

Uptake And Determinants of Cervical Cancer Screening, A Comparative Study of Female Health Workers and University Lecturers

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Copyright © 2025 The Author(s): This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC BY-NC) which permits unrestricted use, distribution, and reproduction in any medium for non-commercial use provided the original author and source are credited.	
Citation: Egbujo Stella Onyinyechi & Prof Omosiviaduka. (2025). Uptake and determinants of cervical cancer screening, a comparative study of female health workers and university lecturers. UKR Journal of Medicine and Medical Research, 1(2), 46-68.	<i>This paper looks at healthcare professionals' adoption of cervical cancer inspection and finds factors affecting their involvement. Respondents mostly cited increased comprehension of cervical cancer risk factors as the cause of their inspection, which was above 75%. The demographic study showed a mostly youthful, married workforce with many Christians identifying themselves. Key results showed that inspection behaviour was mostly influenced by perceived vulnerability and self-efficacy. Participation was greatly influenced by health system elements including as availability and pricing. Especially, individuals with institutional assistance had greater inspection rates whereas those with transit issues were less likely to get examined. The research also underlined comprehension gaps on inspection start and frequency, with both health professionals and professors holding false ideas. Though many people knew cervical cancer was detectable, many of them did not know the correct inspection recommendations. Most people had good attitudes towards inspection; nonetheless, money constraints were still an issue. Statistical analysis showed no notable difference in inspection uptake between health professionals and lecturers, however comprehension levels varied greatly, suggesting a need for focused training projects. All things considered, the results highlight the need of increasing access to inspection services and strengthening educational initiatives to clarify misunderstandings. Healthcare professionals may more actively participate in preventative actions by creating a supportive atmosphere and raising awareness, hence lowering the prevalence of cervical cancer in the community.</i> Keywords: Cervical Cancer Screening, Healthcare Professionals, Screening Uptake, Self-Efficacy, Health Education, Healthcare Accessibility.

Introduction

Research indicates that the most prevalent disease affecting the female reproductive organ particularly in low and medium income countries (lmic) is cervical cancer. Bray et al. (2018) estimate that cervical cancer was the second most common cause of death in Nigeria with 14,943 cases and 10,403 deaths in 2018.

Its epidemiology and health effects are not just impacting women but also their families, communities, and social institutions. Akokuwelre et al. (2021)

More over half a million women get invasive cervical cancer every year despite this comprehension; nonetheless, it is also one of the most preventable diseases by means of

appropriate inspection, therapies, and follow-ups. Cohen and colleagues, 2019.

Mostly women from poor and medium income countries, where access to inspection and treatment is restricted, are affected by this malignancy, which starts in the cells lining the cervix, the lowest portion of the uterus connecting to the vagina. Cervical cancer inspection development spars years starting with precancerous demands known as cervical intraepithelial Neoplasia (CIN) or squamous intraepithelia lesions (SIL) Arbyn et al., 2020.

34.8 new instances of cervical malignancies are found per 100,000 women each year in sub-Saharan Africa; 22.5 die from this condition.

Over 530,000 new instances of cervical cancer and 275,000 fatalities were recorded worldwide in 2008 alone. Usually greatest in middle age women (between the ages of 30-59), the incidence of cervical cancer associated mortality is 90% in developed nations (WHO, 2021).

This suggests that cancer is a worldwide health problem whose impact is more pronounced in the industrialised nations with little preventative resources, uncovering & treatment of the illness. Cervical cancer is a preventable illness that may be found early on; suitable actions can then be made to avoid the development of this life threatening advanced degree of it. Ingum (2016) said that this illness is creating unimaginable chaos and control policies are urgently required.

Approximately 75,000 new cases were recorded in Africa in 2015 across all nations. Worldwide, cervical cancer ranks fourth among cancer-related mortality causes in women. Over 570,000 new cases were reported in 2018, 90% of which were in poor nations, and 311,000 fatalities were reported. Skolnik, 2020. The Cervical Cancer Global Crisis puts Nigeria fifth among nations in terms of mortality toll from cervical cancer, behind India, China, Brazil and Bangladesh. Ojomo et al., 2022. Because its prevention depends on the early uncovering of precancerous lesions detectable by cervical cancer inspection, cervical cancer has been mentioned as one of the few avoidable human malignancies. Zhang et al. (2020)

A medical technique called cervical cancer inspection finds early indications of cervical cancer in women. Usually, it means using a pap smear or HPV test to find aberrant cervical cells before they develop into cancer. Early identification and treatment most of which will be symptomless depend on regular inspection; the inspection seeks to find precancerous alterations, which, if untreated, might become cancer. Sawaya and colleagues, 2015 While Pap smear (cytology) is the only test that has been used in large populations and that has demonstrated to lower burden of cervical cancer incidence and death, other assays may be utilised in inspection for cervical cancer. Visual Inspection with Acetic Acid (VIA) and Visual Inspection with Lugol's Iodine (VILI) are two further methods created for quick cervical cancer inspection. Stumbar et al. (2019) Though speedier and less laborious, these techniques have been shown to be less sensitive than cytology analysis by Pap smear, which might provide erroneous findings and cause great psychological issues as well as incorrect therapy. Canadian Task Force on Preventive Health Care, 2013.

The absence of dependable population-based cancer registry or preventive program databases obscures women's understanding and use of cervical cytological services in the nation. Research throughout time shows that cervical cancer inspection has remained low. A research done in Benin City revealed inadequate understanding and exercise of cervical cancer inspection. Furthermore, a further Abakaliki survey found that while people were well aware of cervical cancer inspection, their use remained low (Ehwarieme et al., 2022). Though the federal government has worked to launch cancer prevention initiatives in several federal health facilities around the nation, research from all around the nation continues to show a low degree of comprehension of cervical cancer inspection and uptake among health professionals in spite of the fairly high degree of cervical cancer awareness. Cervical cancer inspection uptake has been studied in several populations. This research aims to evaluate the comprehension, attitude, and cervical cancer inspection uptake among female health professionals and university professors in Port Harcourt.

1.1.1 Understanding the meaning of uptake in a research

In research settings, uptake usually refers to the extent to which people or groups adjust to certain programs and treatments. Common in health-related research, this idea is one where uptake may show how well preventative actions are used (managed) by the group being studied (Gonzalez et al., 2018). For instance, in the field of cancer inspection for cervical cancer, uptake is the percentage of qualified women who actually get screened.

1.1.2 Significance of uptake in Research

Uptake is essential to guarantee that studies help to bring about good change in the actual world. Evaluating the effectiveness of health initiatives also depends on this essential component. Higher acceptance rates indicate efficient outreach, education and accessibility (Waller et al., 2015). On other side poor uptake indicates obstacles that need immediate attention (handled) include lack of information, cultural belief or logistical issues, (Cameron et al., 2021). Identification of caps in health services thus depends on an understanding of the significance of uptake.

Research life-cycle depends on uptake as it guarantees that information is not only produced but also transformed into significant change. Especially in fields aiming to increase human general well-being, it strengthens the effect and responsibility of research. Research has to interact with people and have efficiently community to maximise adoption.

Digital repositionies broaden the reach of research generates beyond academic pay walls and into the palms of practitioners of the public; example platforms like research

gate, google scholar, twitter can help enhance the view and engage with research findings. Social media, open access publishing, and digital era can create new opportunity for research uptake.

These instruments, meanwhile, need sound policies to guarantee proper understanding and use of data. While policy change is a clear and essential kind of uptake, other forms such as changing professional exercise, increasing comprehension, or changing public opinion are equally significant. Uptake pushes academics to consider effect in more general terms. Examining these effects calls for both quantitative and qualitative approaches, like surveys, interviews, citation, analysis and case studies (Reed et al., 2018).

Training courses that provide researchers with abilities in stakeholder management, policy involvement, and communication may improve uptake. Building trust and sharing ownership of research results depends on government, academia, society and corporate sector working together (Phipps et al., 2012).

1.1.3 Uptake measurement

Surveys, administrative, data analysis, clinical records, citation & references, policy effects, practical implementations & community involvement all help to gauge uptake. Understanding these metrics helps public health authorities and academics evaluate how well an intervention works and enable them to allocate resources wisely.

Moreover, knowing the idea of uptake has momentous consequences for public policies; efficient initiatives should not only emphasise raising awareness but also tackle the particular obstacles experienced by various demographic groups by means of uptake analysis. Health policy makers may focus on programs that satisfy community needs and ideals. Kavanagh and colleagues, 2021. Encouraging open debate on health concerns in culturally sensitive locations helps to create environments that support better adoption rates.

Uptake can be measured in various ways:

1. Analysis of Citations It also monitors how often research is referenced in policy papers or academic publications, tracking thereby how the results of original study are being recognised and expanded upon in the academic community. Researchers should examine citations in Grey literature including government papers, policy briefings, and NGO publications. Oliver and colleagues (2014) This decide if study is creating actual world choices.
2. Policy effect: If policy cites a certain study in the formulation of new policies or program, it indicates that the research results have been adopted & are guiding actual activities. This also highlights the disparity between comprehension creation and practical transformation; for instance, Studies stressing the impact of certing pesticides could result in government prohibitions thereby safeguarding society at large, the environment, and public health. Engaging early with legislators will guarantee the study answers pertinent policy issues, hence guaranteeing its adoption.
3. Efficient communication: It's also crucial to use policy ideas infographics and executive summaries to help decision-makers consume information by converting difficult study results into understandable language.
4. The degree to which research results are converted into useful applications. For example, if research results serve as the basis for a new medical therapy, it shows great adoption.
5. Working with communities, organisations, businesses or advocacy groups can assist guarantee that research results are relevant and significant to people who can benefit from them. Considering these many aspects of uptake, studies may evaluate the effect of their work and act to improve the distribution and use of their study results in the larger society.
6. Media tracking is another useful tool; it updates internet news platform research monitoring measures. Social media, televisions, or newspapers. Media presence may alert public involvement to which study results are entering into general society discussions. Brownson and colleagues, 2018 Tools like alt meter and plum X give another measure that reflects social media attention, press coverage, and policy citations, so presenting a more complete view of study exposure beyond conventional influence.
7. Researchers record particular cases when their work has sparked or caused change in case study analysis. These stories include method by which uptake happens, stakeholders' roles, and timeline (Nutley et al. 2007). In settings where effect is hard to determine, case studies are utilised to record complicated and nonlinear routes from research to impact.
8. Web analytics: Downloaded data also provides statistics and qualitative interest. Tracking how many times a study has been viewed, shared, or

downloaded gives a proxy for involvement (Van Noorden 2014).

