Secondary	19(42.2%)	26(57.8%)	45(100.0%)			
	Post-Secondary	45(36.9%)	77(63.1%)	122(100.0%)			
Total		81(38.6%)	139(61.4%)	220(100.0%)			

* = Statistically significant

DISCUSSION

Cervical cancer awareness (55.5%) among women in Badagry was higher than prior documented rural-based studies, which may indicate rising cervical cancer awareness in peri-urban Lagos. A 2010 study among market women in Lagos State reported a 15% awareness rate. Over 86% of rural dwellers in a northern-based survey did not know cervical cancer was preventable, with only 14% of women having heard of human papillomavirus.

Despite the higher awareness of cervical cancer, the knowledge about the risk factors and pathogenesis of the disease was poor. These findings are similar to a study conducted in other parts of Nigeria and may indicate the need to place more emphasis on HPV as a causative organism in the pathogenesis of the disease, alongside other risk factors, during health education sessions. The primary sources of cervical cancer information were from television and radio combined, demonstrating the role the media plays in engaging the public and sharing critical health information.

Most respondents (80.9%) preferred healthcare worker-conducted VIA screening to HPV self-testing. The preference for health worker-conducted VIA screening over HPV self-testing was mainly attributed to the perception that the former would yield more accurate results (67.8%) and the perceived difficulty in performing the latter (39.1%). This perception is noted in other studies reflecting women's low self-sampling confidence (33,34). Despite the availability of supportive pictorial aids, women may require more support in the form of the physical presence of a HCW to perform their first self-sampling procedure. The high parity among respondents indicates that most women were familiar with pelvic examinations, which may explain why more women preferred HCW-conducted VIA testing. The WHO recommends the "screen and treat" approach for resource-constrained settings like Nigeria; therefore, health worker-conducted VIA screening is highly utilized in community-based studies, with limited research on the utilization and feasibility of HPV self-testing. This suggests a greater familiarity with the health workers conducting the screening and may explain the higher acceptance rate observed.

Divorced, separated, or widowed respondents showed the highest acceptance of self-sampling, reflecting greater confidence and independence in this group. The absence of a spouse may have nurtured independence and decreased the fear of faulting one's sampling technique following a positive result. The consistencies between this study and the previous research highlight confidence levels as a key factor in choosing HPV self-testing over screening conducted by health workers. The studies from some African countries have demonstrated a higher preference for self-sampling, with more significant proportions of women (60% in Ghana and 95.1% in Kenya) opting for self-sampling over hospital-based screening (35,36). Prior awareness of HPV has been identified as facilitating higher acceptance of HPV self-sampling among African women (37,38).

With continued education on HPV and cervical cancer, with adequate support by HCWs, self-sampling for HPV has the potential to improve cervical cancer screening uptake in rural and peri-urban Nigeria. The anticipated limitations to scaling up self-testing for HPV in rural Nigeria include poor prerequisite knowledge about HPV as a cause of cervical cancer, delays with the analysis of HPV samples, and the individual financial cost to women. There are currently limited facilities in Nigeria equipped for HPV testing, and the existing facilities conduct HPV analyses at relatively higher rates than VIA screening.

CONCLUSIONS

Rural women in this study demonstrated low acceptance of HPV self-sampling mainly due to poor literacy levels and awareness of HPV as a causative factor for cervical cancer. There is, thus, a need to increase the emphasis on the causative role HPV plays in cervical cancer pathogenesis within cervical cancer awareness IEC materials used in rural settings. Despite the low acceptance of self-testing for HPV, this method of cervical cancer screening demonstrated feasibility in rural settings.

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APPENDIX

QUESTIONNAIRE

A Study of the Knowledge and Acceptance of Human Papillomavirus Self-Testing in Cervical Cancer Prevention amongst Rural Women of Badagry Community in Lagos.

This Questionnaire is completely anonymous and voluntary. Therefore, your honest responses would be highly appreciated. In addition, all information provided would be treated as absolutely confidential and used solely for research purpose.

PRE SCREENING SECTION

SOCIO-DEMOGRAPHIC DETAILS

1. Age (at last Birthday) ____________

2. Marital status:
   - a) Single [ ]
   - b) Married [ ]
   - c) Separated [ ]
   - d) Divorced [ ]
   - e) Widowed [ ]
   - f) Other ________________________

3. Education:
   - a) No formal education [ ]
   - b) Primary uncompleted [ ]
   - c) Primary completed [ ]
   - d) Secondary uncompleted [ ]
   - e) Secondary completed [ ]
   - f) Tertiary [ ]

4. Ethnicity:
   - a) Igbo [ ]
   - b) Yoruba [ ]
   - c) Hausa [ ]
   - d) Other ________________________

5. Occupation ________________________

6. Religion ________________________

GYNAECOLOGICAL AND MEDICAL HISTORY

When did you have your last menstrual period?
Day [ ] Month [ ] Year [ ]

8. Total number of pregnancies (include miscarriages if any): [ ]

9. Do you suffer from any of the following now?
   - a) Yes [ ]
   - b) No [ ]

(Tick the box if the response is yes; otherwise, leave blank):
   - a) Excessive vaginal discharge [ ]
   - b) Itching in the external vulva/vagina [ ]
   - c) Lower abdominal pain [ ]
   - d) Pain during sexual intercourse [ ]
   - e) Bleeding after sexual intercourse [ ]
   - f) Wounds on external vulva / vagina [ ]
   - g) Lower back ache [ ]
   - h) Bleeding in between your period [ ]

