AWARENESS AND KNOWLEDGE OF SEXUALLY TRANSMITTED INFECTIONS AMONG UNDERGRADUATES IN THE UNIVERSITY OF BENIN

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A PROJECT SUBMITTED TO THE DEPARTMENT OF HEALTH SAFETY AND ENVIRONMENTAL EDUCATION, FACULTY OF EDUCATION UNIVERSITY OF BENIN, BENIN CITY IN PARTIAL FULFILLMENT FOR THE REQUIREMENT OF THE AWARD OF BACHELOR OF SCIENCE EDUCATION (B.Sc.ED)

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CERTIFICATION

We the undersigned, certify that this research project was carried out by **FAVOUR** OSEMOAHU OSEYOMON with the matriculation number **EDU2209505** in the Department of Health, Safety and Environmental Education, Faculty of Education, University of Benin, Benin City, Nigeria.

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DEDICATION

This study is dedicated to God Almighty for His divine mercy, love wisdom and understanding granted through this study.

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TABLE OF CONTENTS

ABSTRACT

This study investigates the level of awareness and knowledge of sexually transmitted infections (STIs) among university students at the University of Benin, Nigeria. The primary purpose of this study is to examine the level of awareness and understanding of sexually transmitted infections (STIs) among undergraduate students at the University of Benin in Nigeria. It aims to identify the sources of students' information, assess their knowledge of transmission, symptoms, prevention, and consequences, and explore the factors that influence their perceptions and behaviors regarding sexual health. The study is driven by the need to address gaps in sexual health education on campuses and to inform strategies for effective intervention.

The research employs a descriptive survey design, utilizing self-administered questionnaires to collect data from a representative sample of undergraduate students across various faculties and levels of study at the university. The questionnaire captures demographic information, knowledge about STIs, sources of information, and risky behaviors. The data is analyzed statistically to evaluate the relationship between variables such as age, gender, and sources of information, providing a comprehensive understanding of students' sexual health awareness.

The findings highlight considerable gaps in STI knowledge among students, with many possessing misconceptions and limited understanding of transmission and prevention methods. The study emphasizes the importance of implementing comprehensive sexual health education programs tailored to students' needs, utilizing trusted sources of information. Recommendations include integrating sexual health education into the university curriculum, increasing awareness campaigns through appropriate channels, and fostering an environment that encourages open discussions about sexual health to curb STI prevalence and promote responsible behaviors among students.

CHAPTER ONE

INTRODUCTION

Background to the Study

Sexually transmitted infections (STIs) are a global public health concern that affect millions of people every year, especially among the youth. These infections, which include gonorrhea, chlamydia, syphilis, HIV, and human papillomavirus (HPV), are primarily transmitted through sexual contact. Despite the availability of information and preventive measures, STIs continue to spread rapidly, particularly in sub-Saharan Africa where young people make up a large portion of the population (Aluko 2015). In sub-Saharan Africa, including Nigeria, the burden of STIs is particularly alarming. The region accounts for a substantial proportion of the global STI cases due to factors such as poverty, cultural norms, inadequate health infrastructure, and limited access to comprehensive sexual education (UNAIDS, 2020). Within this context, university students represent a key demographic of concern.

In Nigeria, studies have shown that even though many young people have heard about STIs, their actual knowledge about the symptoms, modes of transmission, complications, and preventive measures is often superficial. For example, a study conducted by Olugbenga-Bello . (2010) among secondary school students in Osun State revealed that only a fraction of respondents could correctly identify more than two types of STIs, and a significant number harbored misconceptions such as the belief that STIs could be transmitted through mosquito bites or toilet seats. Similarly, Aniebue (2017)

found that among Nigerian university students, knowledge of STIs was limited and inconsistent, often sourced from peers, movies, and unverified internet content rather than formal educational platforms.