9. Payback systems, theory of change and impact assessments provide methodical ways to connect research efforts with results and effects. Phipps et al. 2012 These models motivate studies to identify anticipated uptake routes and compile proof. Examining the duration between publication and later citations helps one to understand the pace of research consumption. While delayed citations could suggest long term impact, rapid citations might suggest instant relevance.

1.1.4 Factors Influencing Uptake

Several Factors can influence the uptake of health interventions especially in the context of cervical cancer inspection. They are:

People who know the value of inspection, who know the dangers of cervical cancer and the advantages of early uncovering are more inclined to engage in the inspection (Daris et al., 2020)

Socio-Demographic Factors: Individual probability of receiving inspection may be significantly influenced by variables such age, educational background, mental state. Tacke and colleagues, 2019 Younger women or those with poor educational level, for example, may have lower inspection rates because of misunderstandings or lack of access to information.

Cultural beliefs: Cultural views towards health & illness might hinder adoption in some populations; talking about reproductive health could be stigmatising and discourage people from getting required inspection. Sharma and colleagues, 2018

Access to service: Uptake is significantly influenced by availability to inspection facilities. Regions with poor healthcare facilities can have less participation because of logistical issues. Nlekim et al. 2020

Individual views on time, expense, and inspection-related hassles may influence acceptance. Community outreach and education may help to solve this, hence increasing the uptake. Zhon et al. (2019)

1.1.5 Inspection Principles

Given that inspection tests are used on vast populations, they should be quite cheap, simple, painless, and safe. Consequently, they are less accurate than diagnostic tests and may have greater margins of error.

Inspection test sensitivity measures how well the test identifies people with a specified condition. Sensitivity is the percentage of people with a certain condition that are identified as helpful via inspection. When the inspection

result is helpful and the individual has the illness, the inspection result is true. A negative inspection result indicates that the inspection result is erroneous and the individual does not have the illness.

While sensitivity and specificity are trade-offs to identify persons with and without chance of illness and reasonable costs, the diagnostic tests should be very sensitive to find the disease.

The specificity of the inspection test indicates how well it identifies unaffected individuals. Specificity is the percentage of those without the illness who have a negative inspection test result. When the inspection test is negative and the individual does not have the illness, the inspection result is true negative; when the inspection test is negative but the person has the condition, the inspection test is false negative.

Sensitivity and specificity are connected inversely. An increase in sensitivity results in more people with the illness being found as well as more people without the disease getting a helpful inspection outcome, which is deemed false helpful. Helpful and negative predictive values rely not only on the sensitivity and specificity of inspection test but also on the frequency of screened condition. The helpful predictive value is the likelihood of the illness in those with favourable outcome. Common illness has a larger helpful predictive value than uncommon diseases. The momentous of a helpful predictive value varies greatly with the outcome of a helpful test. The poor helpful predictive value might be rather acceptable if it is only followed by inspection test repeat. Should it be followed by a possibly dangerous diagnostic test, it is crucial to have a strong predictive value. A inspection test has to meet the criteria of efficacy and effectiveness of early uncovering to be deemed successful. Inspection efficacy refers to the test's ability to identify the target condition sooner than it would be without inspection and with enough precision to prevent generating many false helpful and false negative findings.

Effectiveness of early uncovering suggests that those with illness who are found early should have a better clinical result than those who are found without inspection. Very strong proof is needed to verify that early diagnosis and any following treatment will be better without harm when providing inspection services for large numbers of symptom-free individuals and before beginning the inspection program. Possible drawbacks include false helpful inspection test results, incorrect diagnoses, treatments that might be more harmful than beneficial, stigmatisation of individuals, and false-negative results that provide false confidence. False helpful results make healthy people anxious and expose screened individuals to further tests, which might be dangerous. Screened women suffer some psychological and social harm from inspection

tests; these include expected discomfort or negative inspection test perception; negative interactions with healthcare professionals; worry about the outcomes of a inspection test; and consequences of being classified as sick or at risk of cervical cancer. Screened individuals get various effects from inspection tests. Inspection mostly helps individuals with a genuine helpful result and for whose death is postponed; for those with a real helpful finding but for whom death is not postponed, the efficacy of inspection is questionable. While false negative results have little negative impact and the actual negative result has debatable value, false helpful results have significant negative impact. Inspection programs aims to lower mortality and morbidity as well as to improve population quality of life.

Methodology

Study Design

Using the Cervical (Cancer Awareness Measure) (CAM) instrument with binary result, the current work was a cross-sectional Comparative research.

Study Area

The research was place at University of Port Harcourt Teaching Hospital, Port Harcourt, Rivers state, Nigeria. Located in Port Harcourt, Rivers State, Nigeria, the University of Port Harcourt Teaching Hospital (UPTH) is a tertiary healthcare facility. Being a key referral centre in the Niger Delta area, UPTH offers specialised medical services to a varied clientele. Affiliated with the University of Port Harcourt, the hospital is essential in educating healthcare workers, notably those in obstetrics and gynaecology.

Comprising 35 departments, the University of Port Harcourt Teaching Hospital is a 782-bed tertiary level facility. The clinics include a nurse, lab technician, pharmaceutical technician, and clinician. The research comprised female health workers and university professors from many hospital departments. Eligible candidates were chosen after informed consent signature. Participants were classified into three departmental categories: clinical, administrative, and supporting. Proportional to the size of the population in each department, probability sampling was conducted. Eligible individuals were given self-administered questionnaires (Ampofo et al., 2020).

Momentous of UPTH as a Study Area

1. Target Population Access: Critical to the goals of the research, the hospital employs a notable number of

female health professionals—doctors, midwives, and nurses among them.

2. Healthcare Infrastructure: UPTH provides thorough healthcare services, including treatment and cervical cancer inspection. This makes it a perfect environment to investigate the adoption and factors influencing cervical cancer inspection among university professors and healthcare professionals.
3. Varied Population: — The hospital caters to a varied population from different socioeconomic backgrounds, hence improving the generalisation of the research results to a more general setting.

Reasons for Selecting UPTH

1. Proximity and Accessibility: - The closeness of UPTH to the University of PortHarcourt helps data gathering from both female health professionals and university professors.

Being a teaching hospital, UPTH is well-suited to assist research projects, hence offering a suitable setting for investigations connected to healthcare exercises and results.

3. Emphasis on Cervical Cancer Inspection: Considering the hospital's function in delivering specialised medical treatments, including gynaecological care, it is a suitable environment to explore the adoption and factors influencing cervical cancer inspection among academics and healthcare providers.

Possible Study Participants

1. Female Health Workers: - Other healthcare professionals working at UPTH, physicians, midwives, nurses.

Female teachers from the University of Port Harcourt, representing a comparable sample with perhaps varied factors influencing cervical cancer inspection uptake.

The research done at UPTH will provide insightful analysis of the elements affecting female health professionals' and university lecturers' cervical cancer inspection uptake. The results will help to create focused initiatives meant to raise inspection rates and lower the cervical cancer load in this community as well as others.

Study population size

Currently employed adult female health professionals between the age of 25 to 65 years are: a. Health workers (Doctors, nurses, lab scientist etc b. University lecturer - academic staff members teaching at Unipor.

Study variables

Table 1: Study variables

Variable Questions Operationalization

Age	Age at time of study	Reported in years
Parity	Number of children	Reported in numbers
Marital status	Marital status	Married, single, widow, divorced
Contraceptive use	Ever used contraception and mode used	Yes or no and subtypes
Mode Payment of healthcare	Use of health insurance or cash	Insurance or cash
Vaccination	Ever been vaccinated for cervical cancer	Yes or no
Education level	Highest level of education	None, primary, secondary, tertiary
Cervical cancer inspection	Ever screened for cancer	Yes or no
Frequency of inspection and co testing	Annual or 3 yearly	Annual,3 yearly,5 yearly
Gender	Male or female	Male or female
Professional cadre	List	List
Awareness of inspection	Awareness of inspection program for cervical cancer	

Inclusion criteria

1. Female participants only
2. Females of reproductive age (21-65 years), as recommended by WHO inspection age
3. Female health workers e.g Doctor, nurse, lab scientist currently employed.
4. Female university lecturer teaching in Uniport.
5. Female health workers or university lecturers working in their current work for at least one to two years
6. Female health workers and university lecturers willing to participate.
7. Female health workers/university lecturers working and residing in the study area.

Exclusion criteria

1. Female health workers and university lecturers below the age of 21 years and above 65 years
2. Female health workers and university lecturers with less than one year working experience
3. Individual currently diagnosed with cervical cancer
4. Participants that can't comprehend English Language used in the study
5. Current pregnant female health workers and university lecturers.

Study Tools

The tool that will be used for this study is the questionnaire.

Sample size

In order to estimate the sample size, Rationale used was up being the proportion of screened female healthcare workers

and university lecturers (which was unknown) thus taken up as 50%.

$$n_0 = Z^2 \alpha^2 (1 - P) d^2$$

n: was the sample size

Z: the statistic corresponding to the level of confidence of 1.96

P: expected prevalence (which was unknown, estimated at 50%)

d: the precision was at 5%

Sample size (n) = 384

With adjustment for finite population

$$n = n_0 / (1 + n_0 - 1 N)$$

$$n = 384 / (1 + 384 - 1 N)$$

The present study aimed to recruit 362 participants in the various departments.

Validity and Reliability of the Instrument Used

Ensuring the validity and reliability of the instruments used in this study is critical for obtaining accurate and trustworthy results. The following outlines the approaches taken to assess both aspects:

Validity

1. Content Validity:

The questions were created using current research and cervical cancer inspection standards. Experts in public health and gynaecology examined the items to make sure they thoroughly addressed the relevant components including comprehension, attitudes, and behaviours about cervical cancer inspection.

Revisions based on comments from these professionals guaranteed that the tool correctly represented the goals of the research.

2. Validity of Construction:

Construct validity was evaluated by means of a correlation between the questionnaire questions and accepted measures of related variables (e.g., perceived susceptibility and self-efficacy). Factor analysis was used to verify that the items clustered into predicted components, hence confirming that the tool properly assessed the desired structures.

Face Validity: A pilot research using a small sample of healthcare professionals helped to assess face validity. Participants were requested to comment on the relevance and clarity of the enquiries. Their comments guided changes to improve the face validity of the tool.

Consistency

The instrument's dependability was evaluated using Cronbach's alpha, a statistical tool for internal consistency. Acceptable was a Cronbach's alpha of 0.70 or above. The findings of the pilot research showed good internal consistency across the questions assessing comprehension and attitudes on cervical cancer inspection.

A test-retest reliability study using a subgroup of subjects was performed to evaluate the instrument's stability over time. The correlation between the two sets of replies was computed using the identical questionnaire given twice, many weeks apart. A strong correlation value showed that the instrument generated consistent outcomes over time.

Any observational aspects of the data gathering (e.g., inspection processes) were evaluated for inter-rater reliability by means of numerous trained individuals doing observations. Cohen's kappa statistic was used to assess the degree of agreement among raters, hence guaranteeing the instrument's consistent dependability across many evaluators.

The thorough validation and reliability evaluation of the tools employed in this research provide assurance that the results are both correct and reliable. The research guarantees that it properly records the comprehension, attitudes, and behaviours of healthcare professionals on cervical cancer inspection by using accepted techniques to assess validity and reliability. This strong method increases the validity of the findings of the study and their relevance for future health treatments.

Data Collection methods.

Trained on the questionnaire and data collecting, three research assistants were hired for the study. Approved by the university, the research assistants with clinical backgrounds ran the study. Every self-administered

questionnaire and permission signed by qualified individuals was given a unique research number.

Data Control

Ensuring the integrity, confidentiality, and usefulness of research data depends on good data management. To enable correct findings and preserve participant privacy, this research used a thorough method for data collecting, storage, and analysis. Daily collection upon work completion and evaluation for completion of the finished data tool. All forms were tagged for secrecy and secured in a cabinet accessible only to the primary investigator to be held for a time depending on university policy on preserving research materials.

Data Storage and Entry Data were put into a safe electronic database after collection. To reduce mistakes, double data input was used; frequent audits were done to confirm data correctness. A password-protected system kept all electronic data available only to authorised research staff members. To further safeguard participant anonymity, physical copies of surveys were kept in locked cabinets.

Data Analysis

Descriptive statistics including percentages, frequencies, standard deviation (SD) were used to investigate social demographic data. Median Interquartile Range (IQR) was used for continuous variables. Categorical variables were measured using frequency and percentages. Bivariate logistic regression was used to examine cervical cancer predictors; P values under 0.05 were deemed significant. Independent relationships between the result and the explanatory factors were tested using the Chi-square test. The multivariate model was considered for variables with P values <0.2

Ethical issues

The University of Port Harcourt, Port Harcourt's Research Ethics Committee granted ethical clearance. Approval from University of Port Harcourt Teaching Hospital was secured along with demographic data from department records to carry out the research on female health care professionals and university lecturers. The study period also saw the acquisition of National Commission of Science, Technology and Innovation licence REF 973894.

The current study's very sensitive and private character mandated data collecting secrecy and privacy. Patient autonomy to participate or not was respected. Assigning each participant a unique research number excluding their names or staff numbers helped to ensure patient confidentiality and privacy. The primary investigator and research assistants handled only data required to fulfil the study goal; all other data was left untouched. Research assistants were also educated and sensitised on the

character of information and for any necessity for referral of participants who wanted to have inspection done to gynaecology clinics.

Participants completed the study tools located in a labelled study folder maintained in a locked cabinet with other gathered filled tools accessible only by lead investigator and research assistants. Dissertation completion sent the research files to the School of Public Health Faculty of Public Health Research Office.

Respondents signed informed consents before the surveys were administered. Equity: Participants were told they might leave at any time they felt they could not go on with the interview. Not gathering name, phone number, or other personal information trackable to the responder helped to preserve confidentiality. For safety and secrecy, data was kept on pass worded computer. There was no intrusive

treatment and the trial caused no damage at all to the subjects.

Benefits of the Research

Early diagnosis and prevention depend on regular inspection, which helps to lower death and morbidity rates. This comparative research is to investigate the factors influencing cervical cancer inspection among female health professionals and university lecturers in Port Harcourt as well as their uptake. Knowing the advantages and hazards connected to these groups can help one create focused programs meant to raise inspection rates. Although all groups may gain much from frequent inspection, addressing key obstacles and using particular enablers for each group can help to raise participation rates. To lower risks and encourage cervical cancer prevention efficiently, modified interventions, raised awareness, and better access to inspection services are very vital.

Table 4.1: Demography of the respondents

s/n	Question	Variable	Frequency			
			Health workers	Percentage (%)	Lecturers	Percentage (%)
1	Age at last birthday	21-30	40	26.67	5	3.33
		31-40	63	42	60	40
		41-50	25	16.67	62	41.33
		51-60	15	10	15	10
		Above 60	7	4.67	8	5.33
	Mean $\pm$ SD		31.21 $\pm$ 12.34		42.87 $\pm$ 8.77	
	Range		39.5		39.5	
2	Marital Status	Married	102	68	101	67.33
		Divorced	10	6.67	14	9.33
		Single	26	17.33	25	16.67
		Widow	12	8	10	6.67
	Mean $\pm$ SD		37.5 $\pm$ 41.2		37.5 $\pm$ 40	
	Range		92		91	
3	Religion	Christian	140	93.33	130	86.67
		Muslim	13	6.67	17	12.33
4	Number of years worked in UNIPORT	1-5 years	66	44	80	53.33
		6-10 years	56	37.33	58	38.67
		Above 10 years	28	18.67	12	8
	Mean $\pm$ SD		7.11 $\pm$ 4.38		5.89 $\pm$ 3.59	
	Range		14		14	
5	Educational Qualification	MBBS	45		0	
		BSc.	67		20	
		MSc. and above	15		127	
		Diploma	23		3	
6	Level of monthly income	Below 50000	10		0	
		50000-100000	77		13	
		Above 100000	63		137	
7	Number of children	Less than 5	106		100	
		Above 5	18		25	
		None	26		25	

Respondents were asked their age at their last birthday and from their answers in table 4.1 above, the ages of 40 (26.67%) health workers and 5 (3.33%) lecturers fell within the range of 21-30 years while the ages of 63 (42%) health workers and 60 (40%) lecturers fell within the range of 31-40 years. While the same number of health workers and lecturers 15 (10%) fall within the age range of 51-60, the ages of 25 (16.67%) health workers and 62 (41.33%) professors fell within the range of 41-50 years. Of the 7 (4.67%) health workers and 8 (5.33%) academics over 60 years old, For the health workers, the average age is 31.21 with a standard deviation of 12.34; for the professors, it is 42.87 with a standard deviation of 8.77. Their age range is 39.5.

Of the health professionals, 102 (68%) are married; 10 (6.67%) are divorced. Of the lecturers, 101 (67.33%) are married; 14 (9.33%) are divorced. While 12 (8%) of the health workers and 10 (6.67%) of the lecturers are widowed, 26 (17.33%) of the health workers and 25 (16.67%) of the lecturers are single. Health professionals have a mean of 37.5, a standard deviation of 41.2, and a range value of 92. The value is almost equal for the professors with only a little variation. With a mean of 37.5, a standard deviation of 40, and a range of 91, the professors Of the health staff, 140 (93.33%) are Christians; 13 (6.67%) are Muslims. Of the lecturers, 130 (86.67%) are Christians; 17 (12.33%) are Muslims.

The interviewees were also questioned about how long they had been employed at the university of Port Harcourt. Of the health workers, 66 (44%) and of the academics, 80 (53.33%) had worked for between 1-5 years. Of University health personnel, 56 (37.33%) and 58 (38.67%) had worked between 6 and 10 years. Of University health staff, 28 (18.67%) and of lecturers, 12 (8%) have worked more than ten years. For the health workers, the mean number of years worked is 7.11 with a standard deviation of 4.38; for the academics, it is 5.89 with a standard deviation of 3.59. Their range value is 14.

The table 4.1 also indicates the respondents' educational background. The outcome revealed that 67 had BSc, 45 of the health workers only MBBS. Of the 15 who have diplomas, 23 have advanced in their studies to get higher degree. Regarding the professors, 20 of them have BSc., 127 have pursued their master's PhD degree, and 3 have diploma.

While just a handful of them make below 50000, most of the health workers' salary falls between 50000 and 100000 naira. 63 of them make over 100000 naira. With 137 of them making over 100000 naira, all the professors make above 50000 naira. While 18 of the health workers and 25 of the professors have more than 5 children, most of the health professionals and lecturers have under 5 children. Of the 25 professors, 26 health professionals have no children.

Table 4.2: Ethnicity of the respondents

s/n	Ethnic group	Health workers	Lecturers
1	Igbo	58	40
2	Yoruba	20	20
3	Ikwere	40	58
4	Others	32	32

Table 4.2 above shows that most of the health workers are igbo whereas most of the academics are Ikwere. For both the academics and health workers, 20 of the respondents were from the Yoruba ethnic group. For both health workers and professors, 32 respondents came from various ethnic groups throughout Nigeria.

4.1.1.1 Respondents' Profession

The responders were two groups: lecturers and health workers. Among the health professionals are physicians, nurses, medical laboratory scientists, health attendants, and chemists. Table 4.3 below shows the overall number of various health worker specifications among the respondents.

Table 4.3 Total Number of each Specification of Health Workers among the Respondents

s/n	Specification of Health Worker	Frequency
1	Doctors	32
2	Nurses	58
3	Medical Laboratory Scientists	20
4	Health Attendants	23
5	Pharmacist	17

Table 4.3 reveals that the health personnel have various criteria. While 17 are chemists, 32 are physicians, 58 are nurses, 20 are medical laboratory scientists, and 23 are health assistants. They were 150 for the lectures.

4.1.2 Determining the Uptake and Determinants of Cervical Cancer Inspection

Questions were posed and the answers are shown in table 4.4 and table 4.5 below, therefore helping to identify the uptake and factors influencing cervical cancer inspection. While table 4.5 reveals the factors influencing cervical cancer inspection, table 4.4 reveals the uptake. Table 4.4's

findings revealed that 269 of the respondents had had sex; of them, 39 had their first intercourse under 18 years old. The remainder of the number had theirs over 18 years old. Of the 212 respondents who maintained one sex relationship, 57 had more than one sexual partner; 31 had none in the previous year. While 169 of them have not used contraceptives, 100 of them did. Included among the contraceptives are injectables, implanters, progesterone only tablets, combination oral contraceptives, and intra-uterine devices. Amongst these, progesterone alone tablets were the most commonly utilised, with 33 users.

Table 4.4 Responses on Sexual Intercourse

s/n	Question	Variable	Frequency
1	Have you ever had sexual intercourse?	Yes	269
		No	31
2	Age at first sexual intercourse?	Below 18 years	39
		18 years and above	230
3	In the last year, how many sexual partners have you had?	None	31
		One	212
		More than one	57
4	Have you ever used contraceptives?	Yes	100
		No	169
5	Which contraceptives did you use?	Injectables	7
		Implanter	28
		Progesterone only pills	33
		Combined oral contraceptive	19
		Intra-uterine devices	13

Table 4.5 Cervical Cancer Inspection

s/n	Questions	Variables	Frequency	
			Health workers	Lecturers
1	Is there any history of cervical cancer in your family?	Yes	80	78
		No	20	44
		I don't know	50	28
2	Have you ever been screened for cervical cancer?	Yes	117	70
		No	33	80
3	If you have never screened for cervical cancer, what was your reason for not inspection for cervical cancer?	Fear of being at risk	3	10
		Lack of awareness	0	11
		No interest	6	26
		No access to inspection facility	4	5
		High cost of inspection	20	28
5	What type of inspection test did you do?	Human Papilloma Virus testing	6	10
		Pap smear	77	10
		Visual inspection with acetic acid	12	12
		Colposcopy	12	10
		I don't know	0	28

6	How many times did you screen for cervical cancer?	Once	40	67
		More than once	77	3
7	If you have screened more than once, how often do you screen for cervical cancer?	Once a year	28	0
		Once in 2 years	10	0
		Once in 5 years	39	3
8	What was your reason for inspection for cervical cancer?	Prevention	11	29
		Routine check	88	35
		No reason	18	6

Table 4.5 reveals that 80 health professionals and 78 professors come from families with cervical cancer. While 50 health professionals and 28 lecturers are unaware of whether such history exists in their families, 20 health workers and 44 lecturers do not have such past. Of the lecturers, 70; of the health professionals, 117 had undergone cervical cancer inspection. Of the lecturers, 80; of the health professionals, 33; none had been checked for cervical cancer. Various elements were found to be causes for not inspection some of which include fear, ignorance, apathy, inadequate access to inspection tools and high cost

of inspection. The outcome indicated that most had not been examined due to the high inspection expense. The responders have undergone many different kinds of inspection. Among these are colposcopy, viral examination with acetic acid, pap smear, and human papilloma virus testing. The outcome indicated that a substantial majority of the respondents utilised Pap smear and 28 professors do not know the sort of inspection they had. Most of the health professionals checked more than once; the main reason for inspection for all the responders was for regular check.

4.1.3 Comparing the level of comprehension about cervical cancer inspection among health workers and lecturers of the University of Port Harcourt.

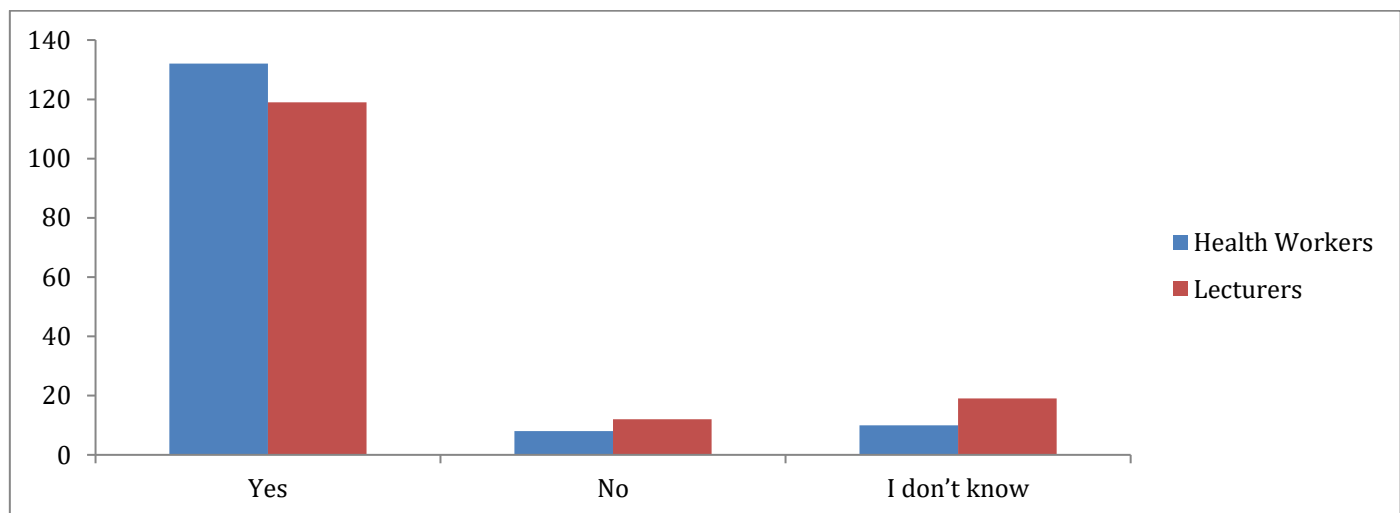


Figure 4.1: Cervical Cancer is an abdominal growth

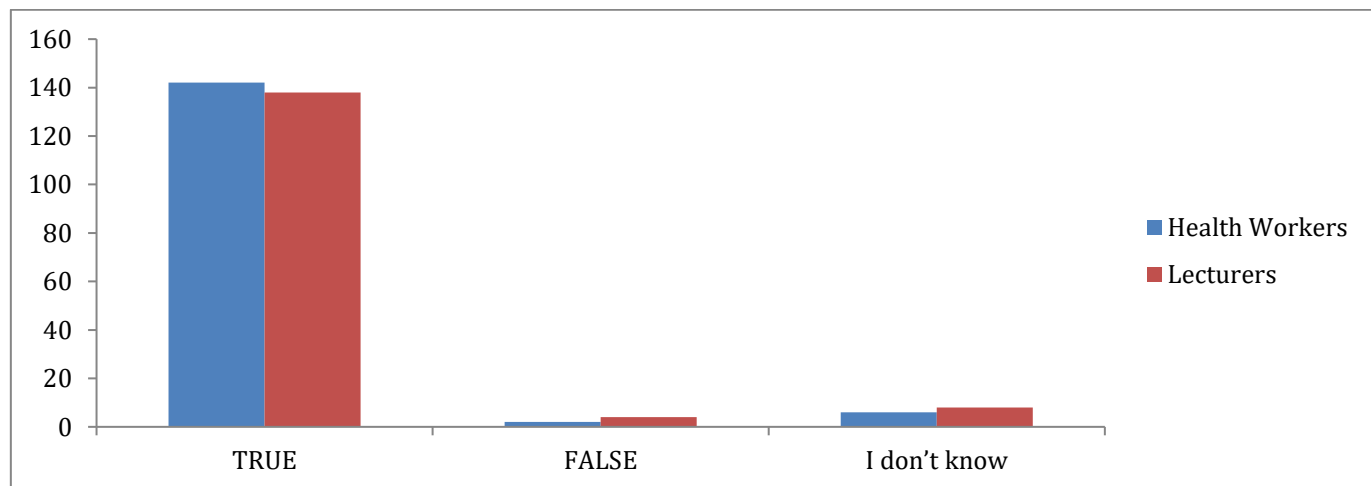


Figure 4.2: Cervical cancer is detectable

Health Workers

■ Age 21 ■ As soon as you are sexually active ■ When Menstrual cycle starts

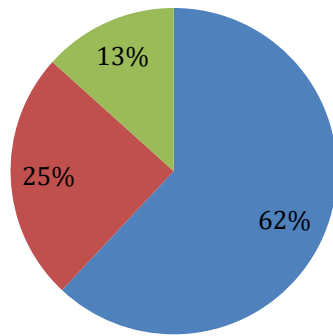


Figure 4.3: When Cervical cancer should be initiated (Health workers)

Lecturers

■ Age 21 ■ As soon as you are sexually active ■ When Menstrual cycle starts

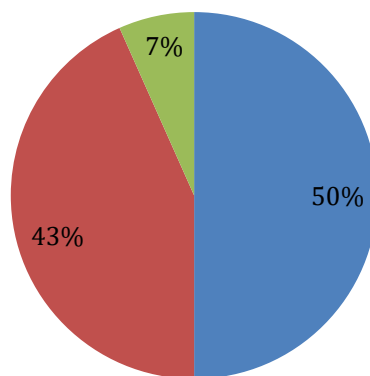


Figure 4.4: When Cervical cancer should be initiated (Lecturers)

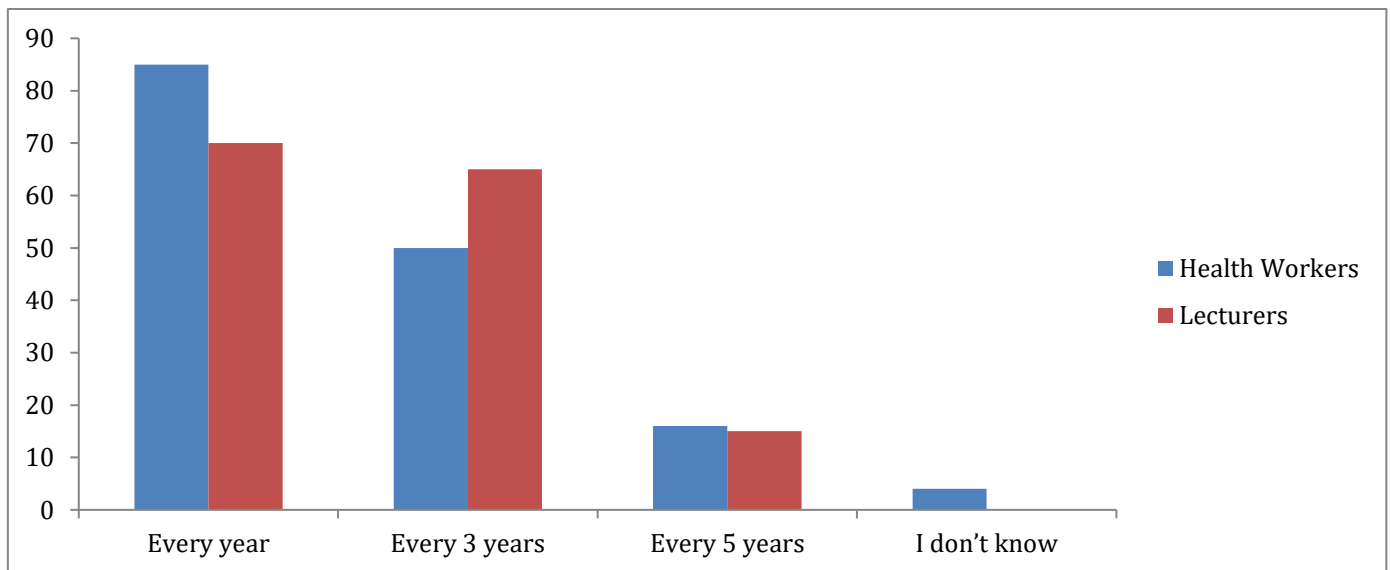


Figure 4.5: Frequency of conducting cervical cancer inspection

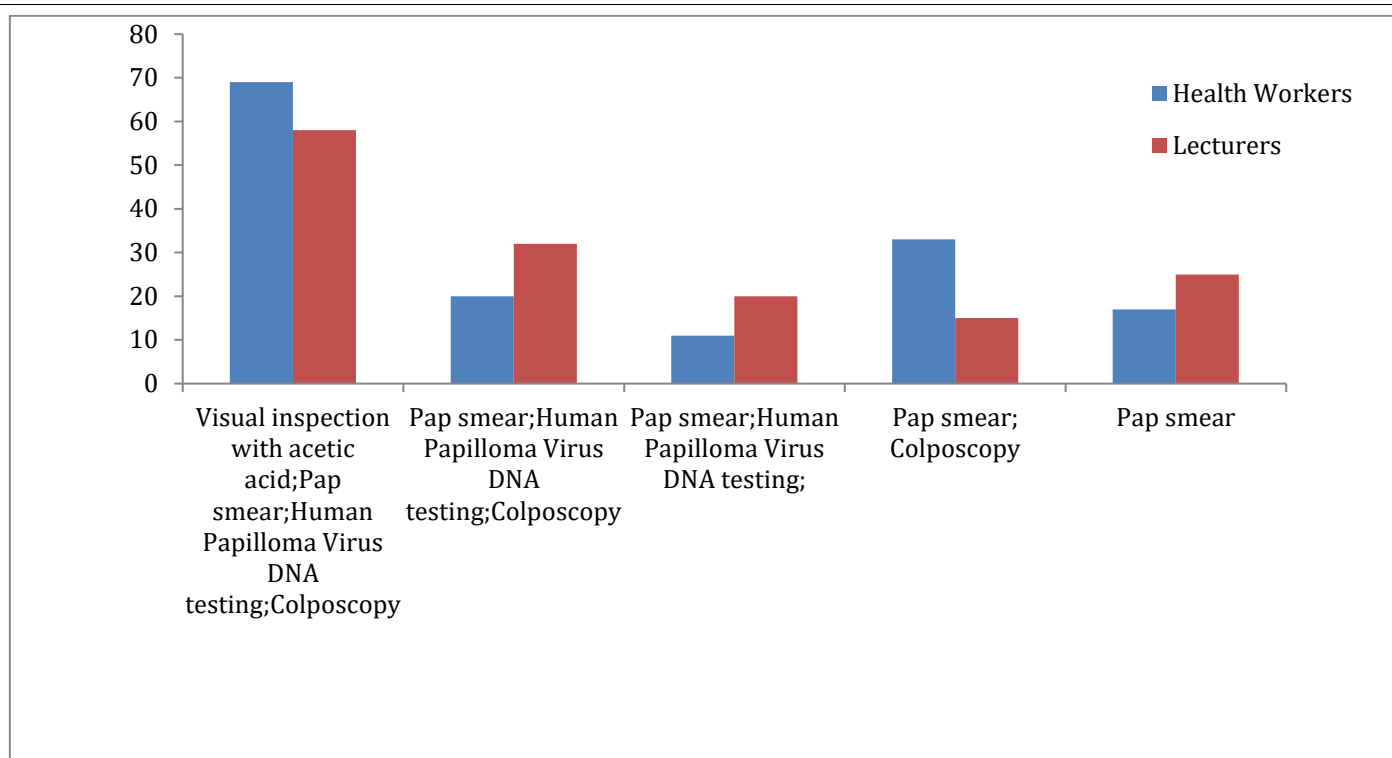


Figure 4.6: Cervical cancer inspection methods

The outcome of have been shown in numbers 4.1–figure 4.6. From figure 4.1, 120 of the health personnel and 130 of the lecturers indicated belly expansion. Though 12 of the health professionals and 15 of the professors disagree, 18 health workers and 20 lecturers are unaware of the answer. Eighteen health professionals and twenty professors are unaware of the solution. From figure 4.2, 142 of the health personnel and 138 professors said cervical cancer is detectable. Two health professionals and four professors said it was undetectable. Eight professors and six health professionals are unaware of this response. While 25 health professionals and 42 lecturers said it should start whenever the individual is sexually active, Figure 4.3 revealed that 62 of the health workers and 50 of the lecturers said cervical cancer inspection should be started at the age of 21. Thirteen health professionals and seven professors believe it should start when menstrual cycle begins. The results on the frequency of performing cervical cancer shown in Figure 4.4 Of the 85 health professionals and 70 lecturers who replied annually, 50 health workers and 65 lecturers replied every three years, 16 health workers and 15 academics said it should be done every five years, and 4 health workers were unsure. The answers of the

responder about the cervical inspection technique have been shown in figure 4.6. The outcome indicated that 70 health workers and 60 lecturers said Visual inspection with acetic acid; Pap smear; Human Papilloma Virus DNA testing; Colposcopy; Biopsy are the kinds of cervical inspection method while 20 health workers and 30 lecturers believe Pap smear; Human Papilloma Virus DNA testing are the types of cervical inspection methods. Ten health professionals and twenty lecturers said that Pap smear, Human Papilloma Virus DNA testing, and Biospy are the several sorts of cervical cancer inspection. Thirty health professionals and fifteen professors recommended Pap smear and colposcopy as the forms of cervical cancer inspection accessible. At last, 20 professors and 15 health professionals said pap smear is the only recognised kind of cervical cancer inspection.

Health personnel, according to the study, have a greater proportion of right answers on cervical cancer inspection—about 97.01% than university professors (86.0%). This implies that health staff have a greater comprehension of cervical cancer inspection policies and procedures.

Table 4.6: Responses showing if there are benefits of cervical cancer inspection

Respondent	Yes	No	I don't know
Health Workers	142	0	8
Lecturers	140	0	10

The result in table 4.6 showed that both the health workers and the lecturers believe that there are benefits of cervical cancer inspection. While very few of them do not know if there are benefits.

Table 4.7: Responses showing if cervical cancer inspection is useful in preventing the disease

Respondent	Agree	Disagree	I don't know
Health Workers	141	3	6
Lecturers	135	5	10

From this result (table 4.7), 141 health workers and 135 lecturers agree that cervical cancer inspection is useful in preventing the disease while 3 health workers and 5 lecturers disagree. 6 health workers and 10 lecturers do not know.

4.1.3: Comparison of the Attitude of Health Workers and Lecturers towards Cervical Cancer Inspection Uptake

Table 4.8: Responses on Attitude of Health Workers and Lecturers towards Cervical Inspection Uptake

s/n	Questions	Variables	Frequency	
			Health workers	Lecturers
1	No need for pap smear if you didn't have multiple sexual partners	Disagree	108	128
		Agree	42	22
2	Only postmenopausal women should be screened	Disagree	136	112
		Agree	14	38
3	Cervical cancer inspection provider must be a female	Disagree	86	90
		Agree	64	60
4	I can only go for cervical cancer inspection if it is made free	Disagree	61	93
		Agree	89	57

Table 4.8 lists the answers of the people on their views on cervical cancer inspection. Of the 128 lecturers, more disagreed that pap smear was unnecessary if one did not have many sex partners. Of the health professionals, 136 majority disagreed that only postmenopausal women should be checked. A bigger proportion of both the health workers (86) and lecturers (90) disagree that cervical cancer inspection provider has to be a female. While 89 thought otherwise, 61 of the health professionals felt they could only go for inspection once it became free. While 57 agreed, 93 of the professors believe they can only go for inspection once it is made free.

Data Analysis

Daily field editing produced the data; SPSS (version 21) was employed for analysis. While later studies sought to investigate statistical correlation between variables, first analyses were conducted by producing frequency tables and graphs. Appropriate bivariate analysis was done to evaluate statistical relationship depending on variable types and a stepwise logistic regression model was run to find characteristics that were substantially linked with uptake of cervical cancer inspection. The model's independent variables were chosen depending on bivariate level significance and/or on whether they have been documented in literatures as significant predictors of cervical inspection uptake. Among the independent variables included are marital status, socioeconomic class, and age of the respondents. Statistical significance was defined as p value <0.05. Placing our respondents in many groups helped us

control for possible confounding variables like age and socioeconomic status of respondents. Factors strongly connected with adoption of cervical cancer inspection programs among our respondents were found using the modified odds ratio and 95% confidence interval.

4.2 Talk

Though many research on the subject have been published, throughout the years cervical cancer inspection programs have been underused. This research sought to find the percentage of healthcare professionals who have undergone cervical cancer inspection and to investigate personal and health system factors affecting inspection adoption among these professionals.

One notable result of the survey is that more than three-quarters of participating healthcare professionals said they had been tested for cervical cancer, with majority having done so within the last three years. Several factors beyond personal motives underlined by the Centres for Disease Control and Prevention (CDC, 2018) might explain this outcome. First, healthcare workers usually have more comprehension about cervical cancer, including its causes, risk factors, and possible outcomes. Increased comprehension might result in a larger feeling of perceived vulnerability, hence motivating people to give their personal inspection top priority (Nwabichie et al., 2018). This result also supports studies by Oyekale et al. (2022), which found a 75.3% inspection rate among female healthcare personnel in another area. Research show that

nurses are the most regular consumers of inspection services (Ayenew et al., 2020), which supports the findings of this research. According to the Centres for Disease Control and Prevention (CDC) (2018), personal reasons usually propel the use of cervical cancer inspection tools; our results confirm this idea.

4.2.1 Respondent Demography

4.2.1.1 Age Spread

The age distribution shows that a notable percentage of both health workers (26.67%) and lecturers (3.33%) are rather young, 21 to 30 years old. Most, however, are in the 31-40 years range (42% for health workers and 40% for professors), suggesting a more seasoned workforce in this age group. Though restricted, older people (51-60 years) are rather noticeable; only 10% of health professionals and lecturers fit this description. Health professionals' average age of 31.21 years is younger than that of lecturers at 42.87 years, therefore stressing a potential need for generational shift in academic personnel.

4.2.1.2 Marital Statuses

The marital status statistics show that most of both categories are married (68% of health workers and 67.33% of academics), which might influence workplace dynamics like stability and job satisfaction. Especially among health professionals (6.67%), the percentage of divorced people is quite low. The statistics on single and widower respondents also reveal a little proportion, which can indicate the area's cultural background. Mean age of married status (37.5) is constant across all groups, indicating a comparable life stage with respect to marriage.

4.2.1.3 Religious Association

Of health professionals, 93.33%, and of lecturers, 86.67%, most call themselves Christians. This high proportion might imply a cultural uniformity that could affect community development and professional relationships. A smaller Muslim population calls for inclusion and comprehension of different religious traditions within the educational environment.

4.2.1.4 Job Experience

Regarding work experience, a remarkable 44% of health professionals and 53.33% of academics had been employed at the institution for 1-5 years, suggesting a rather youthful staff in terms of tenure. The figures indicate a small drop in the number of people with longer tenures—over 10 years—which could indicate staff turnover or changes in employment policies. The average years worked—7.11 for health workers and 5.89 for lecturers—indicate that many staff members are still in the early phases of their

professions, which might affect mentoring and institutional comprehension.

4.2.1.5 Academic Credentials

The educational credentials draw attention to a difference between health professionals and professors. Many health professionals have MBBS or BSc degrees, however many instructors have additional degrees (Masters/PhD). This disparity could highlight the necessity for health personnel to seek further educational progress to improve their professional standing, hence underlining the academic criteria for teaching roles. Like Ngutiku et al. (2021), our research suggests that more service tenure could be linked to more familiarity with the inspection procedure, hence reducing worries about shame. Especially, the research revealed no notable correlations between inspection uptake and educational credentials, religion, or career. This would imply that doctors are comprehensible about cervical cancer inspection. This result is consistent with Ifemelumma et al. (2019), which found no impact on inspection behaviour from the particular healthcare profession of a provider. Healthcare professionals, no matter their background, are educated in medicine and have awareness of cervical cancer and inspection, thereby suggesting that other variables might affect their choice to be screened.

Looking at the Health Belief Model's components, only perceived vulnerability and self-efficacy were notably linked to inspection take-up. This implies that inspection participation is probably limited to those who feel vulnerable and those with strong self-efficacy. This is consistent with Nwabichie et al. (2018), who found that decreased perceived susceptibility and self-efficacy might result in less usage of preventive treatment because of a perceived lower chance of acquiring cervical cancer and less dedication to preventive health behaviours. A research by Keah et al. (2020) at Kenyatta National Hospital similarly revealed that some medical professionals skipped inspection because they believed they were not at risk or that cervical cancer is always deadly.

Inspection behaviour was also affected by self-efficacy, or a person's belief in their capacity to carry out a certain behaviour. Providers who had never thought about inspection often felt ashamed of the test or worried about possible helpful findings, which made them less likely to get screened. These results challenge Ngutiku et al. (2021), who claimed that education increases the adoption of preventative treatment. Though some doctors may have personal self-efficacy issues that need further research despite their medical education and understanding of cervical cancer. The presumption that all providers have high self-efficacy because of their degree may not always be true.

Health system elements influencing the use of cervical cancer inspection services—such as availability, price, and acceptability—were also investigated in the research. Inspection behaviour was much influenced by availability and acceptability. Inspection service availability was vital; providers who struggled with transportation to inspection sites were less likely to engage. By comparison, individuals whose hospitals provided specified days for staff education on cervical cancer inspection were five times as likely to have had inspection themselves. These results agree with Ngutiku et al. (2021), which found inadequate awareness campaigns and transportation obstacles as key reasons for low inspection rates among nurses in a Kenyan hospital. Becerra-Culqui et al. (2018) also discovered that women's probability of getting tested was greatly influenced by geographical accessibility, price, and convenient service hours. Recorded obstacles to inspection uptake, especially in rural and underprivileged regions, include extensive travel distances, high fees, and restricted clinic hours (Mboineki et al., 2020).

4.2.1.6 Distribution of Income

Income statistics indicate that most health professionals make between 50,000 and 100,000 naira, with a significant proportion making over 100,000 naira. By comparison, all professors make above 50,000 naira; 137 make over 100,000 naira. This suggests a possibly greater income possibility for teachers, which might affect retention and degree of happiness.

4.2.1.7 Size of Family

Most health professionals and teachers have less than five children; a handful have more than five. This data might connect to their income and job requirements, implying that both categories could give work and professional growth top priority above bigger families.

4.2.1.8 Ethnic Makeup

The ethnic distribution shows notable variation among the responders the most of health personnel are named Igbo. Given the Igbo ethnic group is prevalent in southern Nigeria, this might indicate regional demographics. The concentration of Igbo health professionals might shape workplace culture and dynamics, hence influencing communication techniques, team cohesiveness, and community involvement. By contrast, most of the teachers are from the Ikwere ethnic group, which is native to the Rivers State region around the University of Port Harcourt. This implies a significant presence of local ethnicity in academic posts, which might improve the relevance of the community in research and instruction.

The presence of 20 responses from the Yoruba ethnic group and 32 from other ethnic groups emphasises the larger

ethnic variety of the institution. By bringing different points of view, cultural customs, and ways of thinking about problems, this variety may enhance the academic atmosphere.

Professional Specialisation of Health Workers

The professional specialisation of health personnel shows the many functions vital for the delivery of healthcare:

Doctors (32): This group is a vital part of health professionals. Clinical decision-making and patient care depend on their presence, which suggests a robust medical basis in the health profession.

The biggest group among health professions, nurses are essential in patient management and care. Their significant numbers draw attention to the need of nursing in the healthcare system and imply an emphasis on patient-centered care.

Medical laboratory scientists: vital for laboratory services and diagnostic tests. Their participation emphasises how laboratory medicine helps to guide therapeutic choices.

Reflecting the need for a multi-disciplinary approach to health service delivery, health assistants serve many different healthcare environments.

Medication management and patient education depend much on chemists. Their contribution to medicine underlines the need of pharmacotherapy and patient safety.

The ethnic and professional variety among health personnel may improve the quality of care given as varied backgrounds can result in a more thorough awareness of patient requirements and culturally responsive care techniques. Lecturers and health workers who are mostly local ethnic group members may build closer community relationships as they may be better aware of the cultural settings and health issues of the people they serve.

A varied ethnic background for instructors could enhance the academic programme, hence prepare students for a heterogeneous society by encouraging inclusion and representation in instructional material.

The findings show a workforce mostly young, married, and mostly Christian with different degrees of educational credentials and pay differences between health professionals and professors. The research points to possible policy development areas, especially in terms of improving professional growth chances for health professionals and economic equality concerns. Furthermore, encouraging inclusiveness and supporting atmosphere would help to improve the educational and professional structure at the University of Port Harcourt.

The results of Tables 4.2 and 4.3 show a varied University of Port Harcourt workforce in terms of ethnicity and

professional specialisation. This variety may improve educational methods and healthcare services, hence helping students as well as the communities they serve. Emphasising this variety in policy and training initiatives will help the organisation to have more influence on health and education in the area.

4.2.1 Determining the Uptake and Determinants of Cervical Cancer Inspection

Osazuwa-Peters's (2013) study emphasises the vital need for inspection services to be provided at reachable places within communities, especially in rural areas. Long travel lengths may greatly turn off people, particularly those with little transit choices. Investing in mobile inspection units or setting up satellite clinics in rural regions will assist to deliver services nearer to people who need them most, hence addressing this problem (Osazuwa-Peters, 2013). Moreover, encouraging flexible clinic hours—including nights and weekends—will fit healthcare professionals with busy schedules. Providing inspection chances after hours or on weekends might help people who rely on public transit with limited service hours as well.

Another key element was how acceptable inspection services fit into the healthcare system. Providers said their institutions gave patient privacy during tests top priority and that the inspection service staff members were kind and accessible. In the research region, inspection services' overall public acceptance was not shown to be a major issue.

Cervical Cancer Inspection Participation

Of the 269 people who said they had sexual intercourse, 39 started sexual activity before the age of 18. Early sexual debut could raise cervical cancer risk as it might correspond to more human papillomavirus (HPV) exposure, a key risk factor for the condition.

Of the 31 respondents who reported no sexual partner in the previous year, most (212) kept a single partner; 57 had many lovers. Most of the respondents' more steady sexual behaviour shown by this distribution might be related to decreased cervical cancer risk factors.

Of the 100 respondents who said they used contraceptives, a significant majority (169) did not use any kind of contraception. Of those who used contraceptives, progesterone-only tablets were the most popular, with 33 users. This suggests a need for better comprehension and access to contraceptive choices, which may help to control sexual health.

4.2.1.2 Determinants of Cervical Cancer Inspection (Table 4.5)

Eighty health professionals and seventy-eight professors had a family history of cervical cancer, suggesting a notable comprehension of hereditary risk elements. Of the 20 health professionals and 44 academics who said no such history, 50 health workers and 28 lecturers were uncertain. Inspection exercises might be influenced by this ambiguity as comprehension of family history can drive people to pursue preventative treatment.

The numbers show that 117 health professionals and 70 lecturers have had cervical cancer inspection; 33 health workers and 80 lecturers have not been tested. The difference in inspection rates points to certain obstacles that should be handled to boost involvement. Devarapalli et al. (2018) advise that to properly prevent cervical cancer, both healthcare professionals and the general public should be screened more often—ideally every one to two years. This disparity between comprehension and reality highlights the need of initiatives addressing possible obstacles to more regular testing among healthcare professionals. Facilities that stress preventative healthcare measures and frequent cancer inspections for patients could promote a culture of self-care among its staff members. Social pressure that promotes following suggested inspection recommendations may result when healthcare professionals see their colleagues giving inspections top priority and are subjected to workplace training initiatives.

Key reasons for not inspection include fear, ignorance, apathy, limited access to facilities, and expensive expense. Particularly troubling is the prominence of cost as a hurdle as it suggests a need for legislative adjustments to enable more inexpensive and accessible cervical cancer inspection. Lack of comprehension and fear also highlight the need for educational programs to let the public know the value of frequent checkups.

Inspection Types: The research reveals that several inspection techniques including HPV testing, Pap smears, viral examination with acetic acid, and colposcopy were used. While 28 professors were ignorant of the kind of inspection they had, Pap smears show a shared comprehension of this technique among responders, suggesting a need for patient education and informed consent.

More health professionals said they had been tested many times, indicating a proactive attitude to health among this group. Routine checkups were shown to be the main driving force for inspection, thereby highlighting the need of consistent health evaluations in avoiding cervical cancer.

The results show a varied adoption of cervical cancer inspection affected by several personal, economical, and educational elements. Though obstacles like cost and anxiety keep people from engaging in inspection programs,

the comprehension of family history is very momentous. Higher inspection rates depend on focused educational campaigns and regulatory changes meant to lower costs and make inspection facilities more accessible. Addressing these issues can help health professionals and teachers to better support their preventative health activities, hence lowering the frequency of cervical cancer in the community.

4.2.2 Comparing the degree of awareness about cervical cancer inspection among University of Port Harcourt professors and health professionals.

The findings from Figures 4.1 to 4.4 provide health professionals and lecturers information on their comprehension and views about cervical cancer. Here is a thorough analysis of these results:

4.2.2.1 Comprehension of Symptoms and Uncovering (Figure 4.1 and Figure 4.2)

Perception of abdomen Growth: 120 health professionals and 130 lecturers admitted that abdomen growth may be a symptom connected to cervical cancer, suggesting a fair degree of comprehension about possible indicators of the condition. The 12 health professionals and 15 lecturers who disagreed, on the other hand, represent a minority who could need further comprehension on the signs of cervical cancer. The 18 health professionals and 20 professors who do not know the solution point to a comprehension deficit that may be closed with focused educational initiatives. Previous studies have demonstrated the significance of mass media in informing, educating, and communicating significant health concerns to the general public including the rural areas regrettably, mass media seldom provide thorough information that can lead to good comprehension of health issues among the population (Zhon et al., 2019). Our research, meantime, indicates that previous counselling is more related to adequate awareness of the condition. Therefore, mass media campaigns should emphasise thorough counselling of women and the broader public on the illness and its inspection.

A solid majority of 142 health professionals and 138 lecturers feel cervical cancer is detectable, hence stressing the need of inspection and early uncovering. Two health professionals and four professors make up the tiny proportion of those who believe it is not detectable; this belief exposes a misunderstanding that can discourage people from pursuing testing. The comprehension gap—six health personnel and eight lecturers unclear about detectability—underscores even more the necessity for training campaigns to explain the advantages of early identification by means of inspection techniques.

4.2.2.2 Inspection Start-Up (Figure 4.3 and figure 4.4)

The answers on when cervical cancer inspection should start reveal a variety of viewpoints. Aligning with medical recommendations, 62 health professionals and 50 professors rightly proposed that inspection should begin at age 21. But, a significant number—25 health professionals and 42 lecturers—believe inspection should start whenever a person becomes sexually active. This point of view shows a typical misconception as the starting age is usually advised to be set rather than depending only on sexual activity. The answers also show more comprehension on cervical cancer inspection recommendations in relation to inspection starting with the beginning of menstruation (13 health professionals and 7 lecturers).

4.2.2.3 Inspection Frequency (Figure 4.5)

The data on inspection frequency shows different preferences among responders. Many health professionals (85) and teachers (70) support annual inspections, which might suggest an overestimation of their need. By contrast, 50 health experts and 65 academics advocate for inspection every three years, more in line with present recommendations. Though this group is tiny, the 16 health professionals and 15 lecturers who advocate inspection every five years show some comprehension of less frequent inspection choices. The four health personnel who are unsure whether checks should take place point to a persistent lack of comprehension in some fields.

Health professionals and academics' comments on cervical inspection approaches (figure 4,6) provide insightful analysis of their awareness and expertise of current inspection tools.

Inspection Types of 4.2.2.4

A notable number of respondents—70 health workers and 60 lecturers—accomprehensiond this complete collection of techniques: visual inspection with acetic acid, pap smear, HPV DNA testing, colposcopy, and biopsy. This implies a good awareness of the several cervical cancer inspection methods available.

A smaller sample of 20 health professionals and 30 lecturers found only these two techniques: Pap Smear and HPV DNA Testing. This suggests that while they know certain inspection possibilities, their comprehension could be lacking in comparison to others who found a more extensive variety.

Though many may not completely value the function of biopsy in cervical cancer inspection, Pap Smear, HPV DNA Testing, and Biopsy by 10 health professionals and 20 lecturers points to awareness of more intrusive techniques.

Thirty health professionals and fifteen professors mentioned Pap Smear and Colposcopy when asked about current kinds of cervical cancer inspection. This answer

emphasises the relevance of these techniques in clinical treatment and education, maybe reflecting their widespread usage in inspection programs.

Especially, fifteen health professionals and twenty teachers thought Pap Smear was the only known cervical cancer inspection kind. This reaction raises alarm as it implies a major comprehension deficit. Relying on one approach for such a vital health concern can result in under-inspection or misdiagnosis.

The differences in replies suggest that both health professionals and teachers might benefit from further comprehension and training on cervical cancer inspection techniques. Improved comprehension might result in improved patient outcomes as efficient preventative plans depend on understanding of different inspection possibilities. Outdated information or lack of exposure to new inspection tools might cause one to think Pap Smear is the only inspection tool. Educational projects should seek to explain the whole range of cervical inspection techniques now accessible. Enhancing communication and teamwork between health professionals and teachers will help to guarantee that the most recent inspection recommendations and techniques are properly disseminated.

Health professionals and professors show generally mixed awareness and comprehension of cervical cancer, according to the findings. While there is a large acceptance of symptoms and detectability, misunderstandings regarding when to commence inspections and how often they should occur continue. This underlines the requirement for extensive educational initiatives focused at enhancing understanding about cervical cancer, its symptoms, and inspection standards. Such programs may enable people to make educated choices regarding their health, eventually strengthening preventive measures and lowering cervical cancer incidence. Among health practitioners and professors, the answers show a combination of thorough comprehension and notable deficiencies in cervical cancer inspection techniques. This emphasises the requirement of continuous education and the need to raise comprehension of all accessible inspection alternatives to enhance healthcare exercises and results in cervical cancer prevention.

University professors had a much larger number of replies saying that cervical cancer is identifiable by inspection and should be started as soon as sexually active as compared to health professionals' answers. A greater majority of the health personnel also think inspection should start at age 21. This implies that while the lecturers may be more conscious of the time for inspection start, health personnel show a better comprehension of the detectability of cervical cancer by means of inspection.

4.2.3 Comparing the attitudes of female health professionals and university professors in Port Harcourt towards cervical cancer inspection uptake.

The answers from both health professionals and professors (table 4.8) on attitudes towards cervical cancer inspection provide significant insights into their ideas and misunderstandings. Many instructors (128) rejected the idea that a Pap smear is unnecessary if one does not have many sex partners. This suggests that all women, regardless of their sexual past, need cervical cancer inspection. It shows a progressive approach to sexual health and the need of consistent inspection.

Most health professionals (136) disagreed that only postmenopausal women should be checked. This answer emphasises the momentous of frequent inspection over a woman's life as it implies awareness that cervical cancer may impact women of all ages. This frame of view fits with current recommendations encouraging cervical inspection beginning at a younger age.

A significant majority of both health professionals (86) and lecturers (90) disagreed that female providers must do cervical cancer inspection. This suggests a change in awareness that the quality of treatment given should not be influenced by gender. It shows a more inclusive view of healthcare and implies that both male and female doctors can give efficient inspection tools.

Accessibility and Financial Issues: With 61 health professionals disagreeing and 89 agreeing that they would only seek inspection if it were free, worries regarding the affordability of inspection are clear. Among academics as well, 93 objected and 57 supported the idea of waiting for free services. This difference draws attention to a major issue with the financial obstacles to obtaining cervical cancer inspection. It implies that while many think inspection should be available to everyone, a significant percentage still see expenses as a hindrance.

The significant opposition to misconceptions about sexual history and the need of female carers shows a good trend in awareness. But, to strengthen these ideas and clear out any last misunderstandings, continuous education is very vital. The comments on the necessity for free services highlight the issue of making cervical cancer inspection financially reachable. Health programs should prioritise cost-cutting and assistance for women who might have financial constraints, so guaranteeing that economic considerations do not stop required tests. Healthcare education and policy should promote the acceptability of male physicians for cervical cancer inspection. Encouraging gender neutrality in healthcare services would improve the accessibility and comfort of inspections for all women.

Though financial issues are still a major obstacle, the attitudes of health professionals and teachers towards cervical cancer inspection show a typically educated view on the need for inspection. Misunderstandings and access to cervical cancer inspection must be addressed by ongoing education and legislative initiatives, hence improving health results for women. Different research on cervical cancer have come to similar conclusions (Aoki et al., 2020). Therefore, initiatives to raise the adoption of inspection for cancer of the cervix ought to be focused on increasing

access to information via counselling to improve awareness of the condition.

4.3 Study Hypothesis

Hypotheses 1: In Port Harcourt, female health professionals and university professors show no notable difference in cervical cancer inspection uptake.

The study reveals the inspection status for university professors and female health professionals. The findings are as follows:

Table 4.9: Hypotheses one

Item	Variable	Health workers	Lecturers	Chi-square test	p-value
Have you ever been screened for cervical cancer?	Yes	117	70	0.172	0.678
	No	33	80		

Results of the Chi-square test show a p-value of around 0.678 and a Chi-square statistic of about 0.172. This p-value, which is much higher than the usual alpha threshold of 0.05, implies no statistically significant difference in the use of cervical cancer inspection between female health professionals and university professors in Port Harcourt.

Hypotheses 2: Female health professionals and university professors in Port Harcourt have no notable variation in comprehension level about cervical cancer inspection.

While for the University professors, it is about 0.93, the average comprehension score for female health professionals is around 0.97. The p-value is 0.0069 and the t-test is 2.73. The p-value being less than 0.05 allows us to say that female health professionals and university lecturers in Port Harcourt have statistically significant difference in the degree of awareness about cervical cancer inspection.

Hypotheses 3: Female health professionals and university professors in Port Harcourt have no notable difference in their attitudes towards cervical cancer inspection.

With a chi-squared statistic of around 46.27 and a p-value of about 8.96×10^{-11} , the chi-squared test findings show a significant difference in attitudes regarding cervical cancer inspection between female health professionals and university professors. This implies that the two groups' opinions are not independent and that their views on cervical cancer inspection vary statistically significantly.

Conclusions

The results of this research provide a thorough picture of the demographics, attitudes, and comprehension of cervical cancer inspection among health professionals and University of Port Harcourt teachers. Most women in North Central Nigeria showed little awareness of cervical cancer and low cervical cancer inspection participation.

Reproductive health professionals and policy makers must show greater dedication in raising awareness about cervical cancer as early case identification by inspection is the most cost efficient way to lower the morbidity and death from cancer of the cervix. Establishing additional inspection centres in the North Central geopolitical zone in particular and in Nigeria as a whole would help them to provide inspection tests at reasonable prices. For more efficiency, the current inspection programs, mostly from voluntary organisations and mostly in metropolitan areas, must be decentralised and harmonised. There should also be integration of cervical cancer inspection activity into the conventional hospital healthcare system. Women at least 21 years old, especially those with family history of cervical cancer, should be urged to choose cervical cancer inspection at every possible chance. At last, Nigeria's cervical cancer inspection will be in the hands of more qualified healthcare professionals. Several momentous results may be drawn:

1. Demographic Insights: The workforce is mostly young; many health workers and professors are married and Christian. This demographic profile indicates a need for customised health education initiatives taking into account cultural and age-related elements.
2. Although there is a fair degree of comprehension about cervical cancer signs and the need of inspection, some people still hold beliefs about the suitable age to start inspection and the frequency of tests. Addressing these disparities depends on educational projects, which will guarantee that both health professionals and teachers are comprehensible about present standards.

3. **Inspection Uptake and Barriers:** Health workers and professors show very different rates of cervical cancer inspection, with both groups confronting obstacles including expense and ignorance. The preponderance of financial issues emphasises the need for legislative actions to make inspections more inexpensive and accessible.
4. **The function of education** The differences in understanding between health professionals and professors show that educational initiatives should stress thorough cervical cancer awareness, stressing the need of frequent checkups and the many inspection techniques available, ignoring sexual history.
5. **Attitudes on Inspection:** Generally, both groups show an increasing awareness of the need for cervical cancer inspection, regardless of sexual behaviour or provider gender. This optimistic attitude should be used to encourage more involvement in preventative health activities.
4. **Encourage community outreach initiatives** including health professionals and professors in increasing comprehension about cervical cancer inspection. Working with nearby health authorities will help to increase the effect of these projects.
5. **Encourage inclusiveness in healthcare environments** by making sure everyone, from all backgrounds, feels at ease looking for inspection services. This include educating medical professionals on cultural sensitivity and comprehension of different requirements.
6. **Research and Evaluation:** Carry out follow-up studies to assess how well educational projects and policy changes increase inspection uptake. Ongoing evaluation will let to find deficiencies and change plans appropriately.

Create support groups for women to talk freely about cervical health, exchange stories, and motivate one another to pursue inspection. This may assist to establish a culture of proactive health management and to lower stigma.

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The results point to an urgent need for measures improving professional development chances for health professionals and addressing financial inequalities. Furthermore, efforts should be taken to promote inclusiveness and assist various cultural traditions within the academic environment.

Future Research Directions: More research should look at how educational interventions affect inspection exercises over time as well as how well policies meant to lower financial obstacles to health care work.

Suggestions for 5.3

1. **Educational Projects:** Design specific educational courses meant to raise comprehension of cervical cancer, its symptoms, and the need of consistent inspection. These initiatives should emphasise clarifying misunderstandings and provide unambiguous instructions on when to begin inspection and how often it should take place.
2. **Advocate for measures lowering the financial obstacles to cervical cancer inspection** under accessibility and affordability. This can include working with nearby health agencies to improve access, offering free inspection services, or funding inspection expenses.
3. **Health professionals should be encouraged to undergo continuous training and professional development** to guarantee they are well-informed on the most recent cervical cancer inspection techniques and rules. This will enhance their capacity to properly inform patients.

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