10. Age at first sexual intercourse:________________
(Don't know write 99)

11. Do you smoke cigarette tobacco?
    a) Yes [ ]
    b) No [ ]

12. If yes to question no 11, how many sticks of cigarette per day? ____________

13. Does your husband smoke tobacco?
    a) Yes [ ]
    b) No [ ]

14. If yes to question no 13, how many sticks of cigarette does he smoke per day? ____________

15. Have you ever been told you had any of the following? Please tick all that apply. (**if NO, please move on to question 19**)
    a) Cervical cancer [ ]
    b) Genital warts [ ]
    c) Abnormal Pap smear [ ]
    d) Positive VIA test result [ ]
    e) Human papillomavirus (HPV) [ ]

16. How long ago were you told that you had the problem listed in the previous question?
    a) 1 year of less [ ]
    b) 2 to 5 years [ ]
    c) 6 to 10 years [ ]
    d) 11 to 20 years [ ]
    e) 21 to 30 years [ ]
    f) 31 to 40 years [ ]
    g) > than 40 years ago [ ]

17. Were you treated?
    a) Yes [ ]
    b) No [ ]

(**if NO, please move on to question 19**)

18. If yes to question no 17, which of the following treatments was given? Please tick all that apply.
    a) Cervical biopsy [ ]
    b) Hysterectomy [ ]
    c) Cryotherapy [ ]
    d) Cone biopsy [ ]
    e) Herbal remedy [ ]
    f) Other____________

KNOWLEDGE ABOUT CERVICAL CANCER PREVENTION

19. Have you ever heard of cancer of the cervix?
    a) Yes [ ]
    b) No [ ]

(**if NO, please move on to question 23**)

20. If Yes, What was the source of information?
    a) Hospital visit [ ]
    b) Friends or family [ ]
    c) Radio or TV [ ]
    d) Other ____________

21. Which of the following are risk factors for cancer of the cervix?

	True	False	Don't Know
a) Sexually transmitted infections	[ ]	[ ]	[ ]
b) Promiscuity	[ ]	[ ]	[ ]
c) Early sexual onset	[ ]	[ ]	[ ]
d) Smoking	[ ]	[ ]	[ ]
e) Use of contraceptive pills	[ ]	[ ]	[ ]
f) Poor hygiene	[ ]	[ ]	[ ]
g) Hereditary	[ ]	[ ]	[ ]

22. What group of women are at risk of cervical cancer?
    a) Young women [ ]
    b) Middle aged women [ ]
    c) Elderly women [ ]
    d) All sexually active women [ ]
    e) Don't know [ ]

23. Have you ever heard of human papillomavirus (HPV)?
    a) Yes [ ]
    b) No [ ]

(**if NO, please move on to question 27**)

24. If yes to question no 23, what was the source of information?
    a) Hospital visit [ ]
    b) Friends or family [ ]
    c) Radio or TV [ ]
    d) Other ____________

25. How can one get HPV infection?
    a) Shaking hands [ ]
    b) Sexual intercourse [ ]
    c) Poor hygeine [ ]
    d) Blood transfusion [ ]
    e) Other ____________

26. How can HPV be prevented?
    a) Condom use [ ]
    b) Abstinence [ ]
    c) Vaccination [ ]
    d) Good hygeine [ ]
    e) Other [ ]

SCREENING PRACTICE

27. Have you ever been screened for cervical cancer?
    a) Yes [ ]
    b) No [ ]

(**if NO, please move on to question no. 31**)

28. If yes to question no 26, what type of test?
    a) Pap smear [ ]
    b) Liquid baesd cytology [ ]
    c) HPV test [ ]
    d) Visual inspection with acetic acid (VIA) test [ ]
    e) Other ____________

29. When were you screened last?
    a) This year [ ]
    b) Last Year [ ]
    c) 3 years ago [ ]
    d) Over 5 years ago [ ]

30. Where were you screened last?
    a) Teaching hospita [ ]
    b) State hospital [ ]
    c) Primary health centre [ ]
    d) In church [ ]
    e) At the office [ ]
    f) Other ____________________

31. Why have you never been screened for cancer of the cervix?
    a) Not interested [ ]
    b) Too busy [ ]
    c) Don't know where to go [ ]
    d) I don't feel I am at risk [ ]
    e) I don't have symptoms [ ]
    f) Anxiety about vaginal examination [ ]
    g) Other ____________________

32. If given the opportunity to screen for cancer of the cervix would you screen?
    a) Yes [ ]
    b) Yes, but only if it is done by a female physician [ ]
    c) No [ ]

33. If no to question no 32, please give your reason

____

POST SCREENING SECTION

ACCEPTABILITY AND PREFERENCE FOR HPV SELF TESTING?

34. I found it difficult to collect the sample myself for the HPV test?
    a) Strongly agree [ ]
    b) Agree [ ]
    c) Undecided [ ]
    d) Disagree [ ]
    e) Strongly disagree [ ]

35. I would have preferred a health care officer to collect the sample for the HPV test
    a) Strongly agree [ ]
    b) Agree [ ]
    c) Undecided [ ]
    d) Disagree [ ]
    e) Strongly disagree [ ]

36. I would recommended HPV self testing to other women?
    a) Strongly agree [ ]
    b) Agree [ ]
    c) Undecided [ ]
    d) Disagree [ ]
    e) Strongly disagree [ ]

37. Overall which test method did you prefer? Please tick
    a) Physician conducted VIA test [ ]
    b) HPV self-testing [ ]

What is the reason for your choice? ____________

____