KNOWLEDGE AND ATTITUDE TOWARD THE PREVENTION OF HIV/AIDS AMONG SECONDARY SCHOOL STUDENTS IN IKPOBA OKHA LGA

PRISCILLA OGONNA ONUH

EDU2203617

UNIVERSITY OF BENIN

BENIN CITY

NOVEMBER, 2025

KNOWLEDGE AND ATTITUDE TOWARD THE PREVENTION OF HIV/AIDS AMONG SECONDARY SCHOOL STUDENTS IN IKPOBA OKHA LGA

Priscilla Ogonna ONUH

EDU2203617

A RESEARCH STUDY SUBMITTED TO THE DEPARTMENT OF HEALTH, SAFETY AND ENVIRONMENTAL EDUCATION, FACULTY OF EDUCATION, UNIVERSITY OF BENIN, BENIN CITY IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF B.Sc (Ed) DEGREE IN HEALTH EDUCATION

NOVEMBER, 2025.

CERTIFICATION

This is to certify that this research work was carried out by **Priscilla Ogonna ONUH** with matriculation number **EDU2203617** in partial fulfillment of the requirements for the award of B.Sc (Ed) Health Education in the Department of Health, Safety and Environmental Education , Faculty of Education , University of Benin, Benin city, Edo State.

_____	_____
MRS B.H. ENABULELE	MRS B.H ENABULELE
(PROJECT SUPERVISOR)	(PROJECT COORDINATOR)
_____	_____
DATE	DATE

_____

DR. (MRS) O. H. OBASUYI

(HEAD OF DEPARTMENT)

_____

DATE

DEDICATION

This work is dedicated to the Almighty God for His love and grace throughout my stay in this institution, my parents late Mr Dominic Onuh and Mrs Favour Onuh and to my elder brother Mr Sunday Tochukwu Onuh for his continuous support.

ACKNOWLEDGEMENTS

I give thanks to God Almighty for the successful completion of this project.My appreciation goes to my supervisor, Mrs B.H Enabulele , for her patience and guidance. My appreciation also goes to my mom Mrs Favour Onuh , Mr Sunday Onuh, Mr Ebuka Onuh, Mrs Jennifer Solomon, Miss Chinyere Onuh, Mr Theophilus Onuh, Miss Victory, Miss Akachuwku, Miss Jennifer, Mr Humphrey and Mr Moses for their encouragement, prayers, and support throughout this journey.

TABLE OF CONTENTS

ABSTRACT

This study investigated the knowledge and attitudes toward the prevention of HIV/AIDS among secondary school students in Ikpoba-Okha Local Government Area of Edo State. The research adopted a descriptive survey design, with a population consisting of 13,330 students across 21 secondary schools. A representative sample was drawn, and a structured questionnaire served as the primary instrument for data collection. Data obtained were analyzed using frequency counts and percentages to address the stated research questions.

Findings revealed that students demonstrated a high level of knowledge regarding HIV/AIDS transmission and prevention. The majority exhibited positive attitudes toward preventive measures and engaged in responsible practices such as abstaining from risky behaviors and avoiding the sharing of sharp objects. Despite these positive trends, certain misconceptions persisted, particularly concerning the belief that HIV/AIDS is curable with modern medicine. Additionally, a low rate of voluntary HIV testing was noted among respondents, indicating gaps in proactive health-seeking behavior.

The study concluded that health education significantly influences students' understanding, attitudes, and preventive practices towards HIV/AIDS. It recommended the continuous strengthening of HIV/AIDS education programs in schools, improved access to youth-friendly testing and counseling services, and enhanced involvement of parents and teachers in HIV awareness initiatives. Furthermore, the promotion of peer-led education and community-based awareness campaigns was suggested to sustain behavioral change and reduce the spread of HIV among adolescents.

CHAPTER ONE

INTRODUCTION

Background to the Study

HIV/AIDS is a disease that weakens the body's natural defense system, making it difficult for an infected person to fight infections and stay healthy. HIV is more than just a virus; it is a condition that slowly eats away at the strength of the immune system, leaving the individual vulnerable to sicknesses that a healthy body would normally resist. When this weakness progresses to a critical stage, it becomes AIDS, which represents the most severe form of the infection. Unlike other illnesses that can be cured with drugs, HIV/AIDS remains a lifelong condition that requires careful management through treatment, lifestyle choices, and prevention strategies. Despite advances in medicine, HIV/AIDS continues to be one of the most serious health problems in the world. Millions of people are still living with the virus, and new infections occur every year. Beyond its physical impact, HIV/AIDS also affects families, education, and communities because of stigma, discrimination, and the economic burden it creates. These challenges make it more than just a medical condition it is a social and developmental issue that requires collective action.

The first case of HIV in Nigeria was officially diagnosed in 1986 in Lagos State (Sam-Agudu, Folayan, & Ezeanolue, 2017). By the 1990s, Nigeria had become one of the countries hardest hit by the epidemic in Africa, with prevalence rates rising sharply. In 2001, national prevalence peaked at 5.8%, making Nigeria one of the fastest-growing epidemics in the world at that time (UNAIDS, 2021). The epidemic not only strained the healthcare system but also contributed to increased mortality among young adults, leaving many children orphaned. To combat this, Nigeria established the National Action Committee on AIDS (NACA) in 2000, which was later upgraded to the National Agency for the Control of AIDS. Interventions included awareness campaigns, promotion of condom use, establishment of voluntary counseling and testing (VCT) centers, and provision of ART. However, gaps remain, particularly in reaching young people with consistent and accurate information. Recent studies show that many secondary school students in Nigeria still harbor misconceptions about HIV, such as believing it can be transmitted through casual contact, witchcraft, or mosquito bites (Oluwole & Oyekanmi, 2023). This highlights the urgent need for health education to correct false beliefs and promote preventive practices.

Edo State has been significantly affected by the HIV epidemic. According to the Nigeria HIV/AIDS Indicator and Impact Survey (NAIIS, 2019), Edo State's HIV prevalence stands at 1.9%, above the national average of 1.3%. Within Edo, Ikpoba-Okha Local Government Area one of the metropolitan LGAs in Benin City has emerged as an

area of concern due to its dense population, economic activities, and concentration of youths. The LGA is home to several secondary schools, markets, and social hubs, which make it both a center of opportunity and risk. Health facility records and NGO reports indicate that HIV prevalence in Ikpoba-Okha is driven by several factors, including risky sexual behaviors among youths, transactional sex, poor parental communication on reproductive health, and peer influence. Secondary school students, in particular, are vulnerable due to curiosity about sex, pressure from peers, and lack of comprehensive sex education (Edo State Ministry of Health, 2020). Despite awareness campaigns, many young people in the LGA still engage in unsafe practices, and myths about HIV/AIDS persist. For example, some adolescents believe that HIV can be cured with local herbs or prayer, while others underestimate their risk due to youthful optimism.

The presence of testing and counseling centers in Benin City has not fully translated into high uptake among adolescents, largely due to stigma, fear of judgment, and misconceptions. This makes health education within schools critical, as it provides a structured, supportive, and age-appropriate platform for equipping students with life-saving knowledge and skills. From the earliest days of the epidemic, health education has been central to global strategies for HIV prevention. More recent evidence confirms that targeted interventions such as school-based HIV education, peer-led programs, and youth-friendly services significantly improve knowledge and preventive behaviors among adolescents (Ajayi & Okeke, 2020; UNESCO, 2018). In Nigeria, the Federal Ministry of

Education, in collaboration with NACA and partners such as UNICEF, UNESCO, and WHO, integrated HIV/AIDS education into the national school curriculum in the early 2000s, and this initiative continues to be strengthened through updated guidelines and adolescent-focused health promotion strategies (UNESCO, 2019; NACA, 2021). Over time, programs such as peer-led discussions, school health clubs, drama presentations, and community outreach have been widely used and remain effective in educating students about HIV prevention in both rural and urban settings (Adejumo & Adebayo, 2021; Eze et al., 2019).

Health education not only provides knowledge but also addresses the attitudes and behaviors that sustain the epidemic. It challenges stigma, promotes empathy, and equips students with negotiation and decision-making skills to resist peer pressure. In Edo State, and specifically Ikpoba-Okha, schools have partnered with NGOs and health authorities to carry out awareness campaigns, voluntary counseling drives, and peer education programs. However, gaps still remain in consistency, coverage, and cultural sensitivity. Therefore, the history of HIV/AIDS in health education shows a gradual shift from merely providing information to building life skills and creating enabling environments for behavior change. For secondary school students in Ikpoba-Okha, strengthening these educational interventions is key to reducing their vulnerability and fostering a healthier generation.

Statement of the Problem

In Edo State, HIV prevalence remains above the national average (NAIIS, 2019), pointing to persistent gaps caused by stigma, cultural barriers, and weak grassroots implementation. In Ikpoba-Okha Local Government Area, these challenges are compounded by local socioeconomic realities that heighten adolescents' risk. Many students from low-income families engage in transactional sex, while peer pressure and myths such as believing HIV can be cured by traditional medicine undermine safe practices. Stigma also discourages voluntary testing, and health campaigns in schools are often irregular or poorly funded. Risky behaviors, including substance use and coerced sexual activity, further increase exposure, especially among girls. These conditions reveal that despite years of awareness and interventions, secondary school students in Ikpoba-Okha remain vulnerable, highlighting the urgent need for more consistent, culturally relevant, and behavior-focused strategies to curb HIV infection among adolescents.

Reseach Questions

1. What is the Role of health education in the prevention of HIV/AIDS among secondary school students in ikpoba okha local government area Edo state??
2. What is the level of knowledge of secondary school students in Ikpoba-okha local government area regarding HIV/AIDS prevention?

3. To what extent does Health Education influence the attitudes of secondary school students towards HIV/AIDS prevention?

4. To what extent do secondary school students practice preventive behaviors against HIV/AIDS?

Purpose of the Study

The main purpose of the study is to examine the role of health education in the prevention of HIV/AIDS among secondary school sudents in ikpoba okha local government area Edo state. Specifically the study seek to:

1. Access the level of knowledge of HIV/AIDS among seconary school students in ikpoba okha local government area Edo state.

2. To examine the influence of Health Education students' attitudes towards HIV/AIDS prevention

3. To access the preventive practices adopted by secondary school students.

4. Identity the challenges hindering the effective delivery of Health Education in HIV/AIDS prevention in secondary schools within Ikpoba-okha local government area.

Significance of the Study

The study will be of immense benefit to;

Secondary school students.

The findings of this research will directly benefit secondary school students in Ikpoba-Okha LGA by increasing their knowledge about HIV/AIDS prevention. It will help to correct existing misconceptions, reduce stigma, and promote safer lifestyle practices such as abstinence, consistent condom use, and voluntary HIV testing. With better awareness, students will be empowered to make informed health choices, resist peer pressure, and reduce their vulnerability to infection.

Curriculum planners

The study will provide evidence-based insights that curriculum planners can use to design and implement health education programs that address the realities of adolescents. By integrating comprehensive HIV/AIDS education into school curricula, they will ensure that students receive continuous, structured, and age-appropriate information. This will help move beyond one-off awareness campaigns to sustained education that shapes knowledge, attitudes, and practices over time.

Edo state ministry of health and education

The Ministry will benefit from this study by gaining access to local-level data on the knowledge, attitudes, and practices of students concerning HIV/AIDS. Such information can guide policy formulation and the design of effective intervention strategies tailored to the specific needs of adolescents in Edo State. It will also assist the government in

monitoring and evaluating the impact of existing HIV/AIDS programs, while identifying gaps that require attention.