University students, particularly undergraduates, represent a demographic that is highly vulnerable to STIs. The transition to university life often comes with newfound independence, exposure to different peer groups, and a desire for exploration, all of which can influence sexual behavior. Many students engage in unprotected sex, have multiple sexual partners, or lack adequate knowledge of the risks associated with sexual activity. These behaviors heighten the risk of contracting STIs and, in the absence of adequate awareness and health-seeking behavior, contribute to their persistence and spread (Smith 2017)

In Nigeria, the prevalence of STIs among university students is an issue that has garnered increasing attention from researchers, healthcare professionals, and policy makers. However, there remains a gap in knowledge and understanding of how aware students are of these infections, the extent of their knowledge, and how such awareness translates into protective behavior. This study seeks to explore this issue within the context of the University of Benin, a prominent tertiary institution in Benin City, Edo State (Ayo 2021).

The University of Benin, located in Benin City, Edo State, is one of Nigeria's foremost federal universities and boasts a diverse student population drawn from across the country. Like many tertiary institutions in Nigeria, it offers various health and wellness programs through its medical center and student affairs division. However, the extent to

which these resources influence the knowledge, attitudes, and practices of undergraduates concerning STIs is not clearly documented. Despite the existence of awareness campaigns, it is not uncommon to encounter students who are unaware of certain critical facts, such as the fact that some STIs can be asymptomatic or lead to long-term reproductive health issues like infertility, pelvic inflammatory disease (PID), and even cervical cancer Ayo (2021). Moreover, the sources from which students obtain information about STIs greatly influence their understanding. In the age of social media and digital information, many undergraduates rely on platforms such as Instagram, TikTok, Twitter, and YouTube for health-related information, which can sometimes be misleading or incorrect. A study by Awofala and Ogundele (2018) indicated that university students who obtained health information from social media were more prone to misinformation and had lower levels of accurate STI knowledge compared to those who received education through structured programs or health professionals. Furthermore, cultural beliefs and stigmatization contribute to poor sexual health communication and low health-seeking behaviors. Many students are reluctant to seek medical advice or testing due to fear of being judged or labeled promiscuous (Ogunbanjo 2014). This reluctance is also compounded by the limited youth-friendly health services available within university settings. In many instances, when students do experience symptoms associated with STIs, they resort to self-medication or consult untrained personnel, further aggravating the situation (Okonkwo 2016). Understanding the level of awareness and knowledge of STIs among undergraduates is therefore essential for developing

effective educational strategies and public health interventions. A well-informed student population is more likely to engage in safe sexual behaviors, seek timely medical help, and contribute to a broader culture of responsible health practices. Moreover, improving STI awareness among university students is directly linked to achieving national and global health targets, including those set out in the Sustainable Development Goals (SDGs), particularly Goal 3, which aims to ensure healthy lives and promote well-being for all at all ages (United Nations, 2015).

Statement of the Problem

Despite ongoing campaigns and health education initiatives, STIs remain prevalent among young adults in Nigeria, especially university students. Many students may be aware that STIs exist but lack accurate and comprehensive knowledge about transmission, symptoms, prevention, and treatment. Inadequate awareness can lead to misconceptions, stigma, and a false sense of security, which may result in risky sexual behaviors.

At the University of Benin, as in many other universities in Nigeria, there is a visible absence of consistent, campus-wide sexual health education programs (Ogundele 2018). This absence leaves students to rely on fragmented sources of information such as peers, social media, and unreliable online content. Inaccurate or incomplete information not only undermines preventive efforts but also contributes to the silent spread of STIs on campus.

There is a need to assess whether undergraduates truly understand the nature of STIs and whether their awareness influences their behavior. Without such data, it becomes difficult

to design and implement effective educational and public health interventions. This study therefore aims to bridge this knowledge gap by providing evidence on the current state of STI awareness and knowledge among University of Benin students.

Research Questions

To guide this study, the following research questions were raised

1. To what extent are the students of the University of Benin Aware of STIs?
2. What is the level of knowledge of STIs among undergraduates students in the University of Benin?
3. What are the factors influencing knowledge of STIs among undergraduates in the University of Benin?
4. How does age influence the knowledge of STIs among undergraduates in the University of Benin?
5. What are the source of information regarding STIs among undergraduates in the University of Benin?

