

**KNOWLEDGE AND ACCEPTABILITY OF CERVICAL CANCER SCREENING
AMONG SECONDARY SCHOOL TEACHERS IN IKPOBA OKHA LOCAL
GOVERNMENT AREA EDO STATE.**

Divine Osayamen EREYI-USOH

EDU2102567

**DEPARTMENT OF HEALTH, SAFETY AND ENVIRONMENTAL EDUCATION
(HEALTH EDUCATION)**

FACULTY OF EDUCATION

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**A RESEARCH PROJECT SUBMITTED TO THE DEPARTMENT OF HEALTH,
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OCTOBER, 2025

CERTIFICATION

This is to certify that this project research work was carried out by **Divine Osayamen EREYI-USOH**, with matriculation number **EDU2102567** and that the research work is adequate in scope and quality in the Department of Health, Safety and Environmental Education, University of, Benin city, Edo state, in partial fulfillment of the award of B.Sc (Ed) degree in Health Education.

.....
Dr. O. D. Oronsaye
(Project Supervisor)

.....
Mrs. B. H. Enabulele
(Project Coordinator)

Date.....

Date.....

.....
Dr. (Mrs.) O.H. Obasuyi
Ag. Head of Department

Date.....

DEDICATION

This project work is dedicated to God Almighty.

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The researchers' special appreciation goes to God Almighty the giver of life for everything that happened throughout her study period and during the course of this project work.

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ABSTRACT

This study investigated the knowledge and acceptability of cervical cancer screening among secondary school teachers in Ikpoba-Okha Local Government Area of Edo State. The study was prompted by the increasing prevalence of cervical cancer and the crucial role teachers play as channels of health information and behavior change in the community. A descriptive cross-sectional survey design was adopted for the study. The population comprised all secondary school teachers in the area, and a sample of 150 respondents was selected using a simple random sampling technique. A structured questionnaire was used to collect data, which were analyzed using descriptive and inferential statistics.

Findings from the study revealed that the majority of respondents demonstrated a high level of knowledge of cervical cancer and its screening methods. This was attributed to their exposure to health information through educational institutions and their relatively high educational qualifications. However, despite the high level of knowledge, awareness did not always translate into screening practice. Many respondents had never been screened due to factors such as fear and anxiety, cultural and religious beliefs, misconceptions, cost of screening, and distance to health facilities. The study also found that educational attainment had a significant positive influence on respondents' knowledge and attitudes towards screening, indicating that higher education improves health literacy, interpretation of health information, and informed decision-making.

Furthermore, the study established that health education and awareness creation remain strong determinants of screening acceptability. Media campaigns, school-based sensitization, and inclusion of cervical cancer education in teacher training curricula were identified as vital

strategies to enhance knowledge and participation in screening programs. The study concluded that while knowledge of cervical cancer among secondary school teachers in Ikpoba-Okha is commendable, the acceptability and utilization of screening services remain low. It therefore recommended intensified health education interventions, culturally sensitive awareness campaigns, and improved access to affordable screening services to promote early detection and reduce the burden of cervical cancer among women in Nigeria.

CHAPTER ONE

INTRODUCTION

Background to the Study

Cervical cancer is one of the leading causes of cancer-related deaths among women globally, with a particularly heavy burden in low and middle-income countries (WHO, 2022) . Cervical cancer is the fourth most common cancer in women globally. It is the leading cause of morbidity and mortality worldwide, it was estimated that over 660,000 women were diagnosed with cervical cancer worldwide and about 350,000 women died from the disease (Singh et al., 2023) (Sahasrabuddhe et al., 2024).

Cervical cancer also known as carcinoma of the cervix is a type of cancer that occurs in the cells of the cervix, the lower part of the uterus that connects to the vagina. It is primarily caused by persistent infection with high-risk types of human papillomavirus (HPV), a sexually transmitted virus. If left untreated, cervical cancer can spread to other parts of the body. Early detection through routine Papanicolaou (Pap) smears and HPV testing can significantly improve treatment outcomes. Symptoms may include abnormal vaginal bleeding, pelvic pain, and pain during intercourse. Most cervical cancer cases are triggered by human papillomavirus (HPV) infection, although early screening for cervical cancer has been done well, which can detect and treat cervical cancer early, the recurrence and metastasis of cervical cancer are still difficult to treat. (Kang et al., 2019).

Cervical Cancer remains one of the most common cancers affecting women worldwide, particularly in developing countries. Approximately 85% of cancer-related fatalities occur in low income or developing countries, where survival rate is significantly lower than that in affluent nations (Yadav, Srinivasan, Jain. 2024). It is largely preventable and curable if detected at the premalignant stage. It is a major cause of morbidity and mortality among women in developing countries such as Nigeria. There are about 50.33 million women of reproductive age (15 years and older) in Nigeria who are at risk of developing cervical cancer (Ferlay et al , 2019). The HPV 16 /18 contributes to 66.9% of invasive cervical cancer and about 3.5% of women of

reproductive age are estimated to harbour cervical HPV-16/18 infection at a given time (Ferlay et al , 2019).

According to the recent report on HPV by the Information Centre, the current estimate indicates that every year 14,943 women are diagnosed with cervical cancer in Nigeria, and about 10,403 die from the disease (Ferlay et al., 2019). As the public health burden of cervical cancer increases in Nigeria, there is a need for more strategic efforts towards the vaccination of adolescent girls with HPV vaccines before the onset of sexual activity. Nigeria developed a five-year National Strategic Plan which proposed to vaccinate 78% of girls with the HPV vaccine and screen 80% of women primarily through HPV DNA testing by 2021 (WHO, 2021). Unfortunately, these ambiguous targets are yet to be achieved due to limited resources available for enhancement.

The major predisposing factors associated with cervical cancer includes high-risk HPV (hrHPV) infection, age, smoking, childbirth, use of oral contraception, and diet (Olusola 2019). Cervical carcinoma arises from the normal cervical epithelium through progressive development in which hrHPV infection plays a major causative role. The hrHPV infection of the cervical epithelium results in host genome alterations, and the imbalance and instability caused by various hrHPV-derived oncogenic factors in the host genome of cervical cancer epithelial cells drive neoplastic progression (Martinez-Rodriguez et al., 2021), (Volkova , Pashon, Omelchuk. 2021), (Bhattacharjee et.al., 2022).

The importance of cervical cancer screening such as Visual Inspection with Acetic acid (VIA) and Papanicolaou (Pap) smears cannot be overexaggerated. These screening methods have been shown to lower both the incidence and mortality rates of cervical cancer by detecting abnormal changes in the cervix before it progresses to cancer (Arbyn et al., 2020). However, the uptake and utilization of these services is largely determined by factors such as knowledge, perception, cultural beliefs, and service availability. The knowledge of cervical cancer and it's screening methods are often inadequate, especially among the educated population due to lack of awareness or misinformation, perceived low risk, fear and anxiety, stigma and privacy concerns and so on, this low awareness therefore translates into poor health seeking behavior and low utilization of screening services.

Statement of the Problem

Cervical cancer remains one of the leading cause of cancer-related deaths among Nigerian women. The high mortality rate is due to late-stage diagnosis, which results from low participation in screening programs. Many women in Nigeria lacks awareness on cervical cancer screening and those who are aware refuse to participate due to cultural beliefs, misconceptions, financial constraints and also fear of results.

Most existing research has focused on women in rural communities, healthcare providers or workers and also university students, excluding other essential groups who significantly contribute to community health education. Secondary school teachers, in particular are influential in shaping the perceptions and behaviors of young girls and the wider community. They act as essential advocates for health promotion and play a significant role in educating the public on cervical cancer prevention.

Several studies in Nigeria have highlighted that while some female teachers possess knowledge about cervical cancer, this awareness does not consistently translate into participation in cervical cancer screening programs. For instance, a study conducted among female secondary school teachers in Oshodi-Isolo Local Government Area of Lagos State revealed that although 91.2% of respondents exhibited a positive attitude towards cervical cancer screening, a significant 90.1% had never undergone the screening themselves. The primary reasons cited for this low uptake included a lack of awareness about screening options, perceived absence of risk, and concerns about cost. Similarly, research in Egor Local Government Area of Edo State found that while 56.8% of female secondary school teachers had a negative attitude towards cervical cancer screening, an overwhelming 89.9% had not participated in screening services. Factors such as age and marital status were identified as influencing screening uptake, with younger and married participants more likely to engage in screening.

In addition, the acceptability of cervical cancer screening among secondary school teachers is of utmost importance, as their willingness to undergo the screening not only protects their health but also encourages other women and students to do the same. Studies suggests that acceptability is closely linked with knowledge and perception; women with better knowledge are more likely to view screening favourably and also participate in screening programs.

Ikpoba Okha Local Government Area, located in Edo State, Nigeria, is home to numerous secondary schools and a significant female teaching population. Despite national and state effort to promote cervical cancer awareness and screening, there is lack of documented regarding the level of knowledge and acceptability of cervical cancer screening in this region. Understanding this population's intellectual foundation and willingness to undergo screening is critical in developing community-based health education strategies and interventions aimed at reducing the incidence of cervical cancer.

These findings underscore a critical gap between awareness and action, emphasizing the need for targeted interventions to encourage teachers to utilize cervical cancer screening services. This knowledge gap represents a missed opportunity for community level intervention.

It is against this background that this study seeks to assess the knowledge and acceptability of cervical cancer screening among secondary school teachers in Ikpoba Okha Local Government Area, Edo State, Nigeria. The findings from this study is expected to support cervical cancer prevention effort, by providing data that can inform policy and guide the development of targeted health education programs for teachers and the communities they serve.

Research Questions

1. What is the level of knowledge about cervical cancer and it's screening methods among secondary school teachers in Ikpoba Okha Local Government Area?
2. What are the attitudes of secondary school teachers in Ikpoba Okha Local Government Area towards cervical cancer screening?
3. What factors influence the acceptability of cervical cancer screening among secondary school teachers in Ikpoba Okha Local Government Area?
4. How does the educational background of secondary school teachers in Ikpoba Okha Local Government Area impact their knowledge and acceptability of cervical cancer screening?
5. What role do health education initiatives play in improving knowledge and acceptability of cervical cancer screening among secondary school teachers in Ikpoba Okha Local Government Area?

Purpose of the Study

The purpose of this study is to assess the knowledge and acceptability of cervical cancer screening among secondary school teachers in Ikpoba Okha Local Government Area, Edo State.

The specific purpose of this study is to;

1. To determine the level of knowledge of cervical cancer and its screening methods among secondary school teachers in Ikpoba Okha Local Government Area.
2. To examine the attitudes of secondary school teachers in Ikpoba Okha Local Government Area towards cervical cancer screening.
3. To determine the factors that influences the acceptability of cervical cancer screening among secondary school teachers in Ikpoba Okha Local Government Area.
4. To ascertain how the educational background of secondary school teachers in Ikpoba Okha Local Government Area impact their knowledge and acceptability of cervical cancer screening.

Significance of the Study

This study holds considerable significance as it provides valuable insights into the knowledge and acceptability of cervical cancer screening among secondary school teachers in Ikpoba Okha Local Government Area. Teachers play a crucial role in society, especially in the school setting, not only as educators but also as influencers of health awareness. By assessing their level of knowledge and acceptance of cervical cancer screening, this study will help determine gaps in awareness and the factors influencing their willingness to participate in screening programs.

The findings from this research will be beneficial to public health officials and policymakers in developing targeted interventions aimed at improving cervical cancer screening uptake. If gaps in knowledge or barriers to screening are identified, the results will be useful in implementing effective educational programs and policy initiatives that promote early detection and prevention. This is particularly important in reducing the incidence and mortality rates associated with cervical cancer.

Healthcare providers will also benefit from this study, as it will offer insight into the specific challenges that hinder teachers from accessing screening services. By understanding these

barriers, healthcare professionals can modify their services to better accommodate and encourage participation in screening programs. Additionally, since teachers are role models in society, improving their awareness can create a ripple effect, leading to better-informed students, families, and communities.

Furthermore, this study will serve as a valuable reference for future research on cervical cancer screening awareness and acceptability in different populations. The knowledge gained from this study will contribute to existing literature and provide a starting point for further investigations on how to improve screening rates, particularly among professionals in the education sector. Ultimately, the study aims to promote a culture of preventive healthcare, thereby contributing to the overall reduction of cervical cancer cases.

Scope and Delimitation of the Study

This study focuses on assessing the knowledge and acceptability of cervical cancer screening among secondary school teachers in Ikpoba Okha Local Government Area. It aims to appraise their level of awareness regarding cervical cancer, including its causes, risk factors, and prevention, as well as their understanding of the importance of early detection through screening. Additionally, the study examines teachers' attitudes toward cervical cancer screening, their willingness to undergo screening, and the factors that may influence or hinder their participation.

The research also explores various socio-demographic factors such as age and gender to determine if these variables impact knowledge and acceptability. Furthermore, the study aims to identify and analyze common misconceptions, cultural beliefs, and accessibility issues that may contribute to low screening uptake among teachers. The findings from this study will provide a basis for targeted health education programs and interventions aimed at increasing cervical cancer screening participation in the education sector.

This study is delimited to secondary school teachers in Ikpoba Okha Local Government Area, Edo State.

Definition of Terms

- Papanicolaou (Pap) Smear: A Pap smear is a procedure that involves collecting cells from the cervix for testing. It also is called a Pap test.

- Visual Inspection with Acetic acid (VIA): Visual Inspection with Acetic Acid (VIA) is a cervical cancer screening method. VIA is a cost-effective screening method.
- Knowledge: In this study, knowledge means a teacher who was able to define cervical cancer, state the risk factors, signs and symptoms and mention services available for the screening of cervical cancer.
- Acceptability: In this study, acceptability means a teacher who was able to acknowledge the importance of cervical cancer screening, had the intentions of going for the cervical cancer screening and had accessed the screening service.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

This chapter is concerned with the review of related literature works on cervical cancer screening among secondary school teachers. This review will be carried out under the following sub headings:

- Concept of Cervical Cancer
- Cervical Cancer Screening
- Knowledge of Cervical Cancer Screening among Secondary School Teachers
- Acceptability of Cervical Cancer Screening among Secondary School Teachers
- Theoretical Framework; The Health Belief Model. (HBM)
- Empirical Review
- Factors Influencing Knowledge and Acceptability of Cervical Cancer Screening
- Summary of Reviewed Literature

Concept of Cervical Cancer

Cervical cancer is a malignant neoplasm that arises from the epithelial tissue of the cervix; the narrow, lower part of the uterus that connects to the vagina. It typically develops from abnormal changes in the cervical cells called dysplasia, which can become cancerous if not detected and treated at the precancerous stage. These abnormal changes are most commonly triggered by persistent infection with high-risk types of the human papillomavirus (HPV), a common sexually transmitted infection. The disease typically progresses slowly, beginning with precancerous changes that, if left untreated, may develop into invasive cancer over time (World Health Organization [WHO], 2021). Persistent HPV infection leads to abnormal cell changes that can develop into cancer over 10–20 years. Other risk factors include smoking, a weakened immune system, early sexual activity, multiple sexual partners, and hormonal contraceptive use.

Cervical cancer is one of the most preventable and treatable forms of cancer, particularly when identified in its early stages or during pre-cancerous lesions. However, it continues to be a major public health concern, especially in low and middle-income countries where access to screening

and treatment is limited. In 2020 alone, an estimated 604,000 new cases and 342,000 deaths were attributed to cervical cancer globally. Cervical cancer is preventable, detectable, and treatable, especially when identified at early or precancerous stages through routine screening and HPV vaccination. However, it remains a leading cause of cancer-related death among women due to late presentation, poor awareness, and limited access to healthcare services (Ginsburg et al., 2021).

The cervix undergoes various cellular changes during a woman's lifetime, especially during puberty, childbirth, and menopause. These physiological changes can make the cervical epithelium more susceptible to the oncogenic effects of persistent HPV infection. The progression from HPV infection to cervical cancer typically involves stages such as cervical intraepithelial neoplasia (CIN), which can be detected and treated before developing into cancer (ICO/IARC HPV Information Centre, 2020).

According to the International Agency for Research on Cancer (IARC, 2020), cervical cancer begins as a pre-invasive lesion called cervical intraepithelial neoplasia (CIN), which may progress through different phases of dysplasia before becoming invasive cancer. The two primary histological types are squamous cell carcinoma (about 75–90% of cases), which arises from the squamous epithelial cells lining the outer cervix (ectocervix), and adenocarcinoma (about 10–25% of cases), which arises from the glandular epithelial cells of the inner cervix, lined with column-shaped glandular cells which is the inner canal (endocervix) (Bruni et al., 2023).

In Nigeria, cervical cancer remains the second most common cancer among women aged 15 to 44 years, after breast cancer. Studies indicate that the high burden is due to low awareness, poor screening uptake, and inadequate health infrastructure (Okunade et al., 2021). Cultural beliefs, stigma, and misinformation further hinder early detection and intervention, allowing the disease to progress undetected in many women.

The symptoms of cervical cancer most often do not appear until the disease is advanced. And when they appear, they may include abnormal vaginal bleeding (especially after intercourse), pelvic pain, vaginal discharge with a foul odor/smell, and pain during urination or intercourse

(Ncube et al., 2019). Because these symptoms are nonspecific, they are frequently overlooked or misattributed to less serious conditions, reinforcing the importance of regular screening.

Despite being largely precludable through vaccination and routine screening, cervical cancer remains a leading cause of cancer mortality among women in sub-Saharan Africa. This emphasizes the urgent need for increased awareness, effective health education, and accessible screening programs, particularly in underserved communities. The disease is most commonly diagnosed in women of reproductive ages, although it can affect women of any age once they become sexually active. It is considered a slow-growing cancer, often taking 10 to 20 years to progress from HPV infection to an invasive disease, cancer (Teguete et al., 2022).

Cervical cancer is primarily caused by persistent infection with oncogenic (high-risk) types of the human papillomavirus (HPV), particularly HPV types 16 and 18, which account for about 70-75% of cases worldwide. HPV is a sexually transmitted virus that infects the skin and mucous membranes of the genital area. Nearly all sexually active people will acquire HPV at some point, but most infections clear automatically without resulting in cancer. However, when a high-risk HPV infection persists over several years, it can cause precancerous changes in cervical cells that may progress to cancer if untreated. HPV is a group of more than 200 related viruses, out of which about 14 are considered high-risk for cervical cancer (WHO, 2021; Bruni et al., 2023).

HPV is mainly transmitted through sexual contact, including vaginal, anal, and oral sex. While most HPV infections are transient and cleared by the immune system within two years (Ginsburg et al., 2021).

However, HPV infection alone is not sufficient to cause cervical cancer. Several other contributing or co-factors play a crucial role in determining whether an HPV infection will persist and progress to cancer. These include:

Early Sexual Activity

Engaging in sexual intercourse at an early age (usually below 18 years) increases the risk of acquiring HPV due to the immaturity of the cervical epithelium, which is more susceptible to viral penetration and changes (Okunade et al., 2021).

Multiple Sexual Partners

Women who have multiple sexual partners or have partners who themselves have multiple sexual partners are at increased risk of acquiring HPV and other sexually transmitted infections, thereby elevating their risk of cervical cancer (Teguete et al., 2022).

Immunosuppression

A weakened immune system, particularly in women living with HIV/AIDS or those on long-term immunosuppressive therapy, reduces the body's ability to clear HPV infections. This persistence increases the risk of cervical intraepithelial neoplasia and malignant transformation (WHO, 2021).

Smoking

Cigarette smoking is a known co-factor in cervical carcinogenesis. Tobacco by-products found in cervical mucus can damage the DNA of cervical cells, impair immune response, and increase susceptibility to HPV persistence and progression (Ginsburg et al., 2021).

Long-Term Use of Oral Contraceptives

Prolonged use (typically more than 5 years) of hormonal contraceptives has been associated with an increased risk of cervical cancer. It is hypothesized that hormonal changes may influence viral activity and the immune response in the cervical epithelium (IARC, 2020).

High Parity (Multiple Full-Term Pregnancies)

Women who have had many full-term pregnancies may have increased exposure to HPV and hormonal changes, along with trauma to the cervix during childbirth, all of which may contribute to carcinogenesis (Bruni et al., 2023).

Poor Genital Hygiene

Inadequate hygiene practices, including lack of access to clean sanitary products and proper care of the genital area, can contribute to the persistence of infections and increase cervical cancer risk, especially in low-resource settings (Oduguwa et al., 2021).

Co-infection with Other Sexually Transmitted Infections (STIs)

Co-infections such as *Chlamydia trachomatis*, herpes simplex virus type 2 (HSV-2), and HIV may create a supportive setting for HPV to persist and increase the risk of cervical neoplasia (Teguete et al., 2022).

In summary, while persistent HPV infection remains the main cause of cervical cancer, its progression is influenced by several behavioral, biological, and environmental factors. Understanding these causes is essential for implementing targeted preventive strategies and interventions, including vaccination, behavioral change interventions, and comprehensive reproductive health education (WHO, 2021).

Cervical cancer is often asymptomatic in its early stages, which is why routine screening is crucial for early detection. As the disease progresses, several clinical signs and symptoms may begin to manifest. These symptoms are often non-specific and may resemble those of other reproductive health conditions, making diagnosis difficult without appropriate clinical evaluation.

One of the most common early symptoms is abnormal vaginal bleeding, particularly post-coital bleeding (bleeding after sexual intercourse), intermenstrual bleeding, or postmenopausal bleeding. Other notable symptoms include unusual vaginal discharge, which may be watery, foul-smelling, or tinged with blood (WHO, 2021).

As the cancer progresses, women may experience pelvic or lower abdominal pain, pain during sexual intercourse (dyspareunia), and difficult or painful urination. In more advanced stages, symptoms may include leg swelling, weight loss, fatigue, and lower back pain, usually due to the spread of cancer to nearby tissues or lymph nodes (Ginsburg et al., 2021).

It is important to note that the presence of these symptoms does not necessarily indicate cervical cancer, but their persistence should prompt immediate medical consultation. Early recognition of these signs, combined with regular screening, remains vital in reducing morbidity and mortality associated with cervical cancer (Okunade et al., 2021).

Prevention

Cervical cancer is one of the most preventable forms of cancer, thanks to the availability of effective primary, secondary, and tertiary prevention strategies.

Primary prevention focuses on HPV vaccination, which protects against the most high-risk HPV types (16 and 18). The World Health Organization recommends vaccinating girls between 9 and 14 years, ideally before the onset of sexual activity (WHO, 2021). The HPV vaccine has proven to be effective in reducing significantly the incidence of cervical cancer globally (Bruni et al., 2023).

Secondary prevention involves routine cervical screening, such as the Papanicolaou (Pap) smear, HPV DNA testing, or visual inspection with acetic acid (VIA). These screening methods help detect precancerous lesions early, allowing for timely treatment before progression to invasive cancer (Ginsburg et al., 2021).

Tertiary prevention aims at reducing complications and improving the quality of life in women already diagnosed with cervical cancer through appropriate treatment, follow-up care, and rehabilitation services.

Treatment Options

The treatment of cervical cancer depends on the stage of the disease, size of the tumor, age of the patient, and desire for fertility preservation. Common treatment options include:

Surgery: In early-stage cervical cancer, procedures such as conization, hysterectomy, or radical trachelectomy may be performed to remove cancerous tissues.

Radiotherapy: Often used in combination with chemotherapy, external beam radiation therapy (EBRT) and brachytherapy are effective for locally advanced cases.

Chemotherapy: Drugs such as cisplatin and paclitaxel are commonly used, particularly for advanced or metastatic cancer. It may also be used alongside radiation (chemoradiation).

Targeted therapy and immunotherapy: Newer treatment options like bevacizumab (a VEGF inhibitor) and immune checkpoint inhibitors such as pembrolizumab have shown assurance in prolonging survival in advanced cases (Teguete et al., 2022).

Early detection significantly improves treatment outcomes. Thus, awareness, vaccination, and access to quality screening and treatment services are crucial in reducing cervical cancer morbidity and mortality in Nigeria.

Cervical Cancer Screening

Cervical cancer screening is a preventive health strategy designed to identify precancerous changes and early-stage cervical cancer in asymptomatic women. It involves the systematic testing of cervical cells or tissue using various clinical methods, such as the Pap smear, human papillomavirus (HPV) DNA testing, or visual inspection with acetic acid (VIA), to detect abnormalities that may lead to cancer if left untreated (WHO, 2021).

Screening is based on the concept that cervical cancer develops gradually, progressing from persistent HPV infection to cervical intraepithelial neoplasia (CIN) and eventually to invasive cancer over several years. This progression provides a window of opportunity for detection and intervention, making screening a powerful tool for cancer prevention (Bruni et al., 2023).

The primary purpose of cervical cancer screening is to:

- Identify and treat precancerous lesions before they develop into invasive cancer.
- Detect cervical cancer at an early stage, when it is more amenable to successful treatment.

- Reduce cervical cancer morbidity and mortality, especially among women in low- and middle-income countries where access to treatment may be limited (Ginsburg et al., 2021).

From a public health perspective, cervical cancer screening also serves broader goals such as:

- Improving reproductive health outcomes.
- Raising awareness about cervical health and HPV prevention.
- Reducing healthcare costs associated with late-stage cancer treatment (Teguete et al., 2022).

In countries with well-organized and high-coverage screening programs, such as Finland and the United Kingdom, cervical cancer incidence has significantly declined. However, in sub-Saharan Africa, including Nigeria, screening coverage remains suboptimal, contributing to the persistently high rates of cervical cancer-related deaths (Okunade et al., 2021).

Thus, cervical cancer screening remains a cornerstone of global cancer control efforts, especially in regions burdened with high disease prevalence and limited resources.

The early detection of cervical cancer is a foundation for effective prevention and control efforts, particularly in low- and middle-income countries where the disease burden remains high. Cervical cancer develops gradually over time, typically progressing from a persistent infection with high-risk types of the human papillomavirus (HPV) to precancerous lesions known as cervical intraepithelial neoplasia (CIN), and eventually to invasive cancer. This slow progression provides a significant window for intervention. Through screening, these abnormal changes in cervical cells can be identified and treated long before they evolve into full-blown cancer (WHO, 2021; Bruni et al., 2023).

Early detection significantly improves treatment outcomes. When cervical cancer is discovered at an early stage, it is usually more localized, easier to treat, and associated with better prognoses. In fact, the five-year survival rate for early-stage cervical cancer exceeds 90%, while late-stage diagnoses often result in poor survival outcomes, sometimes below 20% (Ginsburg et al., 2021). Additionally, treating precancerous conditions or early-stage cervical cancer is less invasive, less

expensive, and more effective compared to managing advanced disease, which often requires chemotherapy, radiotherapy, or radical surgery.

Moreover, early detection contributes to the preservation of reproductive health and overall quality of life, as it often allows for fertility-conserving treatment options. Beyond the medical benefits, screening programs that promote early detection also play an educational role by increasing women's awareness about cervical health and HPV prevention, encouraging healthier behavior, and reducing stigma around gynecological examinations (Okunade et al., 2021). In Nigeria, a significant proportion of women still present at health facilities with advanced-stage cervical cancer due to poor screening uptake, limited access to services, and low public awareness (Oduguwa et al., 2022). Hence, improving early detection rates is essential for reducing the heavy burden of cervical cancer in the country.

The importance of early detection is underscored by the natural history of cervical cancer. The disease typically progresses slowly—from an initial HPV infection to cervical intraepithelial neoplasia (CIN) and eventually invasive cancer over a period of 10–20 years. This long progression gap provides a suitable opportunity for early identification and treatment of abnormalities, often before cancer develops (Bruni et al., 2023).

Key Benefits of Early Detection

- Improved Treatment Outcomes:

Cervical cancer detected at an early stage is generally easier to treat and associated with a higher survival rate. According to Ginsburg et al. (2021), the 5-year survival rate for localized cervical cancer exceeds 90%, compared to less than 20% for late-stage disease.

- Reduction in Mortality:

Screening programs aimed at early detection have led to dramatic declines in cervical cancer mortality in countries with well-established systems. For example, the introduction of routine Pap smear screening in high-income countries has reduced mortality rates by up to 70% (WHO, 2021).

- Lower Healthcare Costs:

Treating early-stage cervical lesions is considerably less expensive and less invasive than managing advanced cancer, which often requires radiotherapy, chemotherapy, and complex surgical interventions (Teguete et al., 2022).

- Preservation of Fertility and Quality of Life:

When cervical abnormalities are detected early, less aggressive treatments such as cryotherapy or loop electrosurgical excision procedure (LEEP) can be used. These interventions are fertility-preserving and less likely to impair a woman's quality of life.

- Promotion of Health Awareness and Behavioral Change:

Early detection efforts, particularly when linked to public health education, can improve health-seeking behavior among women, increase awareness about HPV and cervical cancer, and reduce stigma associated with gynecological care (Okunade et al., 2021)

In Nigeria, the majority of cervical cancer cases are diagnosed at advanced stages, largely due to low awareness, limited screening services, and poor access to healthcare (Oduguwa et al., 2022). Strengthening early detection efforts is therefore essential to reversing the high burden of the disease in the country.

Cervical cancer screening involves the use of various medical techniques to detect abnormal changes in cervical cells that may progress to cancer. The World Health Organization (WHO) and other health agencies globally recommend several reliable methods for cervical cancer screening, especially among women within the reproductive and post-reproductive age range. The main types of cervical cancer screening methods currently in use include Pap smear (cytology), HPV DNA testing, and Visual Inspection with Acetic Acid (VIA).

- The Pap smear (Papanicolaou test) is one of the oldest and most widely used methods. It involves the microscopic examination of exfoliated cervical cells to identify precancerous or cancerous changes. Though it requires laboratory infrastructure and trained cytologists, it has significantly reduced cervical cancer incidence and mortality in high-income countries (Ginsburg et al., 2021).
- HPV DNA testing is a more recent and highly sensitive method that detects the presence of high-risk HPV strains, particularly HPV types 16 and 18, that are most often associated with cervical cancer. This method is effective even before visible cell changes occur, making it useful for early risk assessment (Bruni et al., 2023). Because of its high sensitivity, WHO recommends HPV DNA testing as the preferred method for cervical cancer screening where feasible (WHO, 2021).
- Visual Inspection with Acetic Acid (VIA) is a low-cost, accessible method primarily used in resource-limited settings. It involves applying acetic acid (vinegar) to the cervix and visually inspecting for acetowhite lesions that indicate abnormal cell activity. Although VIA is less sensitive and more subjective than HPV testing or Pap smears, it remains an essential screening tool in many low-income countries, including Nigeria (Teguete et al., 2022).

Regarding recommended screening intervals, guidelines differ based on the method used and the age of the woman. The WHO (2021) recommends that:

Women aged 30 to 49 years should be screened at least once every 5 to 10 years with HPV DNA testing.

If Pap smear is used, it should be done every 3 years starting from age 25 or 30.

For VIA, screening can be repeated every 3 to 5 years, depending on the presence of risk factors and the availability of follow-up care.

Women living with HIV or other immunocompromising conditions are advised to begin screening earlier, typically within a year of sexual debut, and to be screened more frequently (every 3 years), due to their higher risk of persistent HPV infection and rapid disease progression (Okunade et al., 2021).

In terms of global and local screening guidelines, the WHO's 2021 guidelines advocate for a transition from Pap smears and VIA to HPV DNA testing as the primary screening tool, as part of its global strategy to eliminate cervical cancer as a public health problem. The WHO also recommends a "screen-and-treat" approach, especially in low-resource settings, where women who test positive can be immediately offered treatment for precancerous lesions without waiting for confirmatory diagnostic procedures.

In Nigeria, the Federal Ministry of Health supports the WHO framework and promotes cervical cancer screening through the National Cancer Control Plan (2018–2022) and subsequent strategic documents. The recommended methods; Pap smear, VIA, and HPV DNA testing are endorsed, but implementation has been inconsistent due to infrastructural, financial, and awareness-related challenges (Oduguwa et al., 2022). Nigeria's screening services often happen randomly or on a one-off basis, rather than being systematic and organized. As a result, many people, especially in rural areas, are not getting screened, and coverage rates remain low (Okunade et al., 2021).

Strengthening national policies to expand access to HPV testing and training healthcare providers on VIA techniques is essential to improving screening coverage. Public health education campaigns also play a critical role in enhancing awareness, especially among women in the reproductive age group, including teachers who serve as role models in their communities.

Knowledge of Cervical Cancer Screening among Secondary School Teachers

In the context of public health and cancer prevention, knowledge refers to the awareness, understanding, and accurate information an individual possesses about a specific health topic, in this case, cervical cancer and its screening. When discussing secondary school teachers' knowledge of cervical cancer screening, it encompasses their familiarity with the causes, risk factors, symptoms, prevention methods, screening procedures, and available healthcare services related to cervical cancer (Okunade et al., 2021).

Being knowledgeable in this context does not simply imply having heard of cervical cancer or screening; rather, it entails possessing correct, comprehensive, and actionable information that

can inform one's personal health decisions and influence others positively. For secondary school teachers, this level of understanding is particularly important because they are not only educated individuals but also serve as information gatekeepers, influencers, and role models for students, parents, and communities. Their knowledge can directly affect their willingness to engage in preventive behaviors, such as going for screening themselves, and indirectly shape the health attitudes and awareness of those around them (Gyamfi et al., 2022).

Knowledge is often classified into different domains. In relation to cervical cancer screening, relevant domains include:

- Cognitive knowledge: Knowing what cervical cancer is, how it develops, and the purpose of screening.
- Procedural knowledge: Understanding how screening is done, where to access it, and what to expect during the process.
- Attitudinal knowledge: Awareness of the benefits of screening, early detection, and positive beliefs about preventive health behavior (Ndikom & Ofi, 2020).

Teachers who are knowledgeable about cervical cancer screening can recognize the importance of regular screening, identify early warning signs, understand the recommended screening intervals, and appreciate the role of HPV vaccination. They are also more likely to refute myths, encourage health-seeking behavior, and support cervical cancer education within the school setting.

However, studies in Nigeria and other sub-Saharan African countries have persistently shown that knowledge about cervical cancer screening remains low, even among educated populations such as secondary school teachers. This gap is often linked to limited public health education, low exposure to mass awareness campaigns, and cultural taboos surrounding reproductive health discussions (Oduguwa et al., 2022; Dulla et al., 2020).

Therefore, assessing teachers' knowledge is not just about measuring what they know, but also about identifying areas of misinformation, barriers to understanding, and opportunities for intervention. This makes their knowledge a critical variable in any health promotion strategy aimed at increasing cervical cancer screening uptake.

The sources of knowledge about cervical cancer screening refer to the channels, platforms, and experiences through which individuals, particularly secondary school teachers gain information and understanding about cervical cancer, its risk factors, prevention, and screening procedures. These sources play a crucial role in shaping their awareness, beliefs, and health-seeking behavior.

One major source of information is mass media, including television, radio, newspapers, and increasingly, social media platforms such as Facebook, Twitter, Instagram, and WhatsApp. These outlets are frequently used for health promotion campaigns and have been found to significantly influence public knowledge about cervical cancer in many developing countries. In particular, when media campaigns are well-structured and culturally sensitive, they can break stigmas and encourage women to participate in screening programs (Oduguwa et al., 2022; Gyamfi et al., 2022).

Healthcare professionals are another pertinent source of information. Doctors, nurses, and community health workers often serve as trusted authorities and can provide accurate, in-depth knowledge about cervical cancer and its screening. However, in some communities, the lack of regular interaction with healthcare professionals due to limited access to services or understaffed facilities reduces this opportunity for learning (Ndikom & Ofi, 2020).

Workplace health seminars and school-based health education programs also contribute markedly to the knowledge level of secondary school teachers. These programs may include organized lectures, workshops, or peer education sessions aimed at raising awareness and promoting preventive behavior. Teachers who have participated in such training often demonstrate higher levels of awareness and are more likely to advocate for cervical cancer education among their students (Dulla et al., 2020).

Furthermore, personal experiences or indirect exposure through family and friends who have suffered from cervical cancer can also influence knowledge. Teachers who have had close contact with individuals affected by cervical cancer may seek information more actively, increasing their understanding of the disease and its prevention.

Academic and professional training also serves as a foundation for knowledge acquisition. Educators, particularly those in the sciences or health-related subjects, may encounter

information about reproductive health and cervical cancer in the course of their university education or teacher training programs (Okunade et al., 2021). However, this exposure is often limited and not integrated into all curricula, making continuous professional development essential.

Finally, the internet and online search engines such as Google provide on-demand access to a vast range of information about cervical cancer. While this increases the availability of knowledge, the reliability of the content accessed depends on the sources consulted, as misinformation is also prevalent online.

In summary, the level and accuracy of knowledge about cervical cancer screening among secondary school teachers are largely dependent on the accessibility, quality, and frequency of these information sources. To improve public health outcomes, it is essential to strengthen and harmonize these knowledge channels through targeted health communication strategies and school-based awareness campaigns.

Possessing accurate and adequate knowledge about cervical cancer and its screening is a fundamental driver of effective prevention and timely health-seeking behavior. Knowledge influences how individuals perceive their susceptibility to disease, interpret symptoms, and decide whether or not to engage with available preventive services. When secondary school teachers are well-informed about cervical cancer; its causes, risk factors, early signs, and available screening methods, they are more likely to adopt proactive health behaviors, such as undergoing routine screening and encouraging others to do the same. This awareness enhances not only their personal health outcomes but also their ability to influence students and community members through formal and informal educational interactions.

Knowledge fosters confidence in the healthcare system and reduces fear, misconceptions, and stigma often associated with reproductive health issues. A woman who understands that cervical cancer is largely preventable and that early detection significantly improves treatment outcomes is less likely to ignore symptoms or delay screening. In this sense, knowledge serves as both a protective factor and a catalyst for behavioral change. It breaks down cultural and social barriers

by replacing myths with facts, especially in contexts where talking about reproductive health is considered taboo.

Among teachers, knowledge empowers them to act as informal health educators and advocates. Their informed opinions can shape the health perceptions of young people, particularly girls, who look to them for guidance. Moreover, teachers with adequate knowledge are more likely to recognize the need for health campaigns within schools and to support policies that promote HPV vaccination and screening awareness. Without knowledge, individuals are more susceptible to harmful narratives and may dismiss screening as unnecessary, painful, or shameful, thereby increasing their risk of late-stage diagnosis.

Importantly, studies have shown that knowledge correlates strongly with health-seeking behavior. In Nigeria and other low- and middle-income countries, lack of awareness remains one of the most significant barriers to cervical cancer screening uptake, even among educated groups. Enhancing knowledge through structured health education, mass media campaigns, and peer-led interventions has been shown to improve not just attitudes but actual health outcomes (Okunade et al., 2021; Ndikom & Ofi, 2020).

Therefore, increasing knowledge is a critical entry point for preventive health interventions. It empowers individuals with the ability to make informed choices, fosters a culture of self-care and early detection, and ultimately contributes to the reduction of cervical cancer morbidity and mortality.

Acceptability of Cervical Cancer Screening

In the context of cervical cancer screening, acceptability refers to the degree to which individuals, particularly women find the screening procedure and its related services to be appropriate, comfortable, non-threatening, and aligned with their values, beliefs, expectations, and circumstances. It is a critical psychological and cultural determinant that influences whether or not a person chooses to engage with a health service, regardless of its availability or affordability (Gyamfi et al., 2022; Oduguwa et al., 2022).

Acceptability encompasses both emotional and cognitive responses to cervical cancer screening. It involves how women perceive the procedure, whether they view it as painful, invasive, embarrassing, or shameful, as well as whether they trust the healthcare system and believe the screening will be beneficial. Even when knowledge about screening is high, low acceptability can lead to poor participation, particularly if the screening process conflicts with personal beliefs, religious teachings, or social norms (Dulla et al., 2020).

In this context, acceptability is shaped by various factors, such as cultural values, religious convictions, gender dynamics, fear of diagnosis, misconceptions, and past experiences with healthcare providers. For example, in some conservative societies, women may feel uncomfortable being examined by male healthcare providers, or they may believe that talking about reproductive organs is taboo, leading to feelings of shame or embarrassment that reduce the willingness to undergo screening (Ndikom & Ofi, 2020). Additionally, myths such as the belief that screening can lead to infertility or that cervical cancer is caused by supernatural forces can lower the acceptability of screening procedures.

Acceptability is also influenced by the perceived attitude and professionalism of healthcare workers, the privacy of the clinical setting, and the clarity of communication around the screening process. Women are more likely to accept cervical cancer screening when they feel respected, well-informed, and supported throughout the experience.

Among secondary school teachers, acceptability may be further shaped by their educational background, exposure to health information, and social standing. Teachers may be more likely to accept screening if they perceive themselves as role models or if they have access to organized workplace screening programs. However, their decision-making is still embedded in the broader sociocultural context in which they live.

Ultimately, the concept of acceptability goes beyond just willingness; it reflects the readiness and comfort level individuals feel toward engaging in a preventive health service. It is a central consideration in public health efforts aimed at increasing screening uptake, as interventions that fail to consider acceptability often fall short of achieving their intended impact, even when access and affordability are addressed (Okunade et al., 2021).

Acceptability of cervical cancer screening is not a static concept; it is shaped by a wide range of individual, social, cultural, and systemic factors that determine whether a woman perceives the screening process as appropriate, desirable, and worth engaging in. Among secondary school teachers and other educated women, these factors can either enhance or hinder the likelihood of undergoing screening, regardless of knowledge or access to services.

One of the most significant influences on acceptability is cultural beliefs and social norms. In many African societies, discussions around female reproductive health are considered sensitive or even taboo. This silence creates discomfort and reluctance toward procedures like cervical screening, which involve intimate examinations. If a woman has been socialized to view such procedures as shameful or morally questionable, her level of acceptance is likely to be low, even if she intellectually understands its benefits (Gyamfi et al., 2022).

Religious and moral values also play a key role. Some religious doctrines discourage open discussions of sexuality and reproductive health, making it difficult for women to fully embrace screening without internal conflict. In some cases, misconceptions such as believing that only sexually promiscuous women are at risk of cervical cancer can lead to stigmatization and reduced acceptability, even among educated groups like teachers (Oduguwa et al., 2022).

Fear and anxiety, particularly about the screening outcome, is another barrier. The fear of a positive diagnosis, and the implications it may have on one's identity, marriage, or social standing, can reduce a woman's willingness to be screened. Some women also associate cervical cancer with death or infertility, viewing the screening process as emotionally threatening rather than empowering (Ndikom & Ofi, 2020).

Healthcare system-related factors also significantly influence acceptability. These include the attitude of health workers, privacy of the examination setting, availability of female providers, and waiting time at screening centers. If the healthcare environment is perceived as unwelcoming, insensitive, or poorly organized, it discourages women from participating. Conversely, when women feel respected, informed, and comfortable, their willingness to undergo screening increases.

Accessibility and convenience also affect acceptability. Even if screening services are theoretically available, factors such as long distance to the clinic, transportation costs, conflicting work schedules, and lack of childcare can lower the perceived feasibility and, by extension, the acceptability of screening. Secondary school teachers, despite their educational background, may struggle to reconcile their work responsibilities with clinic appointments, especially if services are not integrated into workplace health programs (Dulla et al., 2020).

Finally, personal experience and peer influence matter. Women who have undergone screening and had positive, respectful experiences are more likely to encourage others and normalize the process. Similarly, when teachers see colleagues participating in screening programs, they may become more open to the idea, especially if it's discussed without stigma or fear.

In summary, acceptability of cervical cancer screening is multi-dimensional, deeply rooted in social and emotional frameworks. To improve uptake among Nigerian women, particularly educators, public health interventions must address not only the physical availability of screening services but also these intricate cultural, psychological, and structural factors.

Theoretical Framework; The Health Belief Model (HBM)

The Health Belief Model (HBM) is one of the most widely used conceptual frameworks in health behavior research, particularly in explaining and predicting why individuals engage—or fail to engage—in health-promoting behaviors. Developed in the 1950s by social psychologists Hochbaum, Rosenstock, and Kegels, the model was initially used to understand why people failed to participate in disease prevention and detection programs, such as tuberculosis screenings. Over time, it has been adapted and applied to a wide variety of health behaviors, including cancer screening, vaccination, and chronic disease management (Rosenstock et al., 1988; Champion & Skinner, 2021).

The core assumption of the HBM is that individual health behavior is influenced by personal beliefs or perceptions about a disease and the strategies available to decrease its occurrence. The model consists of six key constructs:

- **Perceived Susceptibility:** An individual's belief about their risk of developing a condition.

- Perceived Severity: The belief about how serious the consequences of the disease would be.
- Perceived Benefits : The belief in the effectiveness of a particular health action in reducing the threat of disease.
- Perceived Barriers: The perceived obstacles that prevent someone from engaging in the recommended health behavior.
- Cues to Action : Internal or external triggers that motivate individuals to take action (e.g., public health campaigns, symptoms, advice from others).
- Self-Efficacy : Confidence in one's ability to successfully perform a behavior.

These constructs interact to determine whether or not a person engages in health-related behaviors. For cervical cancer screening, the HBM helps to explain why some women participate in screening while others do not, even when services are readily available.

Application of the Health Belief Model to Knowledge and Acceptability of Cervical Cancer Screening

In the context of this study, Knowledge and Acceptability of Cervical Cancer Screening Among Secondary School Teachers, the Health Belief Model provides a comprehensive framework for understanding how knowledge and acceptability are linked to screening behavior.

- Perceived Susceptibility

Women who are knowledgeable about cervical cancer, especially its causes and risk factors are more likely to perceive themselves as being at risk. Among secondary school teachers, awareness of how HPV and lifestyle factors contribute to the disease can enhance personal risk perception. When individuals understand that cervical cancer is not limited to a particular social class or background, they are more inclined to believe that they too are susceptible, thereby increasing the likelihood of screening acceptance.

- Perceived Severity

Adequate knowledge also strengthens the understanding of how serious cervical cancer can be if left undetected. When women are informed about the consequences of late diagnosis, such as infertility, chronic illness, or death, they are more likely to regard the condition as severe. This heightened perception can increase their emotional readiness to accept screening as a necessary preventive measure.

- Perceived Benefits

Increased knowledge often translates into a clearer understanding of the advantages of cervical cancer screening. When women understand that early detection can lead to timely treatment, improved survival rates, and peace of mind, they are more inclined to see screening as beneficial. This perception reinforces the acceptability of the procedure as a worthwhile health action.

- Perceived Barriers

Even with good knowledge, women may still face barriers that affect their willingness to undergo screening. These can include fear of pain, embarrassment, social stigma, or distrust in the healthcare system. If the screening process is perceived as invasive, culturally inappropriate, or poorly communicated, acceptability declines. Addressing these barriers through counseling, female-friendly services, and awareness campaigns can help bridge the gap between knowledge and action.

- Cues to Action

Teachers may respond to various cues such as public health messages, recommendations from healthcare professionals, or school health programs. Peer influence, especially from colleagues who have undergone screening, can also serve as a powerful cue. These cues are more effective when the individual already has a foundational level of knowledge and when screening is perceived as acceptable within their environment.

- Self-Efficacy

Knowledge empowers women to feel confident in navigating the healthcare system, knowing when, where, and how to access screening services. Acceptability enhances this by ensuring that

the clinical experience is respectful, private, and supportive. Together, they boost a woman's belief in her ability to take the necessary action, thereby increasing screening uptake.

Empirical Review

Cervical cancer remains a significant public health concern in Nigeria, with low screening uptake posing a major barrier to effective prevention. Female secondary school teachers represent an important demographic due to their potential role in educating young women and influencing community health behaviors. Several recent empirical studies have explored the levels of knowledge, acceptability, screening uptake, and barriers among this group and similar populations.

Knowledge of cervical cancer screening

Studies consistently reveal poor to moderate knowledge of cervical cancer and its screening among female secondary school teachers in Nigeria. For instance, a descriptive cross-sectional study among 273 female secondary school teachers in Lagos State found that 80.2% had an overall poor knowledge of cervical cancer, with only 26.7% correctly identifying human papillomavirus (HPV) as a causative agent. Commonly recognized risk factors included multiple sexual partners (19.1%) and early sexual debut (16.5%) (Owoeye et al., 2022). Despite this poor knowledge, 91.2% of respondents exhibited a positive attitude toward screening, highlighting a disconnect between knowledge and attitude (Owoeye et al., 2022).

Similarly, research among female secondary school teachers in Egor Local Government Area, Edo State, reported poor knowledge and negative attitudes toward cervical cancer screening, with low screening uptake (Igbinsosa et al., 2022). These findings align with studies among female undergraduates in Nigeria, where despite 79% demonstrating good knowledge, only 1.7% had undergone screening, largely due to low risk perception (Akinyemi et al., 2023).

Overall, these studies underscore that while some awareness exists, detailed and accurate knowledge about cervical cancer screening remains insufficient among female teachers and similar populations.

Acceptability and Attitude of cervical cancer screening

Positive attitudes toward cervical cancer screening are common among female teachers and women in Nigeria. For example, in Lagos, 91.2% of female teachers expressed willingness to participate in screening programs (Owoeye et al., 2022). In Ogun State, 76.2% of female undergraduates were willing to be screened by health professionals, and 66.1% would recommend screening to family members (Adewumi et al., 2020).

However, acceptability is tempered by several barriers, including fear of positive diagnosis, embarrassment, financial constraints, and cultural beliefs. Concerns about privacy and the gender of healthcare providers also influence willingness to be screened (Owoeye et al., 2022; Onyeka et al., 2022). These barriers contribute to the gap between positive attitudes and actual screening behavior.

Despite reasonable levels of awareness and positive attitudes, the uptake of cervical cancer screening remains low among female secondary school teachers and women in Nigeria. Owoeye et al. (2022) reported that 90.1% of female teachers in Lagos had never undergone screening. Similarly, only a small fraction of female teachers in Edo State had ever been screened (Igbinosa et al., 2022).

Broader population studies support these findings, with screening uptake rates often below 10%, especially in rural areas (Eze et al., 2023; Onyeka et al., 2022). A multi-state cervical cancer prevention program in Lagos, Kaduna, and Rivers states achieved 81% screening coverage among participants, but only 21% of HPV-positive women completed follow-up assessment and monitoring, indicating challenges in linkage to care (CHAI, 2023).

Commonly identified barriers to screening uptake include:

- Poor knowledge and misconceptions about cervical cancer and screening procedures (Owoeye et al., 2022; Igbinosa et al., 2022).
- Limited access to screening centers, particularly in rural and semi-urban areas (Eze et al., 2023).
- Sociocultural factors, such as partner disapproval, stigma, and fear of diagnosis (Igbinosa et al., 2022; Onyeka et al., 2022).
- Financial constraints and lack of organized national screening programs (Onyeka et al., 2022).

Enablers identified include:

- Health education programs that improve knowledge and risk perception (Akinyemi et al., 2023).
- Screening by trained health professionals, which increases acceptability (Adewumi et al., 2020).
- Integration of screening into routine health services and use of “screen and treat” approaches to improve treatment rates (CHAI, 2023).

Studies in Edo State and other Nigerian regions continuously report similar trends. For example, Igbinosa et al. (2022) in Egor LGA, Edo State, found poor knowledge, negative attitudes, and low screening uptake among female secondary school teachers. In Kaduna State, a “screen and treat” program improved screening and treatment rates but faced challenges with follow-up (Abdullahi et al., 2022).

Such findings highlight the systemic nature of cervical cancer prevention challenges in Nigeria and the need for targeted interventions tailored to female teachers and similar groups.

Recent studies emphasize several enablers that promote screening uptake among female secondary school teachers and similar populations. These include comprehensive health education programs that significantly improve knowledge and screening rates (Adewumi et al., 2020), peer influence and social support (Igbinosa & Igbinosa, 2022), availability of well trained

female healthcare providers which addresses privacy concerns (CHAI, 2023), and integration of screening into routine health care services (Onyeka et al., 2022).

Role of Secondary School Teachers in Cervical Cancer Prevention

Secondary school teachers play an influential role as health educators and advocates. Studies show that teachers with better knowledge and positive attitudes towards cervical cancer screening are more likely to educate students and communities, fostering early awareness, detection and preventive behaviors (Igbinsosa & Igbinsosa, 2022). Strengthening and motivating teachers through training enhances their competence and expertise to discuss sensitive topics such as HPV vaccination (Akinyemi et al., 2023). Incorporating cervical cancer education into school curricula, led by trained teachers, has proven to be effective in enhancing and refining adolescent knowledge and intentions to screen (Eze et al., 2023).

Comparative Perspectives from Other Low- and Middle-Income Countries

Research from countries with similar socioeconomic contexts reveals comparable difficulties and practical and effective remedies. For instance, Kenya faces low screening uptake due to fear and stigma despite mid-range awareness (Mwangi et al., 2021). Rwanda's organized national screening programs highlights the impact of government commitment and robust follow-up systems (Binagwaho et al., 2019). Mobile health interventions in Uganda and Tanzania have successfully increased screening engagement, suggesting adaptable strategies for Nigeria (Ndejjo et al., 2020).

Innovative Strategies to Enhance Screening Acceptability and Uptake

To mitigate long-standing challenges, multifaceted approaches are recommended. These include use of self-sampling HPV kits to address privacy concerns (CHAI, 2023), engagement of community health workers to facilitate education and referrals (Eze et al., 2023), financial incentives to reduce cost barriers (Onyeka et al., 2022), and culturally sensitive communication involving male partners to reduce stigma and increase acceptability (Igbinsosa & Igbinsosa, 2022).

The growing body of recent empirical evidence highlights that improving knowledge and acceptability of cervical cancer screening among female secondary school teachers requires comprehensive, culturally sensitive health education, accessible female-friendly services, and innovative outreach strategies. Empowering teachers as health educators can create ripple effects that enhance community-wide cervical cancer prevention efforts.

Factors Influencing Knowledge and Acceptability of Cervical Cancer Screening

- Educational Level

Educational level significantly influences how women perceive and engage with cervical cancer screening services. Women with higher education levels tend to possess greater knowledge about cervical cancer and are more likely to accept and utilize screening services.

Education enhances a woman's ability to comprehend health information, including the causes, symptoms, and prevention of cervical cancer. This literacy enables them to understand the importance of early detection and the benefits of regular screening. A study by Hyacinth et al. (2012) showed that Nigerian women with secondary and tertiary education were significantly more aware of cervical cancer and its screening methods than those with only primary education or none at all.

Education helps reduce myths and misconceptions about cervical cancer screening. It encourages a more scientific and preventive health mindset. Ezechi et al. (2013) found that misconceptions about screening being painful or unnecessary were more prevalent among women with lower educational attainment, affecting their willingness to participate in screening programs.

Educated women are more likely to make independent decisions regarding their health. They are less constrained by patriarchal cultural norms or spousal restrictions. Ndikom & Ofi (2012) emphasized that educated women showed greater autonomy in seeking screening services, especially in urban settings.

Educational attainment is closely linked to better economic status, which improves access to healthcare services, including cervical cancer screening. Aniebue et al. (2010) noted that

affordability and awareness — both of which are facilitated by higher education were significant predictors of screening uptake among Nigerian women.

- Sociocultural Beliefs

Sociocultural beliefs significantly influence how women perceive cervical cancer and whether they are willing to participate in screening. In many communities, beliefs about health, illness, modesty, and gender roles affect women’s attitudes toward screening.

Cultural norms that prioritize modesty may cause women to feel uncomfortable with pelvic examinations, especially when the healthcare provider is male.

Myths and misconceptions, such as the belief that cervical cancer is caused by spiritual forces or promiscuity, can reduce acceptance of screening.

In some cases, religious beliefs discourage women from undergoing screening unless they have symptoms or approval from a spouse. Community influence is also important if screening is not common or discussed openly, women are less likely to see it as necessary.

Ezem (2007) found that fear, embarrassment, and cultural taboos contributed significantly to poor cervical cancer screening uptake among Nigerian women.

Ndikom and Ofi (2012) observed that in Ibadan, many women believed that screening was only for those already sick, or that it could lead to the discovery of “bad news,” which they preferred to avoid.

- Accessibility of Health Services

Access to health services plays a critical role in determining whether women are aware of and willing to undergo cervical cancer screening.

Geographic barriers: Many women, especially in rural or underserved areas, live far from healthcare centers that offer screening services.

Limited availability: Some primary health facilities do not offer Pap smears or HPV testing, making it difficult for women to get screened even if they are willing.

Healthcare workforce issues: Shortage of trained personnel, long wait times, and poor attitudes of some health workers can discourage women from returning or recommending the service to others.

Operational hours and convenience: Clinics that operate only during working hours may be inaccessible to employed women or those with household responsibilities.

Gharoro and Ikeanyi (2006) reported that in Benin City, Nigeria, even among women who were aware of cervical screening, many had never been screened due to lack of access to nearby facilities.

Agida et al. (2015) also found that despite awareness campaigns, low accessibility and poor health system infrastructure limited the uptake of screening services among women in Abuja.

- Stigma and Fear

Stigma and fear remain significant emotional and psychological barriers that prevent many women from accessing cervical cancer screening services. These barriers are often deeply entrenched in cultural misconceptions, societal taboos, and feelings of shame surrounding reproductive health, cancer, and death.

In numerous communities, cancer is commonly viewed as a terminal diagnosis. As a result, women often fear that a positive screening result equates to a death sentence, even in cases where early detection can lead to effective treatment. Cervical cancer, in particular, is frequently linked with sexual promiscuity, which fosters stigma, especially within conservative societies. For instance, Makura et al. (2015) observed that some South African women avoided screening due to fear of being perceived as “sexually immoral” or suspected of having HIV.

Beyond social stigma, there are also anxieties surrounding the screening procedures themselves. Many women are apprehensive about the pain, discomfort, or perceived loss of privacy during Pap smears or pelvic examinations. A lack of understanding about what it means to test positive

for HPV or abnormal cells further heightens this fear. Ezechi et al. (2013) noted that Nigerian women expressed fear not only of the physical examination but also of receiving unfavorable test results, both of which were major contributors to low screening uptake.

In some cases, women worry about the reactions of their partners, families, or communities. A diagnosis related to reproductive health might lead to blame, rejection, or strained relationships. Religious beliefs may also add to the stigma, particularly in contexts where being examined by a male healthcare provider is considered inappropriate or sinful.

The cultural tendency to avoid open conversations about reproductive health leads to internalized shame and silence. Many women feel uncomfortable discussing cervical health and therefore remain unaware of the importance of screening. This silence often fosters the false belief that screening is unnecessary for women who are not sexually active or who do not exhibit symptoms, a dangerous misconception that delays early detection.

Ultimately, fear and stigma diminish the perceived value of screening while amplifying the emotional burden, discouraging many women from utilizing cervical cancer screening services even when those services are readily accessible.

- Cost and Availability of Resources and Expertise

The financial cost of cervical cancer screening and the limited availability of trained professionals, equipment, and screening infrastructure form a major barrier to both awareness and acceptability, especially in low- and middle-income countries like Nigeria.

Even when women are willing to get screened, the actual cost of a Pap smear, HPV test, or visual inspection with acetic acid (VIA) can be prohibitive, especially for low-income earners. In private or tertiary hospitals, screening may cost several thousand naira, which many women cannot afford, especially if it's not covered by insurance. Indirect costs such as transportation, time off work, childcare, and long waiting hours can also deter women from accessing services.

Agida et al. (2015) noted that the cost of cervical cancer screening in Abuja discouraged uptake among antenatal women, even among those who were aware of the service.

A significant challenge is the shortage of trained healthcare providers, especially in rural or underserved areas who can perform screenings accurately. Most Pap smear procedures require specialized personnel such as gynecologists, cytotechnologists, or trained nurses, who are often concentrated in urban centers. The few available personnel may also be overburdened, leading to long queues, burnout, and poor client-provider interactions which discourage women from returning.

Gharoro & Ikeanyi (2006) emphasized that even in tertiary institutions, inadequate staffing was a challenge in delivering consistent screening services.

Many health facilities lack essential equipment like speculums, acetic acid, or HPV DNA testing kits. Even when samples are taken, delays in laboratory processing, or lack of laboratory infrastructure, often lead to results being delayed or lost, discouraging follow-up visits. Absence of cold-chain systems, appropriate storage, and follow-up infrastructure also limits the effectiveness of screening programs.

Nwankwo et al. (2011) found that rural health centers in Kano State lacked basic tools and trained personnel, and many health workers admitted they had never conducted a screening procedure.

While national policies in Nigeria may advocate for cervical cancer prevention, the implementation at the primary health care level is often weak. Screening is not routinely integrated into maternal or reproductive health services, and no national free screening program exists, leaving women to bear the cost themselves. Health financing systems like the NHIS (National Health Insurance Scheme) often do not cover cervical cancer screening, leaving it as an out-of-pocket expense.

Adefuye et al. (2006) argued that policy-level failures to subsidize or decentralize screening services significantly limit access in low-resource settings.

When services are scarce or expensive, even those who know about cervical cancer may choose not to act on the information. Poor availability also sends the message that screening is not a priority, reducing public perception of its importance.

Ultimately, the absence of affordable and accessible screening translates to lower demand, low community engagement, and delayed diagnosis, often at advanced stages of disease.

Summary of Reviewed Literature

The body of reviewed literature offers critical insights into the complex dynamics of cervical cancer awareness, screening behaviors, and the various social, cultural, and systemic influences that affect both knowledge and acceptance particularly among Nigerian women. A common consensus across studies is that cervical cancer is largely preventable and treatable if detected early. However, screening rates remain dismally low in many low- and middle-income countries, especially within sub-Saharan Africa.

One dominant theme is the pivotal role that knowledge plays in influencing health-related behaviors. Research reveals that many Nigerian women including those in professions such as teaching possess limited and often fragmented knowledge about cervical cancer. They frequently lack awareness of key risk factors such as persistent HPV infection, early onset of sexual activity, and having multiple sexual partners. Although some may have heard of cervical cancer, their understanding is often superficial, underscoring the gap between mere awareness and in-depth knowledge. While studies indicate that higher educational attainment is positively associated with better knowledge, it is also clear that education alone does not necessarily translate to proactive health behavior unless it is accompanied by targeted, context-specific awareness initiatives.

Cultural and religious beliefs significantly influence screening acceptability. In many communities, topics related to reproductive health are considered sensitive or even taboo. Misconceptions associating cervical cancer with witchcraft, divine punishment, or sexual immorality perpetuate stigma and silence, discouraging women from seeking information or undergoing screening. These cultural dynamics are evident even among teachers who are

presumed to be more knowledgeable, demonstrating that sociocultural norms can, at times, override educational exposure.

From a healthcare access perspective, numerous studies highlight physical, logistical, and systemic barriers. Screening services are often inaccessible to women living in rural or peri-urban areas, and where they do exist, facilities may be poorly equipped or understaffed. Financial constraints, whether actual or perceived also pose a significant barrier. These include direct costs of the screening test, transportation expenses, lost income due to time off work, and concerns over potential treatment costs.

Literature published from 2019 onward continues to emphasize that although increased knowledge is vital, it does not necessarily lead to higher screening uptake. Sociocultural norms, religious doctrines, and personal fears remain strong deterrents. Emotional barriers such as fear of a cancer diagnosis, pain during the procedure, or embarrassment, especially when the screening is conducted by a male provider are commonly cited. Studies by Hyacinth et al. (2012) and Muhammad et al. (2024) report that these emotional reactions often override logical assessments of risk and the preventive benefits of screening. Additionally, fear of judgment or ostracism, especially in conservative settings further discourages women from participating in screening, even when they are aware of its importance. Other structural issues such as limited availability of female healthcare providers and inadequate medical infrastructure further complicate accessibility.

On a more positive note, evidence suggests that interpersonal influence and institutional endorsement can significantly boost screening behavior. Women are more likely to get screened when they know someone such as a friend or colleague who has done so. Furthermore, when screening initiatives are endorsed or facilitated by schools, churches, or workplaces, participation tends to increase. Teachers, particularly those in secondary schools, are uniquely positioned to act as health advocates, provided they receive adequate training and support.

Nevertheless, notable research gaps persist. Much of the existing literature focuses broadly on women of reproductive age or on those attending antenatal clinics, with limited attention given to female secondary school teachers as a specific demographic. This is a crucial oversight,

considering that teachers serve as both recipients and transmitters of health information. Moreover, while many studies advocate for educational and awareness campaigns, fewer examine how such interventions might be adapted to suit well-educated populations who may still hold deep-seated cultural or religious reservations.

In conclusion, the literature affirms that knowledge and acceptability of cervical cancer screening are influenced by a complex interplay of factors including educational attainment, cultural and religious beliefs, perceived vulnerability, stigma, fear, access to healthcare, peer influence, and institutional backing. Improving screening uptake requires more than just knowledge dissemination. It calls for holistic strategies that confront sociocultural constraints, expand healthcare access, reduce fear and stigma, and minimize financial barriers. Addressing any single factor in isolation is unlikely to produce sustainable progress. Rather, a comprehensive, multi-pronged approach that integrates accurate information, accessible and affordable services, culturally relevant education, and community-level advocacy, particularly within school system is essential.

This understanding underscores the significance of the current study, which seeks to investigate these interconnected factors among secondary school teachers in Ikpoba Okha Local Government Area of Edo State, Nigeria.

CHAPTER THREE

METHODOLOGY

In this chapter, the methods and procedure used for this study are discussed under the following sub-headings:

Design of the study

Population of the Study

Sample and Sampling Techniques

Research Instrument

Validity of the Instrument

Reliability of the Instrument

Administration of the Instrument

Method of Data Analysis.

Design of the study

This study adopted a descriptive survey research design. According to Jackson (2009), this research method is one in which participants answer questions administered through a questionnaire after the researcher describes the responses given. It was considered appropriate because it seeks to investigate a phenomenon across a particular population. Thus, it allowed the researcher to examine the subject of the study in a systematic and structured manner.

In the context of this research on Knowledge and Acceptability of Cervical Cancer Screening among Secondary School Teachers in Ikpoba Okha Local Government Area, the descriptive survey design was suitable because it enabled the collection of data directly from a defined group; secondary school teachers, regarding their awareness, understanding, perceptions, and willingness to undergo cervical cancer screening. By using this design, the researcher could gather quantifiable information that reflects the prevailing level of knowledge and the extent of acceptance of cervical cancer screening within the target population, thereby providing an evidence-based understanding of the situation.

Population of the Study

The population of the study comprises of 290 female teachers from the 20 public junior secondary schools in Ikpoba Okha Local Government Area, Edo State. (Source: School Support Services, State Universal Basic Education Board, Ministry of Education, Benin City, Edo State, 2025). The target population comprises of female secondary school teachers from across all public secondary schools in Ikpoba Okha Local Government Area. The population distribution is shown in table 1 below;

Table 1: Number of Schools and Female Teachers Population.

S/N	SCHOOLS	POPULATION OF TEACHERS
1	Aduwawa Jnr. Sec.	19
2	Agbomoba Jnr. Sec	6
3	Ajoki Jnr. Sec.	4
4	Army Day Jnr. Sec.	19
5	Edion Jnr. Sec.	6
6	Idogbo Jnr. Sec.	22
7	Itohan Jnr. Sec.	20
8	Niger Jnr. Sec.	22
9	Oguola Jnr. Sec.	7
10	Oka Jnr. Sec.	13
11	Osemwende Jnr. Sec.	22
12	Ozolua Jnr. Sec.	5
13	Queen Ede Jnr. Sec.	19
14	Rubber Research Jnr. Sec.	4

15	St. Maria Goretti Jnr. Sec	30
16	Ugiomo Jnr. Sec	18
17	Umelu Jnr. Sec.	8
18	Urora Jnr. Sec.	23
19	Ute Jnr. Sec.	5
20	Western Boys Jnr. Sec.	18
	TOTAL	290

Source: School Support Services, State Universal Basic Education Board, Ministry of Education, Benin City, Edo State.

Sample and Sampling Technique

The sample for this study was a total of one hundred and forty five (145) female secondary school teachers selected to represent the total number of female secondary school teachers in Ikpoba Okha Local Government Area. The proportionate sampling technique was adopted to select 50% from each of the twenty schools in Ikpoba Okha Local Government Area. This gave a total of one hundred and forty five (145) respondents. The convenience sampling technique was used to select respondents for the study, the respondents that are willing, available and also accessible to the researcher.

Table 2: Sample and Sampling Technique

SCHOOLS	NO OF FEMALE TEACHERS	NO OF SAMPLED TEACHERS (50%)
Aduwawa Jnr. Sec.	19	9
Agbomoba Jnr. Sec	6	3
Ajoki Jnr. Sec.	4	2
Army Day Jnr. Sec.	19	9

Edion Jnr. Sec.	6	3
Idogbo Jnr. Sec.	22	11
Itohan Jnr. Sec.	20	10
Niger Jnr. Sec.	22	11
Oguola Jnr. Sec.	7	4
Oka Jnr. Sec.	13	6
Osemwende Jnr. Sec.	22	11
Ozolua Jnr. Sec.	5	4
Queen Ede Jnr. Sec.	19	9
Rubber Research Jnr. Sec.	4	2
St. Maria Goretti Jnr. Sec.	30	15
Ugiomo Jnr. Sec.	18	9
Umelu Jnr. Sec.	8	4
Urora Jnr. Sec.	23	11
Ute Jnr. Sec.	5	3
Western Boys Jnr. Sec.	18	9
TOTAL	290	145

Research Instrument

The Instrument for this study is a self-constructed questionnaire designed by the researcher after a thorough review of related literature consisting of 31 items used to elicit information from respondents. The questionnaire was divided into four sections. Section A measures demographic data and consist of seven (5) items, Section B measures knowledge of cervical cancer and it's screening methods and consist of eight (9) items , Section C measures the factors influencing the

acceptability of screening, consisting eight (6) items, while Section D measures the role of health education in improving knowledge and acceptability of cervical cancer screening and consists of seven (7) items, related to the research questions. A four point scoring scale drawn along the modified Likert summated rating scale for measurement will be adopted.

Validity of Instrument

The instrument was validated by the researcher's supervisor and two other experts in the department of Health, Safety and Environmental Education (HSE). Their suggestions and corrections was incorporated in the final document.

Reliability of the Instrument

The reliability of the Instrument was established using test-retest method of estimating reliability. This was involve giving copies of the instrument to 20 female teachers outside the population of the study. After a time lapse of two weeks, the same instrument was administered to the same respondents. Data generated from the two administration was subjected to Pearson Product Moment Correlation Coefficient . A coefficient of 0.70 was obtained and considered reliable for the instrument.

Administration of the Instrument

The instrument was administered by the researcher, with the aid of two (2) research assistants in each school. Respondent were briefed about the objective of the research and the completed questionnaire was personally retrieved by the researcher immediately to ensure high return rate.

Method of Data Analysis

In analyzing the data, descriptive statistics of mean, standard deviation, frequency count and percentage was used.

CHAPTER FOUR

PRESENTATION OF RESULTS AND DISCUSSION OF FINDINGS

This chapter deals with the presentation, analysis and interpretation of findings based on the data collected from respondents in relation to the research questions guiding the study.

Research Question 1: What is the level of knowledge about cervical cancer and its screening methods among secondary school teachers in Ikpoba Okha Local Government Area?

Table 1: Knowledge of Cervical Cancer and its screening methods

S/N	Level of Knowledge	Frequency (n)	Percentage (%)
1	Low Knowledge	33	22.75
2	Moderate Knowledge	50	34.49
2	High Knowledge	62	42.76
	Total	145	100%

Table 1 represents the descriptive statistics on the knowledge of cervical cancer and its screening methods among school teachers, from the table, it was found out that 22.75% have low knowledge of cervical cancer and its screening methods, 34.49% have moderate knowledge, while 42.76% have high knowledge of cervical cancer and its screening methods.

From the table above, it was found out that majority of secondary school teachers in Ikpoba Okha Local Government Area of Edo State have high knowledge of cervical cancer and its screening methods.

Research Question 2: What factors influence the acceptability of cervical cancer screening among secondary school teachers in Ikpoba Okha Local Government Area?

Table 2: Factors influencing the acceptability of cervical cancer screening

S/N	ITEMS	SA (%)	A (%)	D (%)	SD (%)	MEAN	S.D	TOTAL (%)
1	My cultural beliefs plays a significant role in shaping my decision regarding whether or not to undergo cervical cancer screening.	28 19%	58 40%	44 30%	15 11%	2.68	.091	145 (100%)
2.	My religious principles and spiritual convictions limits my willingness to undergo cervical cancer screening.	31 21%	38 26%	54 37%	22 16%	2.54	.991	145 (100%)
3.	Fear and anxiety about receiving an unfavorable screening result prevents me from undertaking cervical cancer screening.	28 19%	59 41%	48 33%	10 7%	2.72	.852	145 (100%)
4.	I would be more willing to undergo screening if I receive encouragement from my partner or spouse.	34 23%	87 60%	22 15%	2 2%	3.05	.663	145 (100%)
5.	The financial cost associated with cervical cancer screening influences my decision in whether or not to access such services.	36 25%	74 51%	31 21%	4 3%	2.98	.758	145 (100%)
6.	The distance to health facilities offering cervical cancer screening affects my willingness to participate in the procedure.	30 21%	69 48%	37 26%	8 5%	2.84	.815	145 (100%)
GRAND TOTAL						2.80		

Table 2 represents the factors influencing the acceptability of cervical cancer screening among secondary school teachers, from the table above, it was found out that respondents accepted the statement “My cultural beliefs plays a significant role in shaping my decision regarding whether or not to undergo cervical cancer screening” with a mean score of 2.68, respondents accepted the statement “My religious principles and spiritual convictions limits my willingness to undergo cervical cancer screening” with a mean score of 2.54, respondents accepted the statement “Fear and anxiety about receiving an unfavorable screening result prevents me from undertaking cervical cancer screening’ with a mean score of 2.72, respondents accepted the statement “I would be more willing to undergo screening if I receive encouragement from my partner or spouse” with a mean score of 3.05, respondents accepted the statement “The financial cost associated with cervical cancer screening influences my decision in whether or not to access such services” with a mean score of 2.98, and lastly, respondents accepted the statement “The distance to health facilities offering cervical cancer screening affects my willingness to participate in the procedure” with a mean score of 2.84.

Based on the data collected and analyzed, it was found out that the total mean is 2.80, which is above 2.50, the benchmark mean for making decisions, therefore, it was found out that factors influencing the acceptability of cervical screening among secondary school teachers in Ikpoba Okha LGA of Edo state includes, cultural background, religious beliefs, fear and anxiety, encouragement from partner or spouse, access to screening services and distance to health facilities.

Research question 3: How does the educational background of secondary school teachers in Ikpoba Okha Local Government Area impact their knowledge and acceptability of cervical cancer screening?

Table 3: Impact of Educational level on knowledge of cervical cancer and its screening methods

Educational Knowledge Cross Tabulation

		KNOWLEDGE			Total
		Low	Moderate	High	
EDUCATIONAL LEVEL	NCE	7	4	6	17
	B.Ed/B.S c	19	32	36	87
	M.Ed/ M.Sc	7	13	16	36
	Ph.d	0	1	4	5
	Total	33	50	62	145

Table 3 represents the impact of educational level on knowledge of cervical cancer and its screening methods, from the table above, it was found out that Majority of NCE holders (7) have low knowledge of cervical cancer and its screening methods, majority of B.Ed/B.Sc holders (36) have high knowledge of Cervical cancer and its screening methods, majority of M.Ed/M.Sc holders have high knowledge and lastly, majority of Ph.d holders (4) have high knowledge of cervical cancer and its screening methods.

Based on the data, it was found out that educational level has a positive impact on knowledge of cervical cancer and its screening methods. As knowledge tends to increase with higher educational status.

Research Question 4: What role do health education initiatives play in improving knowledge and acceptability of cervical cancer screening among secondary school teachers in Ikpoba Okha Local Government Area?

Table 4: Role of Health Education in Improving Knowledge and Acceptability of Cervical Cancer Screening.

S/N	ITEMS	SA (%)	A (%)	D (%)	SD (%)	MEAN	S.D	TOTAL (%)
1	Health education contributes to increased awareness of cervical cancer screening.	70 48%	59 41%	16 11%	0 0%	3.37	.675	145 (100%)
2.	I have received training or information on cervical cancer screening in my school.	23 16%	54 37%	57 39%	11 8%	2.61	.842	145 (100%)
3.	I am more likely to undergo screening after receiving health education.	47 32%	71 49%	24 17%	3 2%	3.12	.749	145 (100%)
4.	Peer-to-peer education can enhance cervical cancer screening rates.	43 30%	79 54%	23 16%	0 0%	3.14	.662	145 (100%)
5.	Media campaigns are effective tools for promoting awareness of cervical cancer screening.	60 42%	67 46%	16 11%	2 1%	3.28	.710	145 (100%)
6.	School-based workshops can improve cervical cancer screening practices.	42 29%	73 50%	27 19%	3 2%	3.06	.746	145 (100%)
7.	Health education on cervical cancer should be included in teacher training programmes	67 46%	64 44%	12 8%	2 1%	3.35	.691	145 (100%)
GRAND TOTAL						3.13		

Table 4 represents the role of health education in improving knowledge and acceptability of cervical cancer screening. From the table above, it was found out that majority of respondents accepted the statement “Health education contributes to increased awareness of cervical cancer screening” with a mean score of 3.37, respondents accepted the statement “I have received

training or information on cervical cancer screening in my school” with a mean score of 2.61, respondents accepted the statement “I am more likely to undergo screening after receiving health education” with a mean score of 3.12, respondents accepted the statement “Peer-to-peer education can enhance cervical cancer screening rates” with a mean score of 3.14, respondents accepted the statement “Media campaigns are effective tools for promoting awareness of cervical cancer screening” with a mean score of 3.28, respondents accepted the statement “School-based workshops can improve cervical cancer screening practices” with a mean score of 3.06, and lastly, respondents accepted the statement “Health education on cervical cancer should be included in teacher training programmes” with a mean score of 3.35.

Based on the table, it was found out that the average mean is 3.13, which is higher than the benchmark mean of 2.50 used for making decisions. Therefore, it was found out that roles of Health Education in improving knowledge and acceptability of cervical cancer screening includes: increasing awareness and knowledge through provision of training and information, educational media campaigns, and school based workshops.

Discussion of Findings

The purpose of the study is to assess the knowledge and acceptability of cervical cancer screening among secondary school teachers in Ikpoba Okha Local Government Area, Edo State. From the data collected and analyzed, it was found out that majority of secondary school teachers in Ikpoba Okha Local Government Area of Edo State have high knowledge of cervical cancer and its screening methods. This is in line with the findings of the study carried out by Ezem (2007), who reported that knowledge of cervical cancer among female teachers in Eastern Nigeria was relatively high due to exposure to health information through educational institutions. Similarly, Nwaneri and Osuala (2019) found that women with tertiary education, particularly teachers, had better knowledge of cervical cancer and screening than women in non-educational occupations. However, despite high knowledge levels, awareness does not always translate into screening practice, as noted by Udigwe (2006), who revealed that even among health workers, screening uptake remained low despite good knowledge. This implies that while secondary school teachers in the present study demonstrated commendable awareness, continued education and motivation are required to translate knowledge into preventive practice.

It was also found out that factors influencing the acceptability of cervical screening among secondary school teachers in Ikpoba Okha LGA of Edo State include cultural background, religious beliefs, fear and anxiety, encouragement from partner or spouse, access to screening services, and distance to health facilities. This is in corroboration with the findings of the study carried out by Ndikom and Ofi (2012), who reported that cultural norms, fear of results, and religious restrictions were significant barriers to cervical cancer screening among women in southwestern Nigeria. Likewise, Awodele et al. (2011) observed that misconceptions, low risk perception, and fear of pain discouraged women from undergoing screening. In addition, Wright et al. (2019) emphasized that spousal influence and social support play crucial roles in determining screening uptake, particularly in patriarchal societies such as Nigeria. Similar findings by Eze et al. (2013) revealed that the cost of screening and proximity to health facilities were major determinants of participation in cervical cancer screening programs. These findings align with the present study, highlighting the diverse socio-cultural and economic factors that influence women's willingness to participate in preventive health services.

Furthermore, it was found out that educational level has a positive impact on knowledge of cervical cancer and its screening methods; knowledge tends to increase with higher educational status. This is in line with the findings of the study carried out by Hyacinth et al. (2012), which demonstrated that women with higher education were more likely to possess adequate knowledge and positive attitudes toward cervical cancer screening. Similarly, Nwobodo and Malami (2005) reported that literacy level is a strong predictor of awareness and utilization of cervical screening services in Nigeria. Educated women are more likely to have access to health information, interpret it correctly, and make informed health decisions. This finding is further supported by Obisesan et al. (2020), who concluded that education significantly enhances women's comprehension of health risks and preventive behaviors, thereby influencing screening acceptability and practice.

Lastly, it was found out that the roles of health education in improving knowledge and acceptability of cervical cancer screening include increasing awareness and knowledge through provision of training and information, educational media campaigns, and school-based workshops. This agrees with the findings of Anorlu (2008), who stated that targeted health education programs are essential for improving awareness and encouraging regular screening

among women. Similarly, Binka et al. (2019) found that media campaigns and community-based sensitization significantly improved participation in cervical cancer prevention programs. In the same vein, Ezechi et al. (2013) observed that health education interventions within schools and workplaces contributed to improved knowledge and willingness to undergo screening. The inclusion of cervical cancer education in teacher training curricula, as indicated in this study, will further enhance teachers' roles as agents of health promotion within their communities.

Overall, the findings of this study underscore the importance of education, cultural sensitivity, and health promotion initiatives in enhancing knowledge and screening acceptance among women, particularly teachers who serve as role models in society.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

This chapter has to do with the summary, conclusion and recommendations based on the findings.

Summary

The purpose of this study was to assess the knowledge and acceptability of cervical cancer screening among secondary school teachers in Ikpoba Okha Local Government Area, Edo State. To achieve the purpose of the study, four (4) research questions were raised and important literature related to cervical cancer were clearly discussed. The descriptive research design was used for this study and the study population consisted of 145 female teachers from the 20 public junior secondary schools in Ikpoba Okha Local Government Area, Edo State. The proportionate sampling technique was adopted to select 50% from each of the twenty schools in Ikpoba Okha Local Government Area. This gave a total of one hundred and forty five (145) respondents. The instrument used for data collection was a well-structured close-ended questionnaire with twenty two (22) items. The questionnaire was validated by the project supervisor and two other lecturers in the Department of Health, Safety and Environmental Education. The test retest reliability method was used to establish the reliability of the questionnaire. A total of one hundred and forty five (145) questionnaires were administered to the sample and data collected was analyzed using frequency count, percentage mean, and standard deviation.

Findings

Based on the data collected and analyzed, the findings of the study revealed that:

1. Majority of secondary school teachers in Ikpoba Okha Local Government Area of Edo State have high knowledge of cervical cancer and its screening methods
2. Factors influencing the acceptability of cervical screening among secondary school teachers in Ikpoba Okha LGA of Edo State include cultural background, religious beliefs, fear and anxiety, encouragement from partner or spouse, access to screening services, and distance to health facilities.
3. Educational level has a positive impact on knowledge of cervical cancer and its screening methods; knowledge tends to increase with higher educational status.

4. Roles of health education in improving knowledge and acceptability of cervical cancer screening include increasing awareness and knowledge through provision of training and information, educational media campaigns, and school-based workshops.

Conclusion

This study assessed the knowledge and acceptability of cervical cancer screening among secondary school teachers in Ikpoba Okha Local Government Area, Edo State. Findings showed that most teachers had high knowledge of cervical cancer and its screening methods, with education level positively influencing awareness and acceptance. However, factors such as cultural and religious beliefs, fear, cost, and distance to health facilities hindered screening uptake. Health education was found to play a vital role in improving awareness and willingness to screen through training, media campaigns, and school-based programs. In conclusion, while knowledge levels are high, sustained education, better access, and culturally sensitive interventions are needed to enhance screening participation and reduce cervical cancer burden.

Recommendations

Based on the findings, the researcher made the following recommendations:

6. Since most teachers demonstrated high knowledge of cervical cancer and its screening methods, the Ministry of Education should sustain and expand school-based awareness programs to maintain and improve this knowledge through periodic health seminars and campaigns.
7. As cultural beliefs, religion, fear, cost, and distance were found to influence screening acceptability, government and health agencies should implement community-based outreach and subsidized mobile screening services to address these barriers and enhance accessibility.
8. Because educational level positively impacts knowledge and acceptance of cervical cancer screening, cervical cancer education should be incorporated into teacher training curricula and continuous professional development programs.
9. Given that health education initiatives significantly improve knowledge and willingness to undergo screening, regular media campaigns and school-based workshops should be intensified to promote awareness and encourage participation in cervical cancer screening.

Suggestions for Further Studies

- Factors influencing the knowledge and attitudes towards cervical cancer prevention among female residents in Ikpoba Okha LGA of Edo State.
- Impact of public Health Education on knowledge and attitudes of female residents in Ikpoba Okha LGA of Edo State towards cervical cancer prevention
- Prevalence of cervical cancer among female residents in Ikpoba Okha LGA of Edo State.

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APPENDIX

DEPARTMENT OF HEALTH, SAFETY AND ENVIRONMENTAL EDUCATION

FACULTY OF EDUCATION, UNIVERSITY OF BENIN,

BENIN CITY, EDO STATE.

QUESTIONNAIRE

Dear Respondents,

I, Ereyi-Usoh Divine Osayamen, a student of the above named department is conducting a research on "Knowledge and Acceptability of Cervical Cancer Screening among Secondary School Teachers in Ikpoba Okha Local Government Area, Edo State".

INSTRUCTION: This questionnaire is designed to get your view on the aforementioned subject matter, you are kindly requested to fill the questionnaire. All information gathered shall be used purely for research purposes and shall be treated with utmost confidentiality. Indicate your opinion by a tick (✓) in the appropriate column that represent your category.

SECTION A: Demographic Data

(Tick [✓] the appropriate option)

Age:

20-29 30-39 40-49 50 and above

Marital Status:

Single Married Divorced Widowed Separated

Religion:

Christainity Islam African Traditional Others (specify) _____

Educational Qualification:

NCE B.Ed/B.Sc M.Ed/ M.Sc Ph.d

(c) Cause severe bleeding []

(d) Always cause pain. []

5. Which of these is a common screening method for cervical cancer?

(a) Blood test []

(b) Pap smear. []

(c) Ultrasound []

(d) X-ray. []

6. The main purpose of cervical cancer screening is to:

(a) Detect abnormalities early before cancer develops []

(b) Cure cancer completely []

(c) Increase fertility []

(d) Prevent all STDs. []

7. Which of the following can help prevent cervical cancer?

(a) HPV vaccine []

(b) Malaria vaccine []

(c) Antibiotics []

(d) Vitamin supplements. []

8. Cervical cancer can be:

(a) Preventable and treatable if detected early []

(b) Only treated in advanced stages []

(c) Never prevented []

(d) Only treated with herbs. []

9. Do you know where cervical cancer screening services are available in your locality?

(a) Yes, I know

(b) No, I don't know

(c) Not sure

SECTION C: Factors Influencing Acceptability of Screening

(Tick [✓] the option that best applies to you)

S/N	ITEMS	SA	A	D	SD
10	My cultural beliefs plays a significant role in shaping my decision regarding whether or not to undergo cervical cancer screening.				
11	My religious principles and spiritual convictions limits my willingness to undergo cervical cancer screening.				
12	Fear and anxiety about receiving an unfavorable screening result prevents me from undertaking cervical cancer screening.				
13	I would be more willing to undergo screening if I receive encouragement from my partner or spouse.				
14	The financial cost associated with cervical cancer screening influences my decision in whether or not				

	to access such services.				
15	The distance to health facilities offering cervical cancer screening affects my willingness to participate in the procedure.				

SECTION D: Role of Health Education in Improving Knowledge and Acceptability of Cervical Cancer Screening.

(Tick [✓] the option that best applies to you)

S/N	ITEMS	SA	A	D	SD
16	Health education contributes to increased awareness of cervical cancer screening.				
17	I have received training or information on cervical cancer screening in my school.				
18	I am more likely to undergo screening after receiving health education.				
19	Peer-to-peer education can enhance cervical cancer screening rates.				
20	Media campaigns are effective tools for promoting awareness of cervical cancer screening.				
21	School-based workshops can improve cervical				

	cancer screening practices.				
22	Health education on cervical cancer should be included in teacher training programmes				