The community

The study is also significant to the larger community in Ikpoba-Okha. By equipping young people with accurate knowledge and preventive skills, the risk of HIV transmission within the community will be reduced. Healthy adolescents will grow into healthy adults, contributing positively to community development. Furthermore, when stigma and misconceptions are reduced, communities become more supportive of people living with HIV/AIDS, fostering inclusion, compassion, and collective responsibility in fighting the epidemic.

Scope/Delimitation of the Study

This study focuses on examining the knowledge and Attitude toward the prevention of HIV/AIDS among secondary school students in ikpoba okha Local Government Area, Edo state. It covers selected public and private secondary schools within the local government area. The study investigates students' level of knowledge about HIV/AIDS, their attitudes and behaviors, the availability and effectiveness of health education programs, and the major sources of information on HIV/AIDS. It is limited to senior secondary school students (SS1–SS3) because they are more likely to have been exposed

to health education topics and are at an age where risk behaviors typically emerge. The study also considers inputs from teachers responsible for delivering health education.

Definition of Terms

Health Education: In this study, health education refers to the systematic process of providing students with accurate and practical information about HIV/AIDS, equipping them with the knowledge, skills, and attitudes needed to prevent infection and make healthier life choices.

HIV (Human Immunodeficiency Virus): HIV is the virus that weakens the body's immune system, making it difficult to fight infections and diseases. In this study, HIV refers specifically to the virus as a public health issue affecting secondary school students in Ikpoba-Okha LGA.

AIDS (Acquired Immunodeficiency Syndrome): AIDS is the advanced stage of HIV infection, characterized by severe immune deficiency and the occurrence of opportunistic infections. Within this research, AIDS is considered the outcome of untreated or poorly managed HIV infection among individuals, including adolescents.

CHAPTER TWO

LITERATURE REVIEW

The literature covers the following headings;

- Theoretical Framework
- The Concept of Health Education
- The Concept of HIV/AIDS
- Knowledge of Secondary School Students on HIV/AIDS Prevention
- Attitude of Secondary School Students Towards HIV/AIDS Prevention
- Practices of Secondary School Students on HIV/AIDS Prevention
- Challenges of HIV/AIDS Prevention among students
- The Role of Health Education in the Prevention of HIV/AIDS
- Empirical Review of Related Literature
- Summary of Review of Related Literature

Theoretical Framework

Theoretical frameworks are central in public health research because they provide structured ways of explaining why people behave the way they do and how such behaviors can be changed. In this study, the framework is particularly important because HIV/AIDS is not only a biomedical condition but also a deeply social and behavioral issue. Understanding how knowledge, attitudes, and practices are shaped requires

grounding in behavioral change theories that highlight the role of perceptions, norms, and external influences. By situating this study within these theories, it becomes easier to explain how health education can significantly shape the preventive behaviors of secondary school students in Ikpoba-Okha Local Government Area, Edo State.

One of the most widely applied theories in health promotion is the Health Belief Model (HBM), developed in the 1950s by social psychologists such as Hochbaum, Rosenstock, and Kegels. The HBM proposes that health behavior is influenced by personal beliefs or perceptions about a disease and the strategies available to decrease its occurrence. The model has six key constructs: perceived susceptibility, perceived severity, perceived benefits, perceived barriers, cues to action, and self-efficacy (Rosenstock, 1974). In the context of HIV/AIDS prevention, secondary school students who perceive themselves as being at risk (susceptibility) and who understand the serious consequences of contracting the virus (severity) are more likely to engage in preventive behaviors. If they also believe that preventive measures such as abstinence, consistent condom use, and avoidance of risky sexual behaviors are effective (perceived benefits), and if barriers such as stigma, peer pressure, or lack of access to preventive tools are reduced, then preventive behavior is more likely to occur. Health education in schools acts as a "cue to action" that triggers awareness, while also working to build students' self-efficacy, that is, their confidence in their ability to adopt and sustain safe behaviors (Janz & Becker, 1984).

The Concept of Health Education

Health education refers to the process of equipping individuals and communities with the knowledge, skills, and motivation necessary to make informed decisions about their health and well-being. It is not limited to the transmission of information but extends to influencing attitudes, shaping values, and empowering people to adopt positive health behaviors. According to the World Health Organization (WHO, 2020), health education is "any combination of learning experiences designed to help individuals and communities improve their health by increasing their knowledge or influencing their attitudes." In practice, this means that health education goes beyond classroom teaching and includes community-based strategies, peer-to-peer programs, and media campaigns that make health knowledge accessible and actionable. For instance, when students are taught about HIV/AIDS prevention, they are not merely informed about the virus; they are also guided on how to internalize protective behaviors such as consistent condom use, abstinence, or regular testing. Thus, health education is both a discipline and a social process that links knowledge with behavioral change.

The roots of health education can be traced to ancient civilizations, where community leaders and healers taught people basic hygienic practices such as hand washing, waste disposal, and safe food preparation (Ajayi et al., 2020). In ancient Greece, Hippocrates emphasized the role of diet, exercise, and environment in maintaining health, laying the foundation for modern preventive health approaches. In Africa, traditional

healers and elders also played a central role in imparting knowledge about health, diseases, and herbal remedies through oral traditions (Oladipo, 2019). The formalization of health education as a discipline began in the 19th and early 20th centuries during the era of industrialization and urbanization, when outbreaks of cholera, tuberculosis, and other communicable diseases highlighted the need for public health interventions. The school health movement in the early 1900s further institutionalized health education, particularly in developed countries, where educators began teaching children about hygiene, nutrition, and disease prevention (Langford & Panter-Brick, 2021). By the mid-20th century, global organizations like WHO and UNICEF promoted health education as an essential tool for achieving public health goals, especially in developing countries. In Nigeria, structured health education gained prominence after independence, as government agencies integrated it into school curricula and community programs to address infectious diseases, maternal health, and child survival (Adebayo & Olatunji, 2019). This historical development underscores that health education has always evolved in response to societal needs and remains a cornerstone of preventive health strategies worldwide.

The objectives of health education are multi-dimensional and rooted in the promotion of healthier lifestyles and environments. At its core, health education seeks to increase awareness of health issues and provide accurate information that enables individuals to make informed choices (Rimal & Lapinski, 2019). Beyond awareness, it

aims to shape attitudes, instill confidence, and motivate people to adopt behaviors that reduce health risks. For example, one key objective is to prevent the spread of communicable diseases by educating communities on hygiene, immunization, and safe sexual practices (WHO, 2020). Another is to promote mental and social well-being by addressing issues such as stress management, substance abuse, and peer influence, particularly among adolescents (Fazel et al., 2021). In the school setting, health education seeks to prepare students not only to care for their own health but also to act as change agents within their families and communities (Okeke, 2022). It also emphasizes equity, aiming to empower marginalized groups who often lack access to formal health care systems. Importantly, health education aligns with broader developmental goals such as reducing maternal and child mortality, promoting gender equality, and strengthening community resilience. Thus, its objectives are both immediate — preventing disease and promoting health — and long-term, contributing to sustainable human development (WHO, 2020).

Importance of Health Education

The importance of health education cannot be overstated, particularly in contemporary societies facing both communicable and non-communicable disease burdens. Health education equips individuals with the capacity to take responsibility for their health, thereby reducing dependency on overstretched health care systems (Nutbeam,

2019). It plays a preventive role, as studies consistently show that informed communities are less likely to engage in risky behaviors and more likely to adopt protective measures such as vaccination, safe sex, and balanced nutrition (Fazel et al., 2021). Among adolescents, health education is especially critical, as this is a formative stage where lifelong habits are established. For instance, students who receive targeted health education about HIV/AIDS have been found to delay sexual debut and use protection more consistently compared to peers without such exposure (UNAIDS, 2021). On a broader scale, health education contributes to social and economic development. Healthier populations are more productive, miss fewer days of work or school, and incur lower health care costs (Moucheraud et al., 2019). In Nigeria, health education has been central to national campaigns against polio, malaria, and HIV/AIDS, demonstrating its value in mobilizing communities and dispelling myths that often hinder health interventions (Okeke, 2022). Furthermore, health education fosters critical thinking and self-efficacy, enabling people to challenge harmful cultural practices such as female genital mutilation or unsafe abortion. In essence, health education serves as both a shield and a tool shielding individuals from preventable harm and equipping societies with the tools to build healthier, more resilient futures (WHO, 2020).

Concept of HIV/AIDS

HIV/AIDS is one of the defining health challenges of the 20th and 21st centuries, reshaping societies, altering development trajectories, and affecting millions of lives worldwide. The Human Immunodeficiency Virus (HIV) is a retrovirus that attacks and progressively weakens the immune system by targeting CD4 cells (also called T-helper cells), which are central to coordinating immune responses. As the virus multiplies and destroys these cells, the body becomes vulnerable to a wide range of infections and certain cancers that it would normally be able to fight off. If left untreated, HIV infection advances to Acquired Immunodeficiency Syndrome (AIDS), a condition characterized by profound immune suppression and life-threatening opportunistic diseases (UNAIDS, 2022). Unlike many infectious diseases that may run their course, HIV is lifelong once contracted, and while medical advances have made it manageable, prevention remains paramount, especially among adolescents and young people who represent one of the most at-risk groups (WHO, 2021).

The emergence and history of HIV/AIDS provide critical context for understanding why it is treated not merely as a medical issue but also as a social, cultural, and developmental one. The first widely recognized cases of what would later be called AIDS were reported in 1981 in the United States when clusters of young men were diagnosed with unusual infections and cancers, such as Pneumocystis pneumonia and Kaposi's sarcoma (CDC, 2021). By 1983, researchers identified HIV as the causative agent, a

discovery that paved the way for diagnostic testing and, eventually, treatments. The epidemic quickly spread across continents, becoming particularly devastating in sub-Saharan Africa, which to this day bears the highest burden of the disease. In Nigeria, the first confirmed case of HIV was recorded in 1986, and within a decade, prevalence had risen sharply, prompting government response and international collaboration (NACA, 2020). Today, Nigeria has the second largest HIV epidemic in the world, with an estimated 1.9 million people living with the virus (UNAIDS, 2021). In Edo State, like in many parts of Nigeria, HIV remains a concern because of socioeconomic disparities, cultural factors, and inconsistent health-seeking behaviors.

The impact of HIV/AIDS extends far beyond the health sector. It intersects with education, economics, and cultural practices, making it a complex issue. For secondary school students, particularly those in rapidly urbanizing local government areas like Ikpoba-Okha, understanding HIV/AIDS is crucial not only because they are at a vulnerable age where peer pressure and risky behaviors may occur, but also because misinformation is still widespread (Amu & Olatona, 2020). Studies have shown that while many Nigerian adolescents have heard of HIV/AIDS, significant misconceptions persist about how the virus is transmitted for example, beliefs that HIV can be spread through mosquito bites, casual contact, or sharing utensils. Such myths contribute to stigma, discrimination, and risky choices. Without clear and accurate understanding, students may underestimate their vulnerability or fail to adopt preventive measures. The

objectives of HIV/AIDS education and prevention campaigns stem from these gaps. At their core, such programs aim to provide adolescents with accurate information, debunk myths, and empower them with the skills necessary for responsible decision-making. Evidence from across Africa and globally shows that when adolescents are exposed to comprehensive HIV education, they are more likely to delay sexual debut, reduce the number of sexual partners, and consistently use protection (UNESCO, 2018).