Hypothesis

Hypothesis was formulated to guide this study

a. Age has no significant influence on the knowledge of STIs among undergraduates in the University of Benin

Purpose of the Study

1. Determine the extent of awareness of Sexually Transmitted Infections (STIs) among undergraduate students at the University of Benin.
2. Assess the knowledge of STIs among undergraduates in the University of Benin, including their understanding of symptoms, transmission, prevention, and consequences.
3. Identify the factors influencing students' knowledge of STIs.
4. Assess the influence of age in the knowledge of STIs among undergraduates in the University of Benin.
5. Examine the sources of information through which undergraduate students at the University of Benin learn about STIs, including mass media, internet, social media, school programs, healthcare professionals, and peer influence.

Significance of the Study

This study holds considerable importance for several reasons. First, it seeks to inform health education strategies within universities by providing a clear understanding of students' current knowledge and perceptions about STIs. The findings will be instrumental for university health centers, NGOs, students and policy makers in designing targeted sexual health campaigns and interventions.

The findings of this study will help university health centers better understand the gaps in students' awareness and knowledge of STIs. This can guide the development of tailored health education programs, outreach initiatives, and screening services that are relevant to

students' actual needs. It will also enable the health centers to design targeted interventions that promote safe sexual behaviors and early diagnosis of STIs.

NGOs working in sexual and reproductive health will benefit from the data provided by this study to design evidence-based campaigns and workshops that resonate with university students. The study will help these organizations identify the most effective communication channels and focus areas for STI education and prevention among young people.

Students themselves will benefit as the study will highlight common misconceptions, risky behaviors, and knowledge gaps that may put them at risk of contracting STIs. Increased awareness and access to accurate information will empower students to make safer choices, reduce stigma, and seek medical help when necessary.

For policy makers, especially those in charge of youth health and tertiary education, this study will serve as a reliable source of data to inform the development of comprehensive sexual health policies. It will also support the integration of sexual health education into university curricula, and guide funding and resource allocation for student-centered health programs.

Secondly, by highlighting gaps in awareness and knowledge, the study can serve as a basis for curriculum development that includes comprehensive sex education in university orientation programs. Furthermore, it has the potential to reduce the incidence of STIs among students through the promotion of healthier behaviors informed by knowledge.

Lastly, this research will contribute to the existing academic literature on sexual health among university students in Nigeria and can be a reference point for future research within and beyond the University of Benin.

Scope and Delimitation of the Study

The primary focus is on their awareness and knowledge of STIs, including their sources of information and how this knowledge affects their behavior.

This study is focused on undergraduate students at the University of Benin, Benin City, Edo State. It covers both male and female students across different faculties and levels of study.

The study does not include postgraduate students, staff members, or students from other universities. While it explores behavioral aspects, it does not involve medical testing or diagnosis of STIs; rather, it relies on self-reported data collected through questionnaires.

Limitations of the Study

As with any research, thee are limitations that must be acknowledged. One limitation is the reliance on self-reported data, which may be affected by social desirability bias. Some respondents may underreport risky behaviors or overstate their knowledge to present themselves in a positive light.

Secondly, the cross-sectional nature of the study limits its ability to establish causality. While associations can be observed, it cannot be definitively concluded that knowledge causes behavior change. Additionally, access to certain groups of students (such as part-

time or off-campus students) may be limited, potentially affecting the generalizability of the findings.

Lastly, cultural and religious sensitivities may make some students hesitant to openly discuss sexual matters, which could impact the depth and accuracy of responses.

Definition of Terms

Sexually Transmitted Infections (STIs): Infections that are primarily spread through sexual contact. Examples include HIV, syphilis, gonorrhea, chlamydia, and HPV.

Awareness: The state of having heard or known about something. In this context, it refers to whether students have heard about STIs.

Knowledge: The understanding of STI symptoms, causes, transmission, prevention, and treatment.

Preventive Behavior: Actions taken to avoid contracting or spreading STIs, such as the use of condoms or regular medical check-ups.

Undergraduates: Students enrolled in a bachelor's degree programme in a University.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

The section contains the review of literature under the following topics

- Theoretical Framework
- Concept and Types of Sexually Transmitted Infections (STIs)
- Awareness of STIs Among University Students
- Students' Knowledge of Sexually Transmitted Infections (STIs): A Comprehensive Review
- Factors Influencing Knowledge of STIs Among Undergraduates
- Influence of Age on the Knowledge of STI
- Sources of Information on STIs Among Students
- Summary of Literature Reviewed

Theoretical Framework

A suitable theoretical framework for assessing students' knowledge of sexually transmitted infections (STIs) is the Health Belief Model (HBM), a widely adopted model in health promotion and disease prevention research. The HBM offers a foundational lens for understanding how individuals, including students, make decisions related to health information seeking, risk perception, and preventive behavior. Developed in the 1950s by Rosenstock and later expanded by Becker and others, the model posits that individuals' actions toward health are influenced by their perceived susceptibility to a health issue, perceived severity of its consequences, perceived benefits of taking preventive action,

and perceived barriers to those actions (Glanz, Rimer, & Viswanath, 2015). When applied to the assessment of STI knowledge, this model helps explain the motivational and cognitive factors that drive or inhibit students' willingness to seek and internalize accurate information about STIs.

Students who believe they are susceptible to contracting STIs are more likely to pay attention to health messages and seek information to protect themselves. This sense of vulnerability often grows with increased exposure to STI-related education and peer experiences. According to Adeniyi, Ajayi, and Goon (2017), university students who perceived themselves at risk were significantly more informed about preventive measures such as condom use and routine screening. Conversely, when students feel invulnerable due to trust in their partners or abstinence, they may disregard important STI knowledge, which increases their risk of infection. Perceived severity also shapes the depth of students' knowledge. Students who understand the serious health implications of STIs, such as infertility, chronic pelvic pain, or even death in the case of untreated syphilis or HIV, are more inclined to learn about the symptoms, modes of transmission, and treatment options. Okeke, Anyaehie, and Ezenyeaku (2019) found that perceived severity was a stronger predictor of STI knowledge than mere access to information, as it motivated students to investigate beyond surface-level awareness.

Equally important are perceived benefits, which refer to students' beliefs about the effectiveness of STI prevention strategies. For instance, students who believe that using condoms or accessing STI testing can protect them from disease are more likely to

acquire detailed knowledge about where to get tested, how frequently to test, and which STIs are common among their age group. On the other hand, if students doubt the usefulness of preventive measures or rely on myths, such as the belief that urinating after sex prevents STIs, they may feel no urgency to pursue accurate information (Chima & Odu, 2017). Perceived barriers also play a crucial role in shaping knowledge. These include fear of stigma, embarrassment, lack of privacy, and cultural or religious restrictions on discussing sexual health. Adeoye and Dairo (2020) reported that many Nigerian university students felt discouraged from seeking information due to the judgmental attitudes of health professionals or parental disapproval of sexual health conversations. As a result, students often rely on unreliable sources such as peers or unverified social media platforms, which can spread misinformation.

The HBM also emphasizes cues to action, which are events, experiences, or stimuli that prompt health information seeking. For students, such cues might include classroom lectures, witnessing a friend experience an STI, campus health campaigns, or exposure to media messages about HIV or HPV. These triggers often lead students to engage in intentional knowledge acquisition and can enhance retention when accompanied by interactive tools such as mobile health apps or youth-friendly online content. Ogunbajo . (2019) highlighted that students exposed to multiple sources of STI education particularly through digital media combined with formal instruction showed significantly higher comprehension of STI symptoms and prevention. Lastly, self-efficacy, or confidence in one's ability to understand and apply STI information, influences both knowledge levels

and behavioral follow-through. Students with high self-efficacy are more likely to navigate health systems, access services, and challenge misinformation, while those with low confidence may ignore available resources or misinterpret facts (Ajayi, Olorunsola, & Omisore, 2020).

Concept and Types of Sexually Transmitted Infections (STIs)

Sexually Transmitted Infections (STIs) are infections predominantly transmitted through sexual activity, including vaginal, anal, and oral sex. The public health burden of STIs is immense, especially in developing countries where diagnostic infrastructure, awareness, and treatment options are limited. Globally, STIs affect over 1 million individuals each day (WHO, 2021). Despite technological and medical advances, many STIs remain widespread due to a combination of biological, behavioral, cultural, and socioeconomic factors. The consequences of untreated STIs can be devastating, including infertility, chronic pelvic pain, pregnancy complications, and increased susceptibility to HIV/AIDS (Newman ., 2022). The World Health Organization has emphasized the importance of STI surveillance, prevention, diagnosis, and treatment, particularly in high-risk populations such as adolescents, sex workers, people who inject drugs, and men who have sex with men (WHO, 2021). The burden is also disproportionately high among women due to biological susceptibility, socio-cultural barriers to healthcare access, and gender inequality (Akinyemi ., 2020). In many African contexts, including Nigeria, the challenge is compounded by stigma, poor access to sexual health education, and inadequate healthcare services (Olaolorun & Adebayo, 2018).

STIs are caused by various pathogenic organisms which include bacteria, viruses, protozoa, and ectoparasites. While they are primarily transmitted through sexual intercourse, some STIs may also be transmitted via blood transfusion, contaminated needles, or from an infected mother to her baby during childbirth or breastfeeding. The term “sexually transmitted infection” is now preferred over “sexually transmitted disease” because many of these infections are asymptomatic and may not manifest as recognizable diseases (CDC, 2020).

Infectious agents enter the body through mucous membranes of the genital tract, mouth, or rectum. The likelihood of transmission increases when the mucosal lining is broken or inflamed, which can occur due to rough sex, other infections, or the presence of genital ulcers. Some STIs, such as HIV and syphilis, can invade the bloodstream and affect other organs, making early detection critical (Rowley ., 2019). The incidence and prevalence of STIs are also shaped by social determinants such as poverty, education, gender roles, access to health services, and cultural attitudes toward sexuality. Adolescents and young adults are particularly vulnerable, as they may lack adequate knowledge of protective behaviors or have limited access to reproductive health services (Ogunjuyigbe ., 2020).

Types of STIs

STIs are categorized based on their causative organisms: bacterial**,** viral**,** parasitic, and fungal. Some are curable, while others require lifelong management.

Bacterial STIs

These STIs are caused by bacterial pathogens and are generally treatable with antibiotics. However, treatment must be prompt to avoid long-term health complications.

a. Chlamydia

Chlamydia, caused by *Chlamydia trachomatis*, is one of the most prevalent bacterial STIs worldwide. In women, it can lead to pelvic inflammatory disease (PID), infertility, and ectopic pregnancies. In men, it may result in urethritis and testicular pain. Most cases are asymptomatic, leading to underdiagnosis (WHO, 2021). A study by Fajewonyomi . (2019) in Southwest Nigeria revealed a chlamydia prevalence rate of over 18% among sexually active young women, with limited awareness of the infection's symptoms and risks.

b. Gonorrhea

Gonorrhea is caused by *Neisseria gonorrhoeae*. It is highly infectious and, like chlamydia, often asymptomatic. If untreated, it can cause infertility, septic arthritis, and neonatal conjunctivitis in infants born to infected mothers (Unemo & Shafer, 2021). Alarmingly, multidrug-resistant gonorrhea has emerged as a global threat due to its resistance to conventional antibiotics, including penicillin and fluoroquinolones (WHO, 2021).

c. Syphilis

Syphilis is a chronic bacterial infection caused by *Treponema pallidum*. It progresses through primary, secondary, latent, and tertiary stages. In its later stages, it can damage the brain, heart, and other organs. Congenital syphilis, resulting from maternal transmission, is a significant cause of neonatal mortality and morbidity (Rowley ., 2019).

Despite being curable with penicillin, syphilis remains common in many low-resource settings.

2. Viral STIs

Viral STIs are generally not curable but can be managed with antiviral therapy. Their long-term implications are often more severe.

a. Human Immunodeficiency Virus (HIV)

HIV targets the immune system, destroying CD4 cells and reducing the body's ability to fight infections. Over time, this can lead to AIDS. HIV is transmitted through sexual contact, sharing needles, and from mother to child (UNAIDS, 2021). According to Adebayo . (2018), Nigeria has one of the highest burdens of HIV in the world, especially among young women aged 15–24. The use of pre-exposure prophylaxis (PrEP) and antiretroviral therapy (ART) has dramatically improved outcomes for people living with HIV.

b. Human Papillomavirus (HