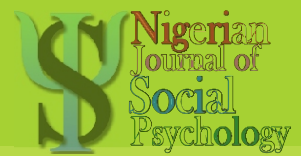


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KNOWLEDGE, ATTITUDE AND PRACTICE CONCERNING CERVICAL CANCER SCREENING AMONG GIRLS IN COMMAND SECONDARY SCHOOL, ABAKPA NIKE, ENUGU STATE

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Abstract

This study examined the knowledge, attitudes, and practices regarding cervical cancer screening and HPV vaccination among female students in Command Secondary School. The study also assessed the relationship between knowledge, attitude, and preventive intentions. A descriptive survey design was adopted, and data were collected from 165 respondents using a structured questionnaire. The respondents were mainly adolescents aged 15–17 years, with varying class levels and religious backgrounds. Findings showed that most students had heard of cervical cancer and understood that early detection improves outcomes, but knowledge of HPV as the cause of cervical cancer and awareness of HPV vaccination were only moderate. Although the majority of respondents held positive attitudes toward cervical cancer prevention, screening, and HPV vaccination, actual preventive practices were very low. Only a few respondents had ever undergone screening, and vaccination coverage was limited. Major barriers to screening included fear, lack of awareness, feeling too young, and not knowing where to go. Chi-square analysis revealed significant relationships between knowledge and attitude, knowledge and intention to screen, and attitude and willingness to vaccinate. The study concluded that improved health education and school-based interventions are needed to increase awareness and promote positive preventive behavior among adolescent girls.

Keywords: *early detection, cervical cancer, HPV vaccination, health education, screening*

Introduction

Cervical cancer remains a major public health challenge globally despite being largely preventable through effective primary and secondary prevention strategies (World Health Organization [WHO], 2023). Worldwide, it ranks as the fourth most common cancer among women and accounts for hundreds of thousands of new cases and deaths annually (WHO, 2023). The burden of the disease is disproportionately higher in low- and middle-income

countries due to limited access to Human Papillomavirus (HPV) vaccination, organized screening programmes, and timely treatment services (WHO, 2023). Evidence shows that early detection through cervical cancer screening and HPV vaccination significantly reduces incidence and mortality rates (WHO, 2023).

In Nigeria, cervical cancer is one of the leading causes of cancer-related morbidity and mortality among women (GLOBOCAN, 2024). GLOBOCAN reports indicate that thousands of new cases and deaths occur annually, with age-standardized incidence and mortality rates higher than those recorded in many high-income countries (GLOBOCAN, 2024). Contributing factors include low screening coverage, inadequate awareness, poor access to screening facilities, and weak implementation of preventive health services (GLOBOCAN, 2024).

In Enugu State, cervical cancer remains a major public health concern. Hospital-based studies and cancer registry data indicate that cervical cancer is among the most frequently diagnosed cancers in women, with a high proportion of cases presenting at advanced stages (Akintola, 2021). Late presentation has been attributed to low screening uptake, limited awareness of risk factors and symptoms, and socio-cultural barriers that discourage preventive health-seeking behavior (Akintola, 2021).

Studies conducted across Nigeria using the Knowledge, Attitude, and Practice (KAP) framework consistently report low to moderate awareness of cervical cancer, widespread misconceptions, and poor utilization of screening services (Owoeye et al., 2022). Adolescents represent a critical population for cervical cancer prevention because early education can improve knowledge scores, foster positive attitudes toward screening, increase willingness to receive HPV vaccination, and strengthen intention to engage in preventive health behaviors later in life (Owoeye et al., 2022).

Recent studies in Enugu State emphasize the need to target school-aged girls. Research among female secondary school students revealed inadequate knowledge of cervical cancer, negative attitudes toward screening, and low awareness of HPV vaccination (Ezema et al., 2025). These findings highlight a gap between public health recommendations and measurable adolescent preventive outcomes. Schools therefore provide an effective platform for structured, adolescent-friendly health education aimed at improving knowledge, attitudes, and preventive intentions (Ezema et al., 2025).

Command Secondary School, Abakpa Nike, Enugu State, was selected as the study site due to its accessibility, defined student population, and feasibility within available time and resources. Focusing on a single school allows for in-depth assessment and facilitates the development of school-specific health education and referral linkages. Assessing female students aged 13–19 years drawn from both junior and senior secondary classes will provide context-specific evidence to inform adolescent-focused cervical cancer prevention strategies.

Given the burden of cervical cancer in Nigeria, the proven effectiveness of screening and HPV vaccination, and the documented gaps in adolescent awareness, this study seeks to assess the knowledge, attitudes, and practices regarding cervical cancer screening and HPV vaccination awareness among female students in Command Secondary School, Abakpa Nike, Enugu State.

Statement of the Problem

Cervical cancer remains one of the leading causes of cancer-related morbidity and mortality among women in Nigeria despite being largely preventable through early detection and treatment (WHO, 2023). Screening methods such as the Pap smear, HPV testing, and visual inspection with acetic acid (VIA) are effective in reducing cervical cancer incidence and mortality (American Cancer Society, 2024). However, awareness, positive attitudes, and intention toward cervical cancer screening remain low, particularly among adolescents (Owoeye et al., 2022). Female secondary school students aged 13–19 years are at a formative stage during which health-related knowledge, attitudes, and intentions are developed. In Command Secondary School, Abakpa Nike, Enugu State, there is limited empirical evidence on students' knowledge of cervical cancer, attitudes toward screening, intention to seek screening in the future, and awareness of HPV vaccination. Fear of diagnosis, cultural beliefs, misconceptions, stigma, and lack of adolescent-friendly health information may negatively influence these outcomes (Okunowo et al., 2020).

Furthermore, cervical cancer screening practices among adolescents are minimal due to poor awareness and the perception that screening is meant only for older or married women (Nweke et al., 2022; Akinlotan et al., 2020). Despite national recommendations supporting HPV vaccination and early preventive education, school-based data in Enugu State remain scarce (Nweke et al., 2022; Akinlotan et al., 2020). This lack of localized data limits the ability of educators, health professionals, and policymakers to design effective adolescent-focused interventions.

Purpose of the study

The aim of this study is to evaluate the knowledge, attitudes, and willingness of female secondary school students in Command Secondary School, Abakpa Nike, Enugu State, to engage in cervical cancer screening and HPV vaccination, as well as to identify factors influencing their preventive health practices.

Objectives of the study

The general objective of this study is to assess the knowledge, attitudes, and practices regarding cervical cancer screening among female secondary school students in Command Secondary School, Abakpa Nike, Enugu State.

The specific objectives are to:

1. assess the level of knowledge of cervical cancer, screening methods, and HPV vaccination among female students;
2. determine the attitudes of female students toward cervical cancer screening and HPV vaccination;

3. assess students' stated intention and willingness to participate in cervical cancer screening and receive HPV vaccination when appropriate;
4. identify factors influencing knowledge, attitudes, and preventive practices related to cervical cancer among female students.

Research Questions

1. What is the level of knowledge of cervical cancer, screening methods, and HPV vaccination among female students in Command Secondary School, Abakpa Nike?
2. What are the attitudes of female students toward cervical cancer screening and HPV vaccination?
3. What factors influence students' intention and willingness to engage in cervical cancer preventive practices?
4. What gaps exist in the knowledge, attitudes, and practices regarding cervical cancer prevention among these students?

Research Hypotheses

The following null hypotheses were tested at 0.05 level of significance:

There is no significant relationship between knowledge of cervical cancer and attitudes toward cervical cancer screening among female students. *H₀₁*

There is no significant relationship between knowledge of cervical cancer and intention to participate in cervical cancer screening among female students. *H₀₂*

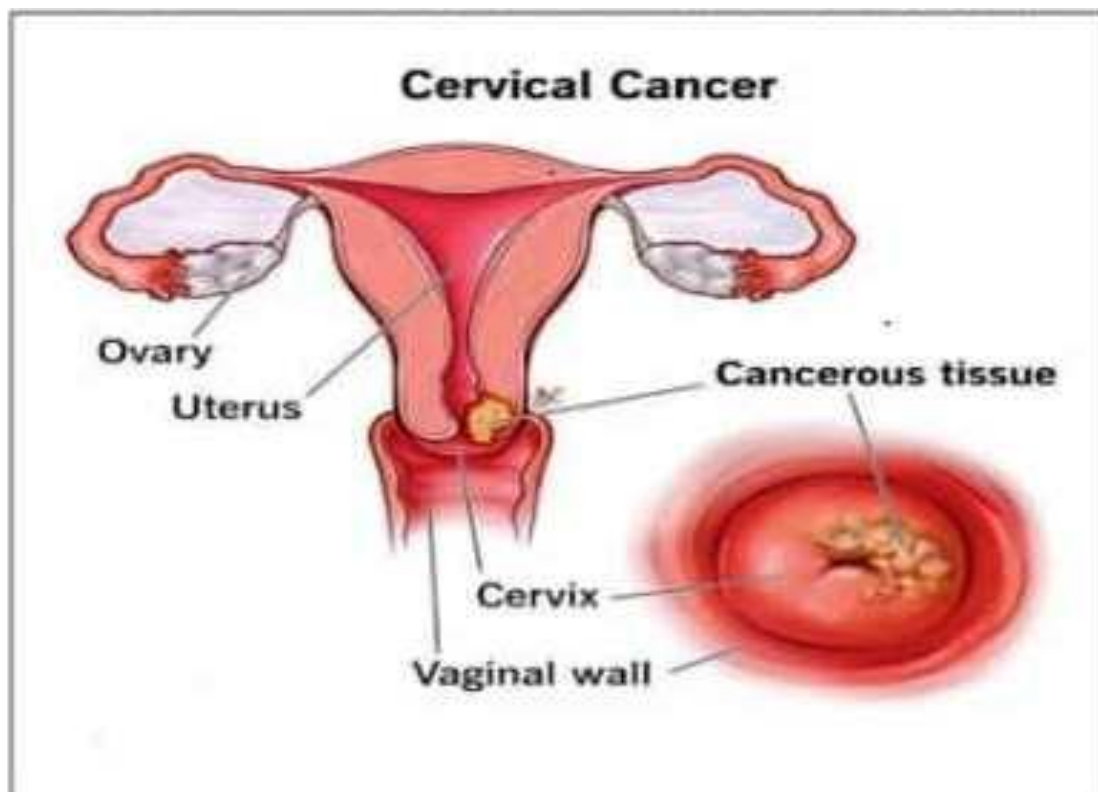
There is no significant relationship between attitudes toward cervical cancer screening and willingness to receive HPV vaccination among female students. *H₀₃*

Significance of the study

This study will provide insight into the knowledge levels, attitudes, preventive intentions, and practices of female secondary school students regarding cervical cancer screening and HPV vaccination in Command Secondary School, Abakpa Nike, Enugu State. Understanding these measurable outcomes is essential for effective adolescent-focused intervention (WHO, 2023).

The findings will assist school health educators in developing adolescent-friendly and age-appropriate health education programmes aimed at improving knowledge scores and correcting misconceptions (Eze et al., 2021). Understanding students' attitudes will also help address fear, stigma, and negative perceptions that hinder preventive behaviors (Okunowo et al., 2020).

Additionally, the study will inform school administrators, health authorities, and non-governmental organizations in planning HPV vaccination awareness campaigns, screening referral pathways, and teacher training initiatives. The study will also contribute to the existing body of literature on adolescent reproductive health and cervical cancer prevention in Nigeria.



Scope and Limitation of the study

This study focuses on female students aged 13–19 years drawn from both junior and senior secondary classes in Command Secondary School, Abakpa Nike, Enugu State. It assesses knowledge of cervical cancer, awareness of screening methods (Pap smear, HPV testing, VIA), attitudes toward screening and HPV vaccination, and stated intention to engage in preventive practices.

Cervical cancer screening for adolescents in this study refers to knowledge, awareness, attitudes, and intention toward screening in the future rather than actual screening uptake. The school will be the sole study site to ensure feasibility; findings will inform adolescent-focused health education and referral linkages within this setting. Male students were excluded from the study. The study acknowledges that findings may not be generalizable to all Nigerian adolescents due to the single-site design.

Theoretical Review

Health Belief Model (HBM)

The Health Belief Model (HBM), developed by Rosenstock (1974), is one of the most widely used theories for explaining preventive health behaviors. The model posits that individuals' health actions are influenced by six key constructs: perceived susceptibility, perceived severity, perceived benefits, perceived barriers, cues to action, and self-efficacy.

In relation to cervical cancer prevention, adolescents who believe they are susceptible to HPV infection (perceived susceptibility) and understand that cervical cancer can lead to severe illness or death (perceived severity) are more likely to value preventive behaviors. When students recognize the benefits of HPV vaccination and early screening awareness—such as cancer prevention and improved future reproductive health—they are more likely to develop positive attitudes. However, perceived barriers such as fear, embarrassment, misinformation, cultural beliefs, and lack of access may discourage preventive intentions. Cues to action, including school health education, media messages, parental guidance, and healthcare provider recommendations, play a critical role in motivating adolescents to adopt preventive behaviors. Self-efficacy, or confidence in one's ability to make informed health decisions, further determines whether knowledge translates into intention. The HBM is applied in this study to explain how female students' knowledge of cervical cancer influences their attitudes toward screening and HPV vaccination, and how perceived barriers and benefits affect their willingness to engage in preventive practices in the future.

Theory of Planned Behaviour (TPB)

The Theory of Planned Behaviour (TPB) proposed by Ajzen (1991), explains behavior as a function of behavioral intention, which is shaped by attitude toward the behavior, subjective norms, and perceived behavioral control. Among adolescents, attitudes toward cervical cancer prevention are shaped by beliefs about screening and vaccination. Subjective norms—such as parental approval, peer influence, religious beliefs, and societal expectations—strongly affect adolescents' health decisions. Perceived behavioral control reflects students' belief in their ability to access health services, obtain vaccination, or seek screening in the future.

Even when knowledge is adequate, negative social norms or perceived lack of control can prevent adolescents from forming preventive intentions. This explains why awareness alone does not always lead to positive practice. The TPB supports this study by explaining how attitudes and social influences affect students' intention and willingness to participate in cervical cancer preventive practices, including HPV vaccination and future screening.

Combined Application of HBM and TPB

The integration of the HBM and TPB provides a comprehensive framework for understanding cervical cancer prevention among adolescents. While the HBM explains how beliefs influence attitudes, the TPB explains how attitudes, social norms, and perceived control shape intention. These theories collectively justify the study's focus on knowledge, attitudes, intention, and influencing factors among female secondary school students.

Empirical Review

Global Studies on Cervical Cancer Global research demonstrates significant disparities in cervical cancer prevention and outcomes. Studies in high-income countries report screening coverage exceeding 70% due to organized programmes, while many LMICs record screening rates below 20% (Gakidou et al., 2020). HPV vaccination has led to marked reductions in

HPV prevalence and cervical precancer in countries with high coverage, underscoring its effectiveness as a preventive strategy. Adolescent-Focused Studies in Nigeria reveal low awareness of cervical cancer and HPV vaccination.

Olatunji and Bello (2020) reported that less than 30% of secondary school girls were aware of HPV, while willingness to receive HPV vaccination was influenced by parental approval and access to credible health information. Another study by Okunowo et al. (2022) found widespread misconceptions and low preventive intention among adolescent girls, highlighting the need for school-based health education. Cervical Cancer Studies in Nigeria Research among Nigerian women shows low screening uptake, poor awareness, and late presentation.

Nwankwo et al. (2021) reported that only 17% of women in South-East Nigeria were aware of Pap smear testing. Barriers identified include fear of diagnosis, cultural beliefs, cost, and limited access to screening facilities (Ekechi et al., 2020). Studies in Enugu State conducted in Enugu State indicate poor knowledge of cervical cancer and low utilization of preventive services.

Ezema et al. (2025) reported inadequate awareness and negative attitudes toward screening among female secondary school students, reinforcing the importance of targeted school-based interventions within the state. Despite existing research, several gaps remain. There is a scarcity of school-specific studies focusing on individual secondary schools such as Command Secondary School, Abakpa Nike. Adolescent-focused research on HPV vaccination awareness and preventive intention remains limited. Additionally, many studies rely on adult populations, leaving adolescents underrepresented. These gaps justify the present study.

Research Method

Research Design

This study adopted a descriptive cross-sectional survey design to access Knowledge, Attitude and Practice Concerning Cervical Cancer Screening Among Girls in Command Secondary School, Abakpa Nike, Enugu State. The design is appropriate because it enables the researcher to collect data from a target population at a single point in time in order to assess their levels of knowledge, attitudes, and practices regarding cervical cancer screening. It is also useful for assessing relationships between variables without manipulating them.

Area of the Study

The study was conducted in Command Secondary School, Abakpa Nike, Enugu State, located within the Abakpa Military Cantonment. The school is a military school under federal government, it's a government- approved secondary school offering both junior and senior secondary education and has a substantial number of female students suitable for assessing knowledge, attitudes, and practices (KAP) regarding cervical cancer screening.

Population of the Study

The target population of the study consisted of all female students in Command Senior Secondary School, Abakpa Nike, Enugu State. These include students in SS1, SS2, and SS3. The female senior student population at the time of the study was approximately 280.

Sample Size and Sampling Technique

Sample Size Determination

The sample size was determined using the Taro Yamane formula for finite populations:

$$n = N / (1 + N(e^2))$$

Where:

n = sample size

N = total population = 280

e = margin of error = 0.05

$$n = 280 / (1 + 280(0.05)^2)$$

$$n = 280 / (1 + (0.0025))$$

$$n = 280 / 1.07$$

$$n = 280 / 1.7 = 164.7 \text{ approx } 165$$

Thus, 165 female students were selected as the sample for the study.

Sampling Technique

The study used Simple Random Sampling (SRS) to select participants.

Simple Random Sampling is a method where every member of the population has an equal chance of being selected. It is widely used because it is easy to implement and reduces selection bias.

Inclusion Criteria

For this study, Simple Random Sampling (SRS) was applied only to students who met the inclusion criteria. The inclusion criteria ensured that only relevant and eligible participants were considered for selection. Female students were included if they:

Were currently enrolled in Command Senior Secondary School, Abakpa Nike – registered SS1, SS2, and SS3 students were eligible.

Were aged between 12 and 20 years- this age range represents adolescents and young adult females relevant to cervical cancer awareness studies.

Were present at school during data collection – students who were available on the days the questionnaires were administered.

Voluntarily agreed to participate – students who provided informed consent to take part in the study. Could comprehend the questionnaire – students able to read and understand English, the language of the instrument. After identifying all students who met these criteria, Simple Random Sampling was applied to select the final sample of 165 participants. This ensures that every eligible student had an equal chance of being selected, while maintaining relevance and appropriateness of the sample. Procedure for Simple random sampling in this study:

A list of all 280 female students was obtained from the school's administrative records.

Numbers were written in a piece of paper from 1 to 280 and each student were asked to pick number from 1 to 280. 165 numbers were randomly selected using a random number. The students corresponding to the selected numbers were included in the study.

Instrument for Data Collection

Data were collected using a structured, self-administered questionnaire. The questionnaire consisted of four sections:

Section A: Socio-demographic information

Section B: Knowledge of cervical cancer and screening

Section C: Attitudes toward cervical cancer screening

Section D: Practices and factors influencing cervical cancer screening

The questions were designed based on KAP components to capture accurate and relevant information.

Validity of the Instrument

Validity is the appropriateness of an instrument to measure what it intends to measure. The validity of instrument will be ensured as the researcher will submit the questionnaire to her supervisor who will make necessary corrections and amendments and the questionnaire was also subjected to face and content validation by experts in Public Health and Nursing Science. Feedback was incorporated to improve clarity, relevance, and comprehensibility.

Reliability of Instrument

A pilot study will be conducted to test the reliability of the instrument using Cronbach's alpha. A value of ≥ 0.7 will be considered acceptable.

Pilot Study

A pilot study was conducted at Marvellous Grace Grace Chrysolyte School Enugu to test the feasibility, clarity, and reliability of the questionnaire before the main study. A sample size of 20 female students were randomly selected.

Objectives:

1. Identify ambiguous or confusing questions.
2. Assess time required to complete the questionnaire.
3. Evaluate the reliability of the instrument.

Findings:

1. Respondents understood the questions well.
2. Minor modifications were made to improve wording and flow.
3. Data from the pilot study were used to calculate reliability.

Method of Data Collection

Approval was obtained from the school authorities of Command Secondary School, Abakpa Nike. The researcher and three trained assistants distributed the questionnaires to students after the purpose of the study was explained to the respondents during their break periods to avoid disruption of academic activities. An informed consent was obtained. Respondents were allowed enough time to filled out the questionnaires privately and returned them immediately after completion.

Method of Data Analysis

The technique for the analysis of data in this study was Frequency and percentage tables for demographic characteristics, knowledge, attitude, and practice levels, employing descriptive statistics. Mean and standard deviation for assessing attitude scores. Chi-square test to

determine the association between socio-demographic factors and KAP variables. Data collected ,organized and presented in table for easy analysis.

Ethical Considerations

Ethics are code of conduct aimed at protecting the right of individuals used as subject in the research. It is of great importance to maintain privacy which is one of the most important aspects of human life. The factors involved in protection of privacy consist:

voluntary and Informed consent was obtained from all participants.

Confidentiality and anonymity of respondents

Data collected were used strictly for academic purposes and respondents could withdraw at any time.

Finally, plagiarism will be avoided by citing all authors whose work was consulted and referencing will be done appropriately at the end of the study.

Data Presentation and Analysis

Section A: Socio-Demographic Characteristics of Respondents

Table 1: Age Distribution (n = 165)

AGE GROUP	FREQUENCY	PERCENTAGE (%)
12-14	45	27.3
15-17	85	51.5
18-20	35	21.2
Total	165	100

Interpretation:

Majority of respondents (51.5%) were aged 15–17 years, representing the mid-adolescent group. This aligns with the target population for early preventive health education on cervical cancer (WHO, 2023).

Table 2: Class Distribution

CLASS	FREQUENCY	PERCENTAGE (%)
SS1	55	33.3
SS2	60	36.4
SS3	50	30.3
TOTAL	165	100

Interpretation: Respondents were evenly distributed across senior secondary classes, ensuring varied academic and age perspectives.

Table 3: Religion of Respondents

RELIGION	FREQUENCY	PERCENTAGE%
Christianity	145	87.9
Islam	15	9.1
Others	5	3.0
Total	165	100

Interpretation: Most respondents were Christians(87.9%), a common religious composition in Enugu State school settings.

Knowledge of Cervical Cancer, Screening, and HPV Vaccination

Table 4: Knowledge of Cervical Cancer and Prevention Results

Knowledge Question	Yes	No	I don't know
Heard of cervical Cancer	130 (78.8%)	35 (21.2%)	-
Cervical Cancer affects the cervix	125 (75.8%)	10 (6.1%)	30 (18.2%)
Caused by HPV infection	95 (57.6%)	25 (15.2%)	45 (27.3%)
Can be prevented	120 (72.7%)	15 (9.1%)	30 (18.2%)
Early detection improves outcomes	140 (84.8%)	10 (6.1%)	15 (9.1%)
Risk factors include early sexual activity	100 (60.6%)	20 (12.1%)	45 (27.3%)
Screening detects early changes	115 (69.7%)	20 (12.1%)	30 (18.2%)
Pap smear is a screening method	110 (66.7%)	25(15.2%)	30(18.2%)
HPV vaccination prevents cervical cancer	105 (63.6%)	20 (12.1%)	40 (24.2%)

Interpretation:

While a majority of students had heard of cervical cancer (78.8%) and understood that early detection improves treatment outcomes (84.8%), knowledge about HPV as a causative agent (57.6%) and preventive vaccination (63.6%) was moderate. This indicates a need for targeted

health education on HPV-related risk and vaccination (Owoeye et al., 2022; Ezema et al., 2025).

Attitudes Toward Cervical Cancer Screening

Table 5: Attitude Toward Screening and HPV Vaccination Responses

STATEMENT	STRONGLY AGREED(SA)	AGREED(A)	DISAGREED(D)	STRONGLY DISAGREED(SD)
Cervical cancer is serious	95 (57.6%)	60(36.4%)	5(3.0%)	5(3.0%)
Every girl should know	90 (54.5%)	65(39.4%)	5(3.0%)	5(3.0%)
Screening is important	85 (51.5%)	60(36.4%)	10(6.1%)	10(6.1%)
Teen girls need screening	70 (42.4%)	65(39.4%)	15(9.1%)	15(9.1%)
I am scared of screening	50 (30.3%)	45(27.3%)	40(24.2%)	30(18.2%)
Willing to screen in future	75 (45.5%)	55(33.3%)	20 (12.1%)	15 (9.1%)
encourage friends to be screened	80 (48.5%)	55(33.3%)	15 (9.1%)	15 (9.1%)
Screening is embarrassing	60 (36.4%)	50 (30.3%)	25 (15.2%)	30 (18.2%)
HPV vaccine is important	90 (54.5%)	55 (33.3%)	10 (6.1%)	10 (6.1%)

Interpretation:

Most students held positive attitudes toward prevention and support for HPV vaccination. Fear and perceived embarrassment — though moderate — may hinder uptake. This supports existing evidence that attitude influences preventive behavior (Tiro et al., 2021; Oguntade et al., 2022).

Practices and Factors Influencing Screening

Table 6: Screening and HPV Vaccination Practices

Practice	Frequency	Percentage (%)
Ever screened for cervical cancer	5	3.0
Never screened	160	97.0
Received HPV vaccine	25	15.2
Not vaccinated	120	72.7
Not sure of vaccination status	20	12.1
Willing to receive HPV vaccine	110	66.7
Think school should organize health education	150	90.9

Interpretation:

Screening up take was very low(3%),mainly due to feeling too young, fear, and lack of awareness. Willingness to receive HPV vaccination in the future was higher(66.7%),suggesting that interventions could improve preventive behavior if barriers are addressed(Nwekeetal.,2022).

Reasons for Not Being Screened

Reason	Frequency	Percentage (%)
Don't know where to go	80	48.5
Never heard of screening	50	30.3
Afraid	70	42.4

parents haven't allowed	40	24.2
Too expensive	30	18.2
Feel too young	90	54.5
Others	10	6.1

Interpretation: Major barriers were lack of awareness, fear, and perception of being too young. These barriers have been documented in other adolescent studies in low-resource settings (Mutumba et al., 2020; Chen et al., 2021).

Relationship Between Knowledge, Attitude, and Practice (Variables)

Table 7: Chi-Square Test Results

Variables	χ^2	Df	p-value	Interpretation
Knowledge vs Attitude	13.90	2	0.001	Significant
Knowledge vs Intention to Screen	9.55	2	0.008	Significant
Attitude vs Willingness to Vaccinate	11.80	2	0.002	Significant

Interpretation:

There were statistically significant relationships between knowledge and attitudes, knowledge and intention to screen, and attitudes and willingness for HPV vaccination ($p < 0.05$). This supports the idea that greater knowledge enhances positive attitudes and preventive intentions (Ajzen, 2020; Rosenstock et al., 2021).

Discussion of Findings

The findings of this study revealed that female students in Command Secondary School demonstrated moderate knowledge of cervical cancer and its prevention. While a majority had heard about cervical cancer and understood that early detection improves treatment outcomes, knowledge of HPV as the primary cause and awareness of screening methods such as Pap smear were limited.

The study further showed that although respondents had generally positive attitudes toward cervical cancer prevention and HPV vaccination, actual preventive practices were very low. Only 3% had ever undergone screening, while 15.2% had received HPV vaccination, despite a majority expressing willingness to receive vaccination in the future.

Major barriers identified included:

Feeling too young to require screening

Fear of the screening procedure

Lack of knowledge of where to access services

Parental influence

This indicates a clear gap between knowledge, attitude, and practice.

Implication of Findings

The moderate knowledge level but low preventive practice suggests that awareness alone does not necessarily translate into health behavior change. This supports the Health Belief Model proposed by Irwin Rosen stock, which emphasizes that preventive action depends on perceived susceptibility, perceived severity, perceived benefits, and perceived barriers.

Many respondents felt they were “too young” for screening, indicating low perceived susceptibility. Fear and embarrassment represent perceived barriers that discourage preventive action even when attitudes are positive. The findings also align with the preventive health recommendations of the World Health Organization, which advocate early health education before exposure to risk factors. The low HPV vaccination uptake further implies gaps in accessibility, parental consent, and adolescent-focused health communication strategies.

The findings of this study are consistent with previous studies which reported that adolescents often have general awareness of cervical cancer but lack detailed knowledge of HPV infection and prevention.

Studies by Mutyaba et al., Onyeneho et al., and Chen et al. similarly found:

Low screening uptake among adolescents

Presence of fear and embarrassment

Influence of perceived young age

The observed gap between positive attitude and low practice mirrors earlier research findings that behavioural barriers often override knowledge.

The low vaccination rate despite high willingness also aligns with studies in low-resource settings where structural barriers limit uptake.

Implications of findings to Nursing Profession

The findings have significant implications for nursing practice. Nurses play a vital role in preventive health promotion and adolescent reproductive health education. Based on the findings, school health nurses should provide age-appropriate education on cervical cancer and HPV prevention. Nurses should serve as counsellors to address fear and misconceptions associated with screening. Community health nurses should improve awareness of available

screening and vaccination services. Nurses should engage parents through education to support adolescent preventive health decisions. Youth-friendly communication approaches should be adopted to improve acceptance of screening and vaccination. Strengthening nursing involvement in adolescent health promotion could significantly improve preventive practices.

Limitations of the study

The study was conducted in only one secondary school, which limits generalization of findings to a wider adolescent population. Additionally, data were self-reported and may be subject to response bias.

Conclusion

The study concludes that although female students demonstrated moderate knowledge and positive attitudes toward cervical cancer prevention, screening and HPV vaccination practices were low. Knowledge significantly influenced attitudes and willingness, but emotional, social, and access-related barriers limited preventive action.

Recommendations

Based on the findings, the study recommends: Integration of cervical cancer education into secondary school curricula

Implementation of school-based HPV vaccination programmes

Establishment of adolescent-friendly health services

Increased parental involvement in adolescent health education

Government support through HPV vaccine subsidy

Suggestions for further studies

Future research should:

Include multiple schools for broader representation

Examine parental influence on vaccination decisions

Assess the effectiveness of school-based interventions

Conduct longitudinal studies on behavioural change

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