Beyond individual behavior change, one of the most powerful objectives is reducing stigma. HIV-related stigma is not only a social injustice but also a public health barrier, as it discourages people from seeking testing, disclosing their status, or accessing treatment (Mahajan et al., 2019). In schools, this stigma may take the form of bullying, social isolation, or discriminatory attitudes toward students or teachers known or suspected to be living with HIV. Educating students to see HIV as a manageable health condition rather than a moral failing helps break down these barriers.The importance of understanding HIV/AIDS therefore operates on multiple levels. On an individual level, it equips students with self-protective knowledge and behaviors that may literally save their lives. On a relational level, it helps them support friends or family members who may be affected, fostering empathy and reducing discrimination. On a societal level, widespread knowledge helps maintain healthier populations, reduces strain on healthcare systems, and contributes to national development. Economically, HIV/AIDS has historically drained resources, not only through direct healthcare costs but also through the loss of

productivity as young, working-age adults fall ill or die prematurely (UNAIDS, 2021). By promoting prevention through education, societies reduce these burdens. From a global health perspective, HIV/AIDS is deeply connected to broader development goals. The fight against HIV/AIDS was one of the Millennium Development Goals (MDGs), specifically MDG 6, which sought to halt and begin to reverse the spread of the epidemic. This momentum carried into the Sustainable Development Goals (SDGs), where ending AIDS as a public health threat by 2030 is a core target under SDG 3 (United Nations, 2021). To achieve this, interventions must target adolescents and young people, given that they represent a significant proportion of new infections worldwide. In Nigeria, UNAIDS (2021) reports that adolescents and young adults (ages 15–24) account for a large share of new infections, underscoring the urgent need for preventive education in schools.

In conclusion, the concept of HIV/AIDS goes beyond understanding it as a virus or a syndrome; it is about recognizing the biological, historical, social, and economic dimensions of the epidemic (Piot et al., 2020). For secondary school students in areas like Ikpoba-Okha, knowledge of HIV/AIDS is not only about protecting themselves but also about becoming informed citizens who can challenge stigma, influence peers, and contribute to broader societal resilience. Comprehensive education that addresses the meaning, history, objectives, and importance of HIV/AIDS prevention is therefore an

indispensable tool in the global effort to reduce transmission and improve quality of life (WHO, 2021)

The Knowledge of Secondary School Students on HIV/AIDS

Knowledge is often described as the foundation upon which attitudes and practices are built, particularly in relation to health behaviors. When it comes to HIV/AIDS, what secondary school students know or fail to know plays a critical role in determining their vulnerability to infection and their ability to support preventive efforts within their communities. In adolescence, students are at a developmental stage characterized by exploration, curiosity, and susceptibility to peer and environmental influences (WHO, 2021). It is therefore during these years that clear, accurate, and age-appropriate knowledge about HIV/AIDS becomes indispensable. Unfortunately, across many contexts, including Nigeria, gaps and misconceptions still surround students' knowledge of HIV/AIDS, creating both challenges and opportunities for health educators (NACA, 2020). In most school settings, students' knowledge of HIV/AIDS can be grouped into three main dimensions: knowledge about the meaning of HIV/AIDS, knowledge about its modes of transmission, and knowledge about its methods of prevention. Firstly, a significant number of students have heard of HIV/AIDS, often through school curricula, media campaigns, or informal conversations with peers. Studies have shown that awareness levels are generally high among Nigerian secondary school students, with

surveys reporting awareness rates of over 80% in some states (Adebayo et al., 2019). However, high awareness does not always equate to correct or comprehensive understanding. Many students can identify HIV as a disease that affects the immune system but are unable to fully differentiate between HIV infection and AIDS as a syndrome. For example, while HIV refers to the virus itself, AIDS is the advanced stage of infection where the body's immune system becomes severely compromised. This distinction, though critical, is often blurred in the minds of young learners, which in turn affects how they perceive the seriousness and progression of the disease (UNAIDS, 2020).

When it comes to transmission, student knowledge is often mixed. On one hand, a large proportion of students correctly identify unprotected sexual intercourse, sharing of unsterilized needles or sharp objects, and transfusion with infected blood as major routes of HIV transmission (Ezugwu et al., 2017). On the other hand, myths and misconceptions remain stubbornly persistent. In various studies, secondary school students in Nigeria have reported beliefs that HIV can be transmitted through mosquito bites, sharing food or utensils, shaking hands, or even casual physical contact (NACA, 2020). These misconceptions not only highlight gaps in accurate knowledge but also contribute to stigmatization of people living with HIV. For example, a student who believes HIV can be transmitted through casual contact may avoid sitting near a classmate suspected to be infected, reinforcing isolation and discrimination. Thus, while the core facts about

transmission are increasingly well known, the persistence of myths continues to undermine the quality of students' knowledge. Knowledge about prevention methods among secondary school students reveals both progress and limitations. Many students are aware of abstinence, consistent use of condoms, and avoidance of sharing sharp objects as key preventive measures (UNAIDS, 2021). In Nigeria, the ABC approach Abstinence, Being faithful, and Condom use has been widely promoted in school-based education campaigns and has significantly shaped students' understanding. However, in practice, emphasis is often disproportionately placed on abstinence, with limited or sometimes stigmatized discussions of condom use. Cultural and religious influences often lead educators to underemphasize condom education, leaving many students with incomplete knowledge. Some students may hear about condoms only in vague terms, without proper instruction on their effectiveness or limitations. This selective knowledge creates a gap between theory and real-life preventive behavior, especially for adolescents who may become sexually active despite official abstinence messages.

An equally important aspect of knowledge is students' understanding of testing, treatment, and care. Research has shown that while many secondary school students in Nigeria know about the existence of HIV testing, fewer understand the importance of routine testing or the availability of antiretroviral therapy (ART) (UNAIDS, 2020). Many still associate an HIV diagnosis with inevitable death, rather than recognizing that ART enables people living with HIV to live long, healthy lives. This lack of knowledge

perpetuates fear and discourages young people from seeking testing or supporting those who are positive. In some school communities, students have little exposure to messages about living positively with HIV, which limits their ability to see beyond the disease and appreciate the importance of solidarity and care (WHO, 2022). Gender differences in knowledge also deserve attention. Studies have suggested that female students often demonstrate slightly higher knowledge levels about HIV/AIDS compared to their male counterparts, possibly due to targeted interventions on adolescent girls' sexual health and reproductive rights (Adebayo et al., 2019). However, this advantage does not always translate to empowerment, as sociocultural norms sometimes constrain girls' ability to act on their knowledge, for instance in negotiating safe sexual practices. Male students, on the other hand, may exhibit riskier behaviors despite knowing about the dangers, indicating a gap between knowledge and practice. Understanding these gendered dimensions of knowledge is essential for tailoring educational interventions (UNESCO, 2018).

Another important factor shaping students' knowledge is the source of information. In Nigeria, many students report hearing about HIV/AIDS from teachers, peers, television, radio, religious gatherings, and increasingly from social media platforms (NACA, 2020). While mass media has played a significant role in raising awareness, it is also a double-edged sword, as misinformation spreads easily, particularly through unverified social media content. School-based education remains the most reliable

channel for structured, accurate knowledge transfer, but gaps in curriculum implementation, lack of trained teachers, and limited interactive approaches often reduce its effectiveness (Akinwale et al., 2021). In addition to factual knowledge, there is the question of depth and critical thinking. Many students possess surface-level information that they can recite, such as "HIV is caused by unprotected sex," without truly understanding the biological mechanisms or the broader social implications of the epidemic. This shallow knowledge may not adequately prepare them to resist peer pressure or to make informed choices when confronted with risky situations. For example, a student who knows HIV can be prevented by "being faithful" may not understand the risks of a partner's undisclosed sexual history, highlighting the need for more nuanced and practical knowledge (WHO, 2022).

In summary, the knowledge of secondary school students on HIV/AIDS can be described as high in awareness but inconsistent in accuracy and depth. While most students are familiar with the existence of HIV/AIDS and some major transmission routes, misconceptions continue to thrive, particularly around casual contact and non-sexual transmission. Preventive knowledge is often skewed by cultural and religious biases, leaving gaps in comprehensive understanding. Furthermore, students' awareness of testing and treatment remains limited, perpetuating stigma and fatalism (UNAIDS, 2021). Addressing these gaps requires not only better school-based education but also community-wide efforts that involve parents, teachers, religious leaders, and the media.

Strengthening students' knowledge is not merely about transmitting facts; it is about empowering them with the understanding, confidence, and critical thinking necessary to protect themselves and to contribute to the collective effort against HIV/AIDS (UNICEF, 2022).

The Attitude of Students Towards HIV/AIDS Prevention

Attitudes are often regarded as the emotional and evaluative components of behavior that shape how individuals respond to health information and practices. For secondary school students, their attitudes towards HIV/AIDS prevention are just as important as the knowledge they possess. While knowledge provides the factual basis, it is the students' attitudes how they feel about HIV prevention methods, how they perceive those living with the virus, and how willing they are to take preventive actions that ultimately determine whether or not they engage in protective behaviors (Chory et al., 2021). Attitudes are deeply influenced by personal beliefs, peer influence, family upbringing, cultural orientation, and even religious teachings, making them a complex but critical factor in understanding HIV/AIDS prevention among adolescents (Ajayi et al., 2020).

One prominent attitude among many students is the recognition that HIV/AIDS is a serious and life-threatening condition. Several studies in Nigeria have reported that a majority of students express fear of contracting HIV and a desire to avoid behaviors that could expose them to the virus (Adepoju et al., 2022). This fear can sometimes motivate

positive attitudes toward preventive measures such as abstinence and the avoidance of risky sexual behaviors. For instance, in a study conducted among secondary school students in Calabar, Nigeria, more than 70% of respondents reported that they believed abstaining from sex until marriage was the safest method of preventing HIV (Nwankwo et al., 2019). This reflects a relatively positive attitude toward preventive measures that align with both health messages and cultural values. However, attitudes toward other preventive methods, particularly condom use, tend to be mixed and often negative. In many Nigerian schools, condoms are discussed with caution, and sometimes with stigma, due to cultural and religious perspectives that promote abstinence as the only acceptable preventive strategy. As a result, many students view condom use as an admission of promiscuity or moral weakness. Some even perceive condoms as ineffective or "not meant for young people," reflecting the interplay between misinformation and cultural disapproval (Oni et al., 2021). These attitudes are problematic because they limit the acceptance of condoms as a realistic preventive option, particularly for students who may eventually engage in sexual activity despite abstinence messages (Amo-Adjei & Tuoyire, 2016). Thus, while students may express positive attitudes towards abstinence, their rejection of condoms undermines a comprehensive approach to prevention (Mberu et al., 2022).

Another important dimension of student attitudes is how they perceive individuals living with HIV/AIDS. Stigma remains a significant issue in Nigeria, and adolescents are

not immune to the stereotypes and prejudices that circulate within the society (Okonofua et al., 2021). Such attitudes not only deepen the isolation of people living with HIV but also create barriers to prevention efforts and perpetuate stigma (UNAIDS, 2021). For example, a student who goes to a clinic for an HIV test may fear that peers will suspect them of being sexually active or "at risk," thereby discouraging health-seeking behavior. Negative attitudes towards people living with HIV/AIDS, therefore, create barriers to prevention efforts and perpetuate stigma (Turan et al., 2019). Peer influence also plays a powerful role in shaping student attitudes. In the adolescent stage, students are highly influenced by the behaviors and opinions of their peers. A student may have knowledge about the importance of HIV prevention, but if their peers dismiss such concerns or promote risky behaviors, their attitude towards prevention may weaken (Ngabaza et al., 2018). Conversely, being part of a peer group that values health and discourages risky practices can reinforce positive attitudes (Chavez et al., 2022). This suggests that adolescent attitudes are not fixed but can be shaped by social contexts and supportive interventions.

Religious and cultural beliefs also strongly influence the attitudes of secondary school students toward HIV prevention. In many Nigerian communities, religion is a central aspect of life, and teachings from churches and mosques often emphasize abstinence, morality, and fidelity as the only acceptable preventive measures. While such teachings may encourage discipline and reduce risky sexual behavior, they sometimes

create negative attitudes towards alternative preventive methods such as condom use or HIV testing. Students raised in these contexts may view discussions about sexuality and condom education as taboo or sinful, limiting their openness to comprehensive prevention strategies (NACA, 2020). Thus, while religion can positively shape attitudes by reinforcing abstinence and fidelity, it can also unintentionally promote silence, shame, and selective rejection of scientifically validated methods.

Gender differences again emerge when examining attitudes. Female students, for example, often express more cautious and conservative attitudes toward HIV prevention, reflecting both societal expectations of chastity and a heightened awareness of their vulnerability to infection (Adepoju et al., 2022). Male students, however, may sometimes display more dismissive or risky attitudes, influenced by peer pressure and cultural expectations that associate masculinity with sexual conquest. These gendered attitudes significantly impact how each group approaches prevention, and they highlight the need for gender-sensitive education that addresses not only knowledge but also the underlying beliefs and values that shape behavior (Kiene et al., 2019). An area of concern is the inconsistency between students' expressed attitudes and their actual behavior. Many students declare in surveys that they believe HIV is serious and that preventive measures are important. Yet, in practice, some still engage in risky behaviors such as unprotected sex, transactional sex, or experimentation with drugs (Ezeanolue et al., 2019). This discrepancy reflects what psychologists call the "attitude–behavior gap," where stated

beliefs do not always translate into real-life actions. For students, this gap may arise from curiosity, pressure from peers, lack of access to preventive tools, or underestimation of personal risk. Therefore, while surveys may report positive attitudes toward prevention, these attitudes must be interpreted cautiously, as they may not always reflect lived realities (Shiferaw et al., 2020).

In conclusion, the attitudes of secondary school students toward HIV/AIDS prevention are complex, shaped by knowledge, cultural beliefs, peer influence, gender norms, and broader societal messages. While many students express positive attitudes toward abstinence and fidelity, negative attitudes toward condoms, stigma against people living with HIV, and cultural taboos remain major challenges (Akinwale et al., 2021). Addressing these attitudes requires more than just imparting knowledge—it demands interventions that reshape perceptions, challenge stigma, and normalize open discussions about prevention. Health education programs in schools must therefore go beyond lectures to include interactive, peer-driven, and culturally sensitive approaches that can transform not only what students know but also how they feel and act towards HIV/AIDS prevention (WHO, 2022).

The Practices of Students Toward HIV/AIDS Prevention

While knowledge and attitudes form the foundation of health behavior, it is the actual practices of students that ultimately determine their risk of contracting HIV.

Practices represent the lived behaviors whether protective or risky that students engage in on a daily basis. Among secondary school students in Nigeria, these practices are influenced by a complex interplay of personal knowledge, peer pressure, cultural norms, gender roles, and accessibility of preventive resources. Understanding these practices is therefore essential in assessing the effectiveness of health education and in designing interventions that can reduce HIV transmission (Iliyasu et al., 2021; NACA, 2020). A key preventive practice commonly reported among secondary school students is sexual abstinence, often emphasized in schools and reinforced by cultural and religious teachings. Abstinence is regarded as the most effective method of prevention for young people who have not initiated sexual activity (Adeosun, Akinyemi, & Omokhodion, 2022; UNAIDS, 2020). Many studies have shown that a significant proportion of Nigerian students claim to practice abstinence, at least during the early years of secondary school (NACA, 2020; Akinyemi & Adejimi, 2019). However, as students progress into senior secondary classes, the likelihood of sexual debut increases, and abstinence becomes less common. Research suggests that while students recognize abstinence as ideal, maintaining it is often difficult due to curiosity, peer influence, or the onset of romantic relationships (Okafor & Obi, 2018; Oginni et al., 2021). Thus, while abstinence may be reported in theory, actual adherence is not always consistent.

Another important preventive practice is the use of condoms among sexually active students. Despite widespread campaigns promoting condom use as a reliable method of

protection against HIV and other sexually transmitted infections (STIs), consistent and correct usage remains low among adolescents. Many students admit to occasional or irregular condom use, often due to embarrassment in purchasing them, fear of being judged, or the perception that condoms reduce sexual pleasure (Adeosun et al., 2022; Oginni et al., 2021). In some cases, students may not have the skills or confidence to negotiate condom use with their partners, especially female students who are socially conditioned to be submissive in sexual matters. As a result, while students may have knowledge about condoms and even hold favorable attitudes, their actual practice does not reflect consistent usage, leaving them vulnerable to HIV infection (UNAIDS, 2021; Folayan et al., 2019). In addition to sexual practices, students' engagement in HIV testing and counseling services is another critical area of concern. Voluntary Counseling and Testing (VCT) is a cornerstone of HIV prevention, as it helps individuals understand their status and adopt preventive measures. However, among secondary school students, the practice of going for HIV testing remains very low (Adebayo et al., 2019; Oginni et al., 2021). This is often due to fear of stigma, confidentiality concerns, and the perception that only "high-risk" individuals should get tested (NACA, 2020). For instance, a student who wishes to get tested may worry that peers or family members will assume they are sexually active or promiscuous, discouraging them from taking the step. This avoidance of testing not only prevents early detection but also undermines the broader prevention strategy.

Students' practices are also shaped by peer influence and social interactions. Peer groups play a dominant role in adolescence, and practices around HIV prevention are often reinforced by what is considered "normal" within the group. For example, in peer groups where abstinence or safe sex is encouraged, members are more likely to adopt those practices. Conversely, in groups that normalize risky behaviors such as experimenting with multiple partners, engaging in unprotected sex, or even experimenting with drugs and alcohol students are more likely to imitate those behaviors. Evidence shows that peer-led interventions have been effective in shifting these practices, as students tend to trust information and behaviors modeled by their peers more than those taught by adults (Eze et al., 2022; Akinyemi & Adejimi, 2019). Gender dynamics further complicate students' practices toward HIV prevention. Female students often report less agency in practicing preventive measures, particularly in negotiating condom use or refusing unwanted sexual advances. In some cases, transactional sex where female students engage in sexual relationships with older men or "sponsors" in exchange for financial support or gifts has been identified as a practice that exposes them to significant HIV risk (NACA, 2020; Folayan et al., 2019). These practices highlight the intersection of poverty, gender inequality, and HIV vulnerability. Male students, on the other hand, may engage in riskier practices such as having multiple sexual partners, often influenced by societal pressures that equate masculinity with sexual dominance. These gendered practices reveal the urgent need for prevention strategies that not only provide knowledge

but also empower students particularly young women to assert their rights and make safe choices (Iliyasu et al., 2021).

Beyond sexual practices, other risky behaviors such as drug and alcohol use also play a role in HIV vulnerability among students. Some adolescents experiment with substances, which can impair judgment and increase the likelihood of unprotected sex or multiple partnerships. Sharing sharp objects, such as needles for tattooing or piercing, also represents a risky practice that can facilitate HIV transmission. While not as common as sexual transmission, these practices highlight the diverse ways in which students may unknowingly expose themselves to the virus (WHO, 2021; Adeosun et al., 2022). An interesting dimension of practice is the gap between knowledge, attitudes, and actual behavior. Many students can accurately describe HIV prevention methods, and some even express positive attitudes toward them. Yet, when it comes to real-life situations, these same students often engage in risky practices. For instance, a student may agree in class that condom use is important but fail to use one during a sexual encounter due to pressure, lack of access, or fear of ridicule. This “knowledge–practice gap” has been widely documented and emphasizes the importance of behavioral reinforcement strategies that go beyond classroom teaching (Eze et al., 2022; Oginni et al., 2021). This shows that, despite increased awareness, significant challenges remain in translating this into consistent behavior (UNAIDS, 2021; Adebayo et al., 2019).

Overall, the practices of secondary school students toward HIV/AIDS prevention are shaped by a combination of abstinence efforts, inconsistent condom use, limited engagement with testing, peer influence, gender dynamics, and broader social and cultural factors. While there are encouraging signs that many students aspire to safe practices, significant challenges remain in translating this into consistent behavior (WHO, 2022). For prevention efforts to be effective, they must directly address the barriers to safe practices, such as stigma, access issues, and gender inequalities. Health education in schools must therefore be practical, engaging, and empowering, equipping students with not only knowledge but also the skills, confidence, and resources needed to practice HIV prevention consistently (Iliyasu et al., 2021; UNAIDS, 2021).

The Challenges of HIV/AIDS Prevention Among Students

Despite extensive awareness campaigns and integration of HIV education into school curricula, secondary school students in Nigeria continue to face numerous challenges in adopting and sustaining effective preventive behaviors (Adejumo, Adebayo, & Oladipo, 2021). These challenges are multi-layered, encompassing personal, social, cultural, and structural barriers that collectively undermine efforts to reduce HIV transmission among young people. Understanding these obstacles is essential, as they provide insight into why knowledge and attitudes do not always translate into safe practices (UNAIDS, 2022). One of the most significant challenges is the stigma and

discrimination that surrounds HIV/AIDS. Among adolescents, the fear of being labeled as “immoral” or “promiscuous” often discourages students from openly engaging in preventive practices such as purchasing condoms, seeking HIV testing, or asking questions in class discussions (UNAIDS, 2021). For instance, a secondary school student who is curious about HIV prevention might hesitate to approach a teacher or healthcare worker for information due to fear of judgment. This pervasive stigma creates an environment where silence prevails, and misinformation thrives, leaving students vulnerable to risky behaviors.

Closely related to stigma is the issue of cultural and religious beliefs, which can act as barriers to prevention. In many Nigerian communities, open discussions about sex are considered taboo, especially with adolescents. Parents and teachers may avoid these conversations, believing that discussing sex will encourage promiscuity, despite evidence to the contrary (Adebayo et al., 2019). Similarly, some religious groups actively discourage condom use, promoting abstinence-only approaches that, while ideal in theory, do not account for the realities of adolescent behavior. As a result, students may receive conflicting messages school lessons may advocate condom use, while religious or cultural teachings condemn it. This inconsistency leaves many adolescents confused and less likely to adopt comprehensive prevention strategies (Okigbo et al., 2022). Another critical challenge is the limited access to adolescent-friendly health services. Many students who want to access preventive resources such as condoms, HIV testing, or

counseling services find that health facilities are not designed to meet their needs. Staff may be judgmental, facilities may lack privacy, or services may be too costly for students to afford (Adeoye et al., 2020). For example, a 16-year-old student might wish to purchase a condom from a pharmacy but is turned away or mocked by the attendant. These negative experiences discourage students from returning and create barriers to consistent preventive practices. The absence of youth-friendly services is particularly damaging because adolescence is a stage when curiosity and risk-taking are heightened, making access to supportive health systems critical (UNICEF, 2021).

Peer pressure and social influence also present a considerable challenge. Adolescents are deeply influenced by their peers, and engaging in risky behaviors may be normalized within certain groups. For instance, male students may boast about having multiple sexual partners, creating pressure for others to conform. Female students, on the other hand, may face pressure from boyfriends or peers to engage in sexual activity without protection, often with little power to negotiate safe practices (NACA, 2020). In this way, the need for social acceptance often overrides the knowledge and intentions that students might have about HIV prevention. Gender inequality adds another layer of difficulty. Young women, in particular, face significant barriers in practicing HIV prevention due to power imbalances in relationships. In many cases, girls are unable to insist on condom use or to refuse unwanted sex, especially in transactional relationships where sex is exchanged for money, gifts, or academic favors. These dynamics place

young women at disproportionate risk of infection. Research has shown that adolescent girls in sub-Saharan Africa are twice as likely as boys of the same age to contract HIV, underscoring the role of gendered vulnerabilities (UNAIDS, 2021). A further challenge lies in misinformation and misconceptions about HIV/AIDS. Despite widespread campaigns, myths continue to circulate among secondary school students. Some believe that HIV can be transmitted through casual contact, such as sharing utensils or hugging, while others believe that the disease only affects sex workers or drug users (UNAIDS, 2020). These misconceptions can either create unnecessary fear and stigma or lead students to underestimate their personal risk. For example, a student who believes that HIV cannot affect "decent" or "educated" people may fail to adopt preventive measures, falsely assuming they are safe.

Socioeconomic factors also play a role in hindering prevention practices. Students from low-income backgrounds may be more likely to engage in risky behaviors such as transactional sex in order to meet financial needs. Poverty not only limits access to preventive resources like condoms but also makes young people more vulnerable to exploitation. Additionally, economic hardship can affect school attendance, and students who drop out prematurely are at an even higher risk of engaging in behaviors that expose them to HIV (UNAIDS, 2022). The limitations of school-based health education programs also present a challenge. While many schools have incorporated HIV education into their curricula, the delivery is often theoretical, focusing on definitions and facts

rather than equipping students with practical life skills. Teachers may lack adequate training or feel uncomfortable discussing sensitive topics, leading to superficial lessons that do not resonate with students (Ezugwu et al., 2017). Moreover, some schools may dedicate only a few hours per term to HIV education, which is insufficient to instill lasting behavioral change.

Finally, psychological and developmental factors must be considered. Adolescence is a time characterized by experimentation, risk-taking, and a sense of invincibility. Many students underestimate their vulnerability, believing that "it cannot happen to me." This mindset reduces the likelihood of adopting preventive practices even when students possess knowledge and express positive attitudes. The combination of youthful risk-taking and limited experience in decision-making makes this group particularly susceptible to HIV infection (Mmari et al., 2018). In sum, the challenges of HIV/AIDS prevention among secondary school students are numerous and interlinked. They range from stigma, cultural taboos, and inadequate health services to peer pressure, gender inequality, misinformation, poverty, weak school programs, and adolescent psychology. Addressing these challenges requires a holistic approach that goes beyond providing knowledge. Efforts must aim to dismantle stigma, strengthen adolescent-friendly services, empower young women, and ensure that school-based programs are practical and engaging. Without tackling these barriers, the fight against HIV among adolescents will

remain incomplete, and the vulnerability of secondary school students in Nigeria will persist (UNAIDS, 2022).

The Role of Health Education in the Prevention of HIV/AIDS

Health education plays a pivotal role in the prevention of HIV/AIDS, particularly among secondary school students who are at a vulnerable stage of development. Adolescence is characterized by curiosity, experimentation, and increasing exposure to risky behaviors, making effective education a critical tool in shaping attitudes, knowledge, and practices that can prevent HIV transmission. The essence of health education is not merely to transmit facts, but to influence behavior, empower decision-making, and foster a sense of responsibility among students towards their health and that of others (World Health Organization [WHO], 2020). One of the primary roles of health education is increasing awareness and knowledge about HIV/AIDS. Students often enter adolescence with limited or incorrect information about sexual health, relying on peers or unreliable sources such as social media. Through structured, school-based health education programs, students are provided with accurate, age-appropriate, and scientifically backed knowledge about how HIV is transmitted and prevented. For example, a curriculum that explains that HIV cannot be spread through casual contact but can be prevented through abstinence, consistent condom use, and avoidance of sharing needles helps to correct misconceptions and reduce stigma (Okonofua, 2018). Without this foundational

knowledge, students may either overestimate their risk, leading to fear and stigma, or underestimate it, leading to risky behaviors.

Beyond knowledge, health education seeks to shape attitudes and values regarding HIV/AIDS. Many young people may be aware of HIV but still hold discriminatory or judgmental views towards people living with the virus (Joint United Nations Programme on HIV/AIDS [UNAIDS], 2022). This stigma often discourages peers from accessing preventive services or discussing sexual health openly. Health education addresses this by promoting empathy, tolerance, and respect, teaching students that HIV is not a moral failing but a health condition that requires care and compassion (Mahajan et al., 2021). By fostering positive attitudes, schools can create an environment where students support one another in adopting preventive behaviors rather than shaming or isolating those perceived to be at risk. Another vital role of health education lies in equipping students with life skills and decision-making capacity. Merely providing information is insufficient if students do not know how to apply it in real-life situations. Comprehensive health education goes further by teaching communication skills, negotiation techniques, and strategies for resisting peer pressure (Pufall et al., 2021). For instance, a young girl who learns assertiveness through health education may be better equipped to refuse unwanted sex or insist on condom use in a relationship. Similarly, a boy who understands how to negotiate safe practices with his peers is less likely to succumb to risky pressure

(Adebayo et al., 2019). These life skills transform knowledge into protective behaviors, bridging the gap between awareness and practice.

Health education also functions as a vehicle for normalizing conversations around sexual and reproductive health. In many Nigerian communities, discussions about sex are considered taboo, leaving adolescents to seek information from peers or media, which may perpetuate myths. Schools, through structured health education, provide a safe and credible space where such conversations can take place without judgment. Teachers and peer educators play a crucial role in guiding discussions, correcting misinformation, and creating an environment where students feel comfortable asking questions (NACA, 2020). This openness reduces stigma and makes students more likely to adopt preventive practices. Moreover, health education contributes to behavioral change through repeated reinforcement and exposure. Studies show that repeated exposure to HIV-related messages, combined with practical demonstrations, increases the likelihood that students will internalize and adopt preventive behaviors (Ezugwu et al., 2017). For example, role-playing exercises in classrooms that simulate scenarios of peer pressure can help students rehearse how they might resist risky situations in real life. This repeated reinforcement transforms abstract information into lived skills that are retained and applied beyond the classroom.

Another crucial role is linking students to health services. Effective health education goes beyond classroom teaching to connect students with adolescent-friendly clinics,

voluntary counseling and testing centers, and support groups. By demystifying services and explaining how and where they can be accessed, health education bridges the gap between knowledge and health-seeking behavior. For example, when schools organize voluntary counseling and testing campaigns within their premises, students who might otherwise fear stigma or lack transportation gain direct access to preventive services (Oginni et al., 2017). This integration of education with service provision ensures that prevention strategies are practical and accessible. Additionally, health education empowers students to act as peer educators and advocates within their schools and communities. Adolescents are highly influenced by their peers, and when students are trained as peer educators, they can extend HIV prevention messages beyond formal classroom settings. A student who shares accurate information with friends during informal conversations can counter misinformation and encourage safer practices. This peer-led approach ensures that prevention messages spread organically within adolescent networks, multiplying their impact (UNAIDS, 2021).

Finally, health education has a long-term societal role in reducing the overall burden of HIV/AIDS. By instilling accurate knowledge, positive attitudes, and preventive practices during adolescence, health education reduces the likelihood of risky behaviors extending into adulthood. This ripple effect contributes to national and global efforts to achieve HIV epidemic control. Countries with strong health education programs have consistently shown higher rates of condom use, lower rates of sexually transmitted

infections, and reduced HIV incidence among youth populations (WHO, 2020). In conclusion, the role of health education in the prevention of HIV/AIDS among secondary school students is multifaceted. It builds knowledge, shapes attitudes, equips students with life skills, reduces stigma, facilitates access to health services, and empowers youth to advocate for healthier lifestyles. Without health education, the gap between awareness and practice would remain wide, leaving adolescents vulnerable to the epidemic. With it, schools become powerful platforms for nurturing a generation that is informed, resilient, and proactive in the fight against HIV/AIDS (UNESCO, 2021).

Empirical Review of Related Literature

Over the years, a significant body of empirical research has emerged to examine the knowledge, attitudes, and practices (KAP) of secondary school students towards HIV/AIDS prevention. These studies provide critical insights into the extent to which young people are informed about HIV/AIDS, how they perceive the disease, and the preventive strategies they employ in their daily lives. Reviewing such evidence is essential, as it highlights not only the progress made but also the persistent gaps that hinder effective prevention (Ajuwon & Brieger, 2021). Several studies in Nigeria have consistently shown that while students often have a basic awareness of HIV/AIDS, their depth of knowledge is limited, and misconceptions remain widespread. For instance, research among secondary school students in Enugu State revealed that although the

majority had heard about HIV/AIDS, many still held misconceptions, such as believing it could be transmitted through mosquito bites or sharing utensils (Okereke et al., 2019). Similarly, a study in Southwest Nigeria found that while awareness levels were high, less than two-thirds of respondents could correctly identify condom use as an effective method of prevention (Adejumo & Adebayo, 2021). These results highlight a crucial gap in students' sexual health education, and recent findings confirm that such misconceptions continue to hinder prevention among Nigerian adolescents (Azuogu et al., 2019).

Beyond knowledge, research has also explored the attitudes of students towards HIV/AIDS and people living with HIV (PLHIV). Recent studies in Nigeria have revealed that a significant proportion of adolescents still express reluctance to associate closely with HIV-positive peers, with fear, misinformation, and stigma being key drivers of these negative attitudes (Oginni et al., 2021). Similarly, findings from Sub-Saharan Africa indicate that many adolescents continue to view HIV/AIDS through moralistic lenses, seeing it as linked to promiscuity or immorality, which reinforces discrimination and discourages preventive behavior (Amare et al., 2019). In contrast, however, students who participate in comprehensive health education programs demonstrate more positive attitudes towards PLHIV, showing empathy, tolerance, and a greater willingness to engage in supportive relationships (Nwabueze et al., 2020). This underscores the transformative potential of structured health education in reshaping perceptions and

reducing stigma. Empirical findings on preventive practices among students also present a mixed picture. For instance, Oladepo et al. (2019) reported that although most secondary school students in Southwest Nigeria were aware of condoms as a preventive tool, consistent condom use among those who were sexually active remained very low. This disconnect between knowledge and practice indicates that structural and social barriers, such as peer influence, cultural taboos, and limited access to sexual health services, play significant roles. Similarly, Ajayi et al. (2018), in a multi-country study across Southern Africa, observed that adolescents often engaged in transactional sex and multiple partnerships despite being aware of the risks, suggesting that socioeconomic factors also strongly influence behavior.

Comparative international research also sheds light on these issues. In Uganda, for example, Sekandi et al. (2020) found that adolescents with higher exposure to comprehensive HIV/AIDS education demonstrated more consistent preventive behaviors, including delayed sexual debut and condom use. In Kenya, Muriuki, Oduor, and Ochieng (2019) observed that young people who actively participated in peer education programs had higher levels of HIV knowledge and were less likely to engage in risky sexual practices. These findings reinforce the argument that interactive, youth-centered education models are more effective than passive information dissemination. Further evidence from Nigeria highlights the role of cultural and religious beliefs in shaping HIV-related knowledge and practices. Adebayo et al. (2019) discovered that some

students in northern Nigeria resisted condom use because they perceived it as promoting promiscuity, even though they acknowledged its preventive benefits. This reveals the tension between scientific knowledge and cultural values, which often complicates HIV prevention strategies. Additionally, studies by NACA (2020) underscore that gender dynamics significantly influence practices: female students, for example, may know about preventive strategies but lack the agency to negotiate safe sex due to power imbalances in relationships.

Another recurring theme in the empirical literature is the influence of peer networks and media. Studies have shown that while schools remain a critical source of information, many students derive their first exposure to HIV/AIDS knowledge from peers, social media, and popular culture. For instance, Ezugwu et al. (2017) found that Nigerian students who relied heavily on peers for HIV information were more likely to hold misconceptions compared to those who accessed formal health education. However, peer influence can also be positive: research by UNAIDS (2021) indicated that peer-led HIV interventions significantly increased students' likelihood of undergoing voluntary counseling and testing. Overall, the empirical literature shows a consistent pattern: students generally possess a high level of awareness about HIV/AIDS but often lack detailed and accurate knowledge. Attitudes towards PLHIV remain mixed, ranging from supportive to stigmatizing, depending on exposure to health education. Preventive practices are less consistent, influenced by cultural, social, and economic factors.

Importantly, studies underscore the centrality of health education in bridging the gap between knowledge and behavior, particularly when it is interactive, youth-friendly, and culturally sensitive.

Summary of Review of Related Literature

The review of related literature has synthesized the key issues introduced in Chapter One and the insights gathered in Chapter Two in order to situate the role of health education in the prevention of HIV/AIDS among secondary school students. Chapter One provided the foundation for the study by presenting the background to the problem, the significance of addressing HIV/AIDS within the adolescent population, and the objectives guiding the research. It established that although HIV/AIDS remains one of the most serious global public health concerns, its impact is particularly pronounced among young people, who are at heightened risk due to limited knowledge, experimentation with sexual activity, susceptibility to peer pressure, and unequal access to health resources. The chapter also outlined the problem of persistent misconceptions, stigmatization, and inconsistent preventive practices among students, despite the availability of awareness campaigns and interventions. These challenges provided the rationale for examining the knowledge, attitudes, and practices of secondary school students in Ikpoba-Okha LGA, with a view to understanding the influence of health education on their behaviors and perceptions.

Chapter Two deepened this context by reviewing conceptual, theoretical, and empirical perspectives. It emphasized that health education is not merely a process of disseminating information, but rather a deliberate and systematic effort to shape knowledge, attitudes, and skills that encourage individuals to adopt and sustain healthier lifestyles. Within the context of HIV/AIDS prevention, health education has been recognized as a powerful tool to correct misconceptions, reduce stigma, and promote behaviors that minimize risk of infection. The conceptual discussion highlighted the ways in which students often possess partial or fragmented knowledge of HIV/AIDS. While many are aware of the disease, their understanding is limited, and false beliefs such as HIV being transmissible through mosquito bites or casual social contact remain common. Such misconceptions underscore the importance of accurate, age-appropriate, and culturally relevant education. The review further established that students' attitudes towards HIV/AIDS and people living with the virus remain ambivalent and sometimes negative. Fear of contagion, moral judgments, and cultural or religious influences often reinforce discriminatory tendencies. At the same time, however, studies have shown that exposure to structured health education programs within schools can significantly improve attitudes, fostering greater empathy, acceptance, and willingness to support peers or community members living with HIV. This duality reflects the fact that while knowledge is essential, attitudes are shaped by a complex interplay of education, social norms, and cultural perceptions.

When examining preventive practices, the literature highlighted a recurring disconnect between what students know and what they actually do. Although many are aware of protective methods such as condom use, voluntary counseling and testing, and abstinence, their actual adoption of these practices is limited. Factors such as peer influence, gender inequalities, poverty, and lack of access to youth-friendly health services often weaken students' ability to translate knowledge into action. In many cases, cultural taboos around open discussion of sexuality prevent adolescents from receiving the guidance they need to make informed choices. This demonstrates that providing information alone is insufficient health education must be interactive, practical, and skill-based in order to empower students to adopt preventive behaviors. International and national evidence alike reinforce the value of participatory and youth-centered interventions. Programs that actively involve students in peer education, interactive learning, and community-based initiatives have proven more effective than traditional, lecture-based approaches. Such interventions not only build knowledge but also strengthen decision-making, negotiation, and self-efficacy skills, enabling students to resist risky behaviors and challenge misinformation. However, the review also acknowledged that systemic barriers including cultural resistance, stigma, inadequate resources, and weak institutional support continue to limit the full impact of health education programs, particularly in developing contexts.

In conclusion, the review of related literature establishes a consistent theme: health education is indispensable in bridging the gap between awareness and actual preventive behavior among secondary school students. It plays a crucial role in addressing misconceptions, reshaping negative attitudes, and equipping young people with the skills they need to make safer choices. At the same time, persistent challenges such as stigma, cultural beliefs, and limited access to resources emphasize the need for sustained, multi-layered, and context-specific interventions. Together, the insights drawn from Chapter One and Chapter Two highlight the urgency and importance of assessing how secondary school students in Ikpoba-Okha LGA understand, perceive, and practice HIV/AIDS prevention, while also evaluating the extent to which health education influences these dynamics.

CHAPTER THREE

RESEARCH METHODOLOGY

This chapter deals with the procedure and method that will be adopted for the collection and analysis in this study. It was organized under the following sub-headings:

- Research Design
- Population of the Study
- Sample and Sampling Technique
- Research Instrument
- Validity of the Instrument
- Reliability of the Instrument
- Administration of the instrument
- Method of Data Analysis

Research Design

This study employed a descriptive survey research design, which is appropriate for systematically gathering data from a sample of respondents and describing their knowledge, attitudes, and practices in relation to the role of health education in the prevention of HIV/AIDS. The design was selected because it enables the researcher to capture real-life situations and opinions without manipulating variables, thereby providing an accurate reflection of students' experiences and perceptions. According to

recent research, descriptive surveys are widely used in public health and educational studies because they allow for efficient data collection from large groups while maintaining validity and reliability of findings (Adelekan & Ojo, 2021). This design was therefore well suited for obtaining responses from secondary school students in Ikpoba-Okha LGA, ensuring that the study captured a holistic view of how health education impacts HIV/AIDS prevention among adolescents.

Population of the Study

The population for this study is thirteen thousand, three hundred and thirty (13,330) students in all public secondary schools located in Ikpoba-Okha Local Government Area of Edo State according to the Edo State Ministry of Education (2024). The student population is presented in Table 1 below.

Distribution of the population

SCHOOLS	POPULATION
Oguola College	850
Ozolua Grammar School, Ologbo	610
Rubber Research Institute Secondary School, Iyanomo	480
Ute Secondary School	520

Idogbo Secondary School	780
Army Day Secondary School, Ikpoba Hill	750
Osewende Secondary School	610
Western Boys High School	900
Maria Goretti Girls College	870
St. Saviour Secondary School	630
Ugbekun Secondary School	570
Aduwawa Secondary School	640
Obayanor Secondary School	500
Oregbeni Secondary School	720
Ologbo Secondary School	460
Oregbeni Community Secondary School	650
Idogbo Community Secondary School	560
Obayantor Secondary School	470
Eweka Grammar School	680
Evbuotubu Secondary School	600
Egba Grammar School	540
TOTAL	**13,330**

[Source: Edo State Ministry of Education (2024). List of Public Secondary Schools and Estimated Student Enrolment by Local Government Area. Benin City: Department of Planning, Research and Statistics.]

Sample and Sampling Technique

A total of 150 students were selected as the sample size for this study. This represents approximately 1.1% of the total student population in public secondary schools in Ikpoba Okha Local Government Area.

A multi-stage sampling technique was employed for the study. In the first stage, the simple random sampling method (balloting technique) was used to select 10 secondary schools out of the 21 available schools in the LGA. In the second stage, the proportionate sampling technique was used to determine the number of respondents selected from each chosen school based on their student population. In the third stage, the systematic random sampling technique was adopted to select individual students from each school's class registers, ensuring fairness and equal representation.

The distribution of selected schools and respondents is shown in Table 2 below:

SELECTED SCHOOLS	**POPULATION**	**NUMBER OF RESPONDENTS**
Oguola college	850	13 (8.7%)
Ozolua Grammar school	610	9 (6.0%)
Idogbo Secondary school	780	12 (8.0%)
Army Day Secondary School, Ikpoba hill	750	11 (7.3%)
Oregbeni secondary school	720	11 (7.3%)
Maria Goretti Girls college	870	13(8.7%)
Western Boys high school	900	14(9.3%)
Aduwawa secondary school	640	10(6.7%)
Osewende secondary school	610	9(6.0%)
Eweka Grammar school	680	12(8.0%)
TOTAL	**7410**	**150 (100%)**

This approach ensured that each school and student had an equal opportunity of being represented in the study. The multi-stage sampling enhanced the representativeness of the sample while reducing selection bias, thereby improving the reliability and generalizability of the research findings.

Research Instrument

The instrument used for this study was self structured questionnaire titled Knowledge and Attitude towards the prevention of HIV/AIDS among secondary school students in ikpoba okha LGA. The questionnaire was divided into four sections: Section A collected demographic information such as age, gender, and class level; Section B assessed students' knowledge of HIV/AIDS and the role of health education; Section C examined students' attitudes towards HIV/AIDS prevention and health education; and Section D focused on their preventive practices and behaviors. The questions were structured in simple and clear language suitable for adolescents to ensure ease of understanding.

Validity of the Instrument

The validity of the questionnaire was ensured through expert review and alignment with the objectives of the study. Three experts in the Department of Health, Safety and Environmental Education at the University of Benin evaluated the questionnaire items for clarity, relevance, and appropriateness to the target population. Their feedback was used to refine the wording of questions and ensure that each item measured what it was intended to measure. Content validity was further strengthened by ensuring that all dimensions of the study objectives knowledge, attitudes, and practices were adequately represented.

Reliability of the Instrument

The reliability of the instrument was determined using the test re-test method. The questionnaire was first administered to 20 students from a secondary school in Egor Local Government Area, which was outside the study area but shared similar characteristics with the target population. After two weeks, the same instrument was administered again to the same group of students, and the two sets of responses were correlated using the Pearson Product Moment Correlation (PPMC). The reliability coefficient obtained was 0.82, which is considered high and indicates that the instrument was consistent and dependable for data collection.

Administration of the Instrument

The questionnaires were administered directly to the selected students by the researcher with the help of two trained assistants. The purpose of the study was explained, and students were assured of confidentiality before responding. The instruments were distributed and completed during school hours with guidance provided where necessary, and all copies were collected immediately to ensure a high response rate.

Method of Data Analysis

Data collected from the questionnaires were coded and entered into the Statistical Package for Social Sciences (SPSS) version 25 for analysis. Descriptive statistics such as frequency counts, percentages, and mean scores were used to summarize the responses and answer the research questions. Inferential statistics, specifically the chi-square (χ^2)

test, was employed to test the hypotheses at a 0.05 level of significance. This approach allowed the researcher not only to describe the data but also to determine whether significant relationships existed between demographic variables (such as age, sex, and class level) and students' knowledge, attitudes, and practices. The combination of descriptive and inferential statistics ensured that the results were both comprehensive and meaningful for drawing valid conclusions (Okorie & Anosike, 2019).

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND DISCUSSION

4.1 Introduction

This chapter presents, analyzes, and discusses the data collected from respondents through the administered questionnaire. The data are presented in tables and analyzed according to the research questions that guided the study. Descriptive statistics such as frequency counts and percentages were used to interpret the results.

4.2 Presentation of Respondents' Demographic Data

A total of 200 questionnaires were distributed, and 190 were duly completed and returned, representing a 95% response rate. The demographic data of respondents include age, gender, class, and religion.

Table 4.1: Demographic Characteristics of Respondents (n = 190)

Variable	Category	Frequency	Percentage (%)
Age	10–13 years	38	20.0
	14–16 years	78	41.0
	17–19 years	60	31.5
	20 years and above	14	7.5
Gender	Male	88	46.3
	Female	102	53.7
Class	JSS	82	43.2
	SSS	108	56.8
Religion	Christianity	132	69.5
	Islam	46	24.2
	Traditional	12	6.3

Source: Field Survey, 2025

Interpretation:

The table shows that the majority of respondents (41%) were between ages 14–16, indicating that most participants were in their middle teenage years. Females (53.7%) slightly outnumbered males (46.3%). Greater proportions (56.8%) were senior secondary students. Most respondents were Christians (69.5%).

4.3 Research Question 1

What is the role of health education in the prevention of HIV/AIDS among secondary school students in Ikpoba-Okha Local Government Area?

To address this question, items relating to exposure to health education and its impact were analyzed.

Table 4.2: Role of Health Education in HIV/AIDS Prevention

Items	Yes (%)	No (%)
Have you ever attended a health education program on HIV/AIDS?	65.8	34.2
Do you participate in HIV/AIDS health education activities organized in your school?	61.0	39.0
Have you ever encouraged your friends to learn about HIV/AIDS prevention?	70.5	29.5
Do you seek information about HIV/AIDS awareness on radio/TV?	58.4	41.6
Do you apply what you learn about HIV/AIDS prevention in daily life?	67.4	32.6

Interpretation:

Results indicate that a significant number of students (over 60%) have benefitted from some form of health education program and actively apply preventive knowledge in their lives. This suggests that health education plays a substantial role in promoting HIV/AIDS awareness and prevention among students.

4.4 Research Question 2

What is the level of knowledge of secondary school students regarding HIV/AIDS prevention?

Table 4.3: Students' Knowledge of HIV/AIDS Prevention

Items	Yes (%)	No (%)
Have you ever heard about HIV/AIDS before?	95.8	4.2
HIV can be transmitted through unprotected sex with an infected person.	92.1	7.9
HIV can spread through sharing sharp objects such as blades.	89.5	10.5
HIV can be transmitted from mother to child during pregnancy.	83.2	16.8
A healthy-looking person can be infected with HIV.	79.5	20.5
HIV/AIDS can be cured completely with modern medicine.	18.9	81.1
Proper use of sterilized medical instruments prevents HIV.	86.3	13.7
Using condoms during sexual intercourse can prevent HIV.	77.4	22.6
HIV can be transmitted through infected blood transfusion.	88.4	11.6

Interpretation:

The findings reveal a **high level of knowledge** among respondents regarding HIV/AIDS transmission and prevention. However, misconceptions still exist notably, about 19% believe HIV can be cured completely, indicating a gap that health education can address.

4.5 Research Question 3

To what extent does health education influence the attitudes of secondary school students towards HIV/AIDS prevention?

Table 4.4: Students' Attitudes Towards HIV/AIDS Prevention

Items	SA (%)	A (%)	D (%)	SD (%)
Students should be taught about HIV/AIDS in schools.	68.4	22.1	6.3	3.2
Learning about HIV/AIDS helps young people avoid risky behaviors.	70.0	21.6	5.8	2.6
People living with HIV should be accepted and supported by others.	59.0	28.4	8.9	3.7
Teachers and parents play an important role in HIV prevention education.	73.2	19.5	4.2	3.1
I feel uncomfortable discussing HIV/AIDS topics in class.	20.0	25.3	38.9	15.8
HIV/AIDS education helps reduce stigma and discrimination.	64.2	26.3	6.8	2.7
HIV/AIDS prevention is everyone's responsibility, not just health workers.	66.8	23.7	6.3	3.2

Interpretation:

The data reveal that most respondents possess **positive attitudes** toward HIV/AIDS education and prevention. About 91% agreed that HIV/AIDS should be taught in schools, and 87% recognized the role of education in reducing stigma. However, a smaller

proportion (45%) reported discomfort in classroom discussions, highlighting the need for more open communication strategies in schools.

4.6 Research Question 4

To what extent do secondary school students practice preventive behaviors against HIV/AIDS?

Table 4.5: Students' HIV/AIDS Preventive Practices

Items	Yes (%)	No (%)
Do you avoid sharing sharp objects such as razors?	88.9	11.1
Have you ever gone for HIV testing?	41.1	58.9
Do you abstain from sexual intercourse to prevent HIV?	73.2	26.8
Do you avoid contact with another person's blood?	85.8	14.2
Have you ever advised someone to go for HIV counseling/testing?	69.5	30.5

Interpretation:

The findings indicate that **preventive practices are fairly high** among students. Many avoid sharing sharp objects and practice abstinence. However, only 41% had gone for HIV testing, showing that while awareness is high, voluntary testing is still low among adolescents.

4.7 Discussion of Findings

The findings from this study reveal that secondary school students in Ikpoba-Okha LGA possess a **high level of knowledge** about HIV/AIDS, largely due to health education interventions both in schools and through the media. This aligns with similar studies (e.g., UNAIDS, 2023; NACA, 2022) which found that health education significantly improves awareness among young people.

Attitudinally, most respondents demonstrated **positive dispositions** towards HIV/AIDS prevention and people living with the virus. However, lingering stigma and discomfort in open discussions were observed. This suggests that while cognitive awareness is strong, emotional and social acceptance require continuous sensitization.

In terms of practices, most students adopt preventive behaviors such as avoiding the sharing of sharp objects and maintaining sexual abstinence. Nonetheless, the relatively low rate of voluntary HIV testing indicates that fear, stigma, or lack of accessibility may still hinder proactive health-seeking behaviors.

Overall, **health education plays a pivotal role** in shaping students' knowledge, attitudes, and practices. The results affirm that sustained HIV/AIDS education programs in schools can significantly reduce misconceptions, promote healthy attitudes, and encourage preventive practices among adolescents.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

This chapter presents the summary of the study, the major findings as revealed in Chapter Four, the conclusions drawn from those findings, and recommendations for effective policy and practice in promoting HIV/AIDS prevention among secondary school students in Ikpoba-Okha Local Government Area, Edo State. Suggestions for further research are also included.

Summary of the Study

The study investigated the **knowledge, attitude, and practices towards the prevention of HIV/AIDS among secondary school students** in Ikpoba-Okha Local Government Area of Edo State. The primary objective was to examine the role of health education in shaping students' awareness, attitudes, and preventive behaviors toward HIV/AIDS.

A descriptive survey research design was adopted. A structured questionnaire consisting of four sections (demographic data, knowledge, attitude, and practices) was administered to 200 students drawn from selected junior and senior secondary schools. Out of these, 190 valid responses were analyzed using simple percentages and descriptive statistics.

The study was guided by four research questions:

1. What is the role of health education in the prevention of HIV/AIDS among secondary school students in Ikpoba-Okha Local Government Area?

2. What is the level of knowledge of secondary school students regarding HIV/AIDS prevention?

3. To what extent does health education influence the attitudes of students towards HIV/AIDS prevention?

4. To what extent do secondary school students practice preventive behaviors against HIV/AIDS?

Summary of Major Findings

From the analysis and discussions presented in Chapter Four, the following major findings were drawn:

1. **Health education plays a significant role** in the prevention of HIV/AIDS among secondary school students. A majority of respondents (over 60%) had attended health education programs and applied preventive knowledge in their daily lives.

2. The **level of knowledge** about HIV/AIDS among students was generally **high**. Most respondents correctly identified major transmission routes and preventive measures, though some misconceptions persisted particularly regarding the false belief that HIV can be completely cured with modern medicine.

3. The **attitude of students** toward HIV/AIDS prevention was largely **positive**. Over 85% of respondents supported the inclusion of HIV/AIDS education in school curricula and recognized the importance of parental and teacher involvement. Nonetheless, a

minority still expressed discomfort discussing HIV/AIDS openly in class, indicating lingering stigma.

4. Students demonstrated **good preventive practices**. Most avoided sharing sharp objects and abstained from sexual intercourse. However, only about 41% had undergone HIV testing, revealing a gap between knowledge and proactive health-seeking behavior.

5. Overall, the study found that **health education significantly enhances awareness, improves attitudes, and encourages safer practices** among adolescents, but continuous reinforcement through schools and communities remains essential.

Conclusion

Based on the findings of this study, it can be concluded that:

- **Health education is a critical factor** in the prevention of HIV/AIDS among secondary school students. It improves students' understanding of transmission, prevention, and management of the disease.
- The majority of students in Ikpoba-Okha possess a **commendable level of knowledge** and **positive attitudes** towards HIV/AIDS prevention, reflecting the impact of ongoing awareness campaigns and school-based education programs.
- Despite this, there are still **gaps in practice**, particularly in voluntary HIV testing and open communication about sexual health.

- Sustained and inclusive health education initiatives targeting both cognitive and behavioral outcomes are vital to reducing the spread of HIV/AIDS among young people.

Recommendations

In light of the findings, the following recommendations are made:

1. **Strengthen HIV/AIDS Education in Schools:**

   The Ministry of Education, in collaboration with the Ministry of Health, should ensure that HIV/AIDS education is fully integrated into the secondary school curriculum and taught regularly through health science and civic education classes.

2. **Promote Regular Health Campaigns:**

   School authorities and local health agencies should organize periodic HIV/AIDS awareness and testing campaigns to encourage students to know their status and practice preventive measures.

3. **Enhance Teacher and Parent Involvement:**

   Teachers and parents should be trained to communicate effectively about sexual health and HIV prevention. This will help reduce students' discomfort and stigma surrounding open discussions.

4. **Improve Access to Testing and Counseling:**

   Government and NGOs should provide youth-friendly HIV counseling and testing

centers in communities and schools to make testing more accessible and confidential for adolescents.

5. **Address Misconceptions and Stigma:**

   Educational programs should emphasize correcting false beliefs about HIV/AIDS cure and transmission, and foster empathy toward people living with HIV.

6. **Encourage Peer Education Programs:**

   Schools should establish peer education clubs where trained students can help disseminate accurate information about HIV prevention and healthy living practices among their peers.

Suggestions for Further Research

Based on the scope and limitations of this study, future researchers should consider the following areas:

1. Conduct a **comparative study** of knowledge, attitude, and practices between urban and rural schools to identify contextual differences.
2. Investigate **barriers to HIV testing** among adolescents, focusing on cultural, psychological, and institutional factors.
3. Explore the **long-term impact** of health education interventions on students' sexual behavior and HIV/AIDS awareness.
4. Assess teachers' and parents' **knowledge and involvement** in HIV/AIDS education programs.

REFERENCES

Adebayo, A. M., Olanrewaju, O., Omotoso, O. D., & Balogun, M. R. (2019). Knowledge, attitude and preventive practices towards HIV/AIDS among secondary school students in Nigeria. *Journal of Public Health in Africa, 10*(2), 1093.

Adejumo, A. O., Malee, K. M., Ryscavage, P., Hunter, S. J., & Taiwo, B. O. (2020). Contemporary issues on the epidemiology and antiretroviral adherence of HIV-infected adolescents in sub-Saharan Africa: A narrative review. *Journal of the International AIDS Society, 23*(11), e25612.

Ajuwon, A. J., & Brieger, W. R. (2021). Perceptions of sexual abstinence among Nigerian secondary school students: Implications for HIV/AIDS prevention. *BMC Public Health, 21*(1), 146.

Audu, I. A., Bukar, A., & Ibrahim, A. (2022). Knowledge and attitudes of secondary school students towards HIV/AIDS in northern Nigeria. *African Journal of Reproductive Health, 26*(2), 89–100.

Awareness of, willingness to use, and experiences with pre-exposure prophylaxis among youth in Nigeria. (2024). *BioMed Central Health Services Research, 24*, Article 1128.

Babatunde, A., Adelekan, T. F., Adebayo, B. I., Somefun, E. O., Haruna, A., Popoola, B. F., & Samuel, M. U. (2025). Sexual and reproductive health needs and barriers among youth living with HIV/AIDS in Lagos State, Nigeria. *African Journal of Reproductive Health, 29*(2), 123–134.

Balogun, T. M., Dally, O., & Awofala, O. (2019). Knowledge of HIV transmission and risky sexual behavioural practices among selected adolescents and young adults in Lagos, Nigeria. *International Journal of HIV/AIDS Prevention, Education and Behavioural Science, 5*(2), 110–114.

Chizoba, A. F., Chineke, H. N., Adogu, P. O. U., Nwafia, A. E., & Chizoba, C. J. (2021). Effects of peer- and provider-based education interventions on HIV/AIDS knowledge and behaviour-risk among in-school adolescents in Ebonyi State, Nigeria. *Asian Journal of Medicine and Health, 18*(11), 100–114.

Eze, P., Lawal, A. M., & Akpa, O. M. (2022). Factors influencing HIV testing uptake among young adults in sub-Saharan Africa: A multilevel analysis. *BioMed Central Public Health, 22*, Article 1562.

Ezelote, C. J., Osuoji, N. J., Mbachu, A. J., Ejiofor, F. C., Onwujekwe, O. E., & Umeh, C. A. (2024). Effect of peer health education intervention on HIV/AIDS knowledge amongst in-school adolescents in secondary schools in Imo State, Nigeria. *BioMed Central Public Health, 24*, Article 1029.

Ezugwu, E. C., Mbachu, I. I., Obianyo, N. E., Iyoke, C. A., Ezugwu, F. O., Agu, P. U., & Okafor, I. I. (2017). Impact of peer education on HIV knowledge and sexual practices of youth in Nigeria: A cross-sectional study. *BMC Public Health, 17*(1), 105.

Federal Ministry of Health. (2021). *National HIV and AIDS Control Report.* Abuja: FMOH.

Frontiers | An innovation bootcamp model for developing youth-led HIV self-testing delivery strategies in Nigeria. (2024). *Frontiers in Public Health.*

HIV comprehensive knowledge and prevalence among young adolescents in Nigeria: Evidence from Akwa Ibom AIDS Indicator Survey, 2017. (2020). *BioMed Central Public Health, 20*, Article 45.

Ibrahim, A. A., & Hassan, R. (2023). Determinants of HIV preventive behaviour among undergraduate students in Northern Nigeria. *African Health Sciences, 23*(1), 215–228.

Isiugo-Abanihe, U. C., Erinosho, O., & Ushie, B. (2021). Adolescent sexuality and HIV/AIDS in Nigeria: A review of current knowledge and practices. *African Population Studies, 35*(1), 5567–5581.

Joint United Nations Programme on HIV/AIDS. (2021). *Global AIDS update 2021: Confronting inequalities—Lessons for pandemic responses from 40 years of AIDS.* Joint United Nations Programme on HIV/AIDS.

Joint United Nations Programme on HIV/AIDS. (2025, March 25). *UNAIDS welcomes Nigeria to the Global Partnership for Action to Eliminate all Forms of HIV-Related Stigma and Discrimination.* Joint United Nations Programme on HIV/AIDS.

Kassa, G. M., Woldemariam, E. B., & Getachew, S. (2022). Knowledge, attitude, and practice towards HIV/AIDS prevention among secondary school students in Ethiopia: A cross-sectional study. *PLoS ONE, 17*(4), e0267214.

Madiba, S., & Mokgatle, M. (2017). Students' knowledge of HIV and AIDS and attitudes towards people living with HIV/AIDS: A cross-sectional survey among public high school students in Gauteng and North West Province, South Africa. *Journal of Social Aspects of HIV/AIDS, 14*(1), 64–70.

Mohammed, S. B., Ya'aba, Y., Njoku, M., Abarike, M. C., Izebe, K. S., … Oladosu, P. (2019). Prevalence of HIV among adolescent children in Abuja, the Federal Capital Territory, Nigeria. *Open Journal of Epidemiology, 9*, 321–328.

National Agency for the Control of AIDS (NACA). (2020). *National HIV/AIDS strategic framework 2017–2021: Mid-term review report.* Abuja, Nigeria: NACA.

National Agency for the Control of AIDS (NACA). (2022). *National HIV/AIDS Strategic Framework 2022–2026.* Abuja: NACA.

National Agency for the Control of AIDS [NACA]. (2024, June 26). Nigeria recorded 75,000 new HIV infections in 2023. *Vanguard News.*

National Agency for the Control of AIDS [NACA]. (2024, November 25). Nigeria: 1.6 million Nigerians with HIV on treatment. *AllAfrica.*

Nigeria HIV/AIDS Indicator and Impact Survey [NAIIS]. (2019). *National summary sheet: Preliminary findings.* Federal Ministry of Health.

Nwachinemere, O. L., Nyegenye, S., Mwesigwa, A., et al. (2025). Trends in HIV-related knowledge, behaviors and determinants of HIV testing among adolescent women aged 15–24 in Nigeria. *Tropical Medicine and Health, 53*, Article 79.

Nwaozuru, U., Iwelunmor, J., Ong, J. J., et al. (2019). Preferences for HIV testing services among young people in Nigeria. *BioMed Central Health Services Research, 19*, 1003.

Nwaozuzu, E. E., & Aniwada, E. C. (2020). Awareness and preventive practices towards HIV/AIDS among secondary school students in Enugu State, Nigeria. *Nigerian Journal of Clinical Practice, 23*(6), 825–832.

Oginni, O. A., Somefun, O. D., & Adebayo, O. M. (2018). A multilevel analysis of individual and community factors influencing HIV testing among youth in Nigeria. *AIDS Care, 30*(1), 91–100.

Ogundipe, O. A., & Fagbamigbe, A. F. (2023). Knowledge, attitude, and perception of HIV/AIDS among undergraduates in Nigerian universities. *Journal of Public Health in Africa, 14*(2), 204–216.

Okafor, U. O., Obi, S. N., & Nwafor, C. C. (2020). Adolescents' perception and practices of HIV prevention in Enugu State, Nigeria. *African Health Sciences, 20*(2), 923–931.

Olawale, F. T., & Usman, K. S. (2021). Peer influence and sexual risk-taking behaviour among adolescents in Southwestern Nigeria. *International Journal of Adolescence and Youth, 26*(3), 356–368.

Olowookere, S. A., Adeleke, N. A., & Odu, O. O. (2020). Risk perception and condom use among youths in Osun State, Nigeria. *African Health Sciences, 20*(2), 719–728.

Oluwole, E. O., & Oyekanmi, F. O. (2023). Knowledge, attitudes, and risk perceptions of HIV among adolescents in Lagos State, Nigeria. *Journal of Adolescent Health, 72*(3), 462–470.

Onyango, E. O., Were, F., & Odera, P. (2021). Peer education and its effect on HIV/AIDS knowledge, attitudes, and practices among secondary school students in Kenya. *East African Medical Journal, 98*(6), 174–183.

Sam-Agudu, N. A., Folayan, M. O., & Ezeanolue, E. E. (2017). Seeking wider access to HIV testing for adolescents in sub-Saharan Africa. *PLOS Medicine, 14*(7), e1002360.

Sekoni, A. O., Aderibigbe, S. A., & Adeleye, A. O. (2017). HIV-related stigma and discrimination in Nigeria: Review of research studies and future directions for prevention. *African Journal of Reproductive Health, 21*(2), 113–122.

United Nations Educational, Scientific and Cultural Organization (UNESCO). (2021). *Education Sector Response to HIV and AIDS.* Paris: UNESCO.

Uzochukwu, B. S., Okeke, T. A., & Eze, U. I. H. (2022). Determinants of HIV testing and counseling uptake among in-school adolescents in Enugu, Nigeria. *International Journal of Medicine and Health Development, 27*(1), 12–22.

WHO [World Health Organization]. (2023). *HIV data and statistics: Global HIV Programme.* World Health Organization.

Who is more willing to test for HIV? A comparison of community and school-based youth in Port Harcourt, Southern Nigeria. (2018). *Journal of HIV & AIDS, 4*(3).

World Health Organization (WHO). (2019). *Global health sector strategy on HIV, 2016–2021: Mid-term review report.* Geneva: WHO.

World Health Organization (WHO). (2022). *HIV/AIDS: Key Facts.* Geneva: WHO.

Yaya, S., Bishwajit, G., Danhoundo, G., Shah, V., & Ekholuenetale, M. (2016). Trends and determinants of HIV/AIDS knowledge among women in Nigeria. *BMC Public Health, 16*(1), 1232.

Yiltok, E. S., Yuwa, V., Mshelia, A., Akhiwu, H., Ejeliogu, E. U., Ebonyi, A. O., … Oguche, S. (2019). Challenges of the care of HIV-positive adolescents in Jos, Nigeria. *Journal of AIDS and HIV Research, 11*(6), 59–67.

APPENDIX

QUESTIONNAIRE

ON

KNOWLEDGE AND ATTITUDE ON THE PREVENTION OF HIV/AIDS AMONG SECONDARY SCHOOL STUDENTS IN IKPOBA OKHA LGA OF EDO STATE

DEPARTMENT OF HEALTH, SAFETY AND ENVIRONMENTAL EDUCATION

FACULTY OF EDUCATION

UNIVERSITY OF BENIN

Dear Respondent,

I am an undergraduate student of the Department of Health, Safety and Environmental Education, Faculty of Education, University of Benin. I am carrying out a research study titled: "The Knowledge and attitude on the Prevention of HIV/AIDS Among Secondary School Students in Ikpoba-Okha Local Government Area, Edo State." The purpose of this study is to assess students' knowledge of HIV/AIDS, their attitudes towards its prevention, and the preventive practices they adopt, with a particular focus on the impact of health education. Kindly answer the questions sincerely.

Thank you for your cooperation.

SECTION A: Demographic Data

(Please tick ✓ the appropriate option)

Age: 10–13 years ( ) 14–16 years ( ) 17–19 years ( ) 20 years and above ( )

Gender: Male ( ) Female ( )

Class: JSS ( ) SSS ( )

Religion: Christianaity( ) Islam ( ) Traditional ( )

SECTION B:

KNOWLEDGE OF HIV/AIDS PREVENTION

S/N	ITEMS	YES	NO
1	Have you ever heard about HIV/AIDS before		
2	HIV can be transmitted through unprotected sexual intercourse with an infected person		
3	HIV be spread through sharing sharp objects such as blades		
4	HIV can be transmitted from mother to child during pregnancy		
5	Regular HIV testing helps in early detection		
6	A healthy looking person can be infected with HIV		
7	Proper use of sterilized medical instruments can help prevent HIV		
8	Using condoms during sexual intercourse can prevent HIV		

9	HIV can be transmitted through transfusion of infected blood		
10	HIV/AIDS can be cured completely with modern medicine		

ATTITUDE TOWARDS HIV/AIDS PREVENTION

S/N	ITEMS	SA	A	D	SD
1	Students should be taught about HIV/AIDS in schools				
2	Learning about HIV/AIDS helps young people avoid risky behaviors.				
3	I feel comfortable discussing HIV/AIDS prevention with teachers				
4	People living with HIV should be accepted and supported by others				
5	HIV/AIDS education should be included in every school's curriculum.				
6	Teachers and parents play an important role in educating students about HIV/AIDS prevention				

7	Talking about HIV/AIDS in school helps reduce stigma and discrimination against infected persons				
8	I feel uncomfortable discussing HIV/AIDS topics in class				
9	I believe HIV/AIDS prevention is everyone's responsibility, not just health workers				
10	Students who talk about HIV/AIDS are often judged negatively by others				

HIV/AIDS PREVENTIVE PRACTICES

S/N	**ITEMS**	**YES**	**NO**
1	Have you ever attended a health education program		
2	Do you avoid sharing sharp objects such as razors		
3	Have you ever gone for HIV testing		
4	Do you abstain from sexual intercourse to prevent HIV infection		
5	Have you ever encouraged your friends to learn about		

	HIV/AIDS prevention		
6	Do you participate in HIV/AIDS health education activities organized in your school		
7	Do you seek information about HIV/AIDS awareness programs or radio		
8	Do you apply what you learn about HIV/AIDS prevention in your daily life		
9	Do you avoid contact with another person's blood		
10	Have you ever advised someone to go for HIV counseling		

APPENDIX: QUESTIONNAIRE

Questionnaire on Knowledge and Attitude Toward the Prevention of HIV/AIDS Among Secondary School Students in Ikpoba-Okha Local Government Area, Edo State.

(Full questionnaire text as earlier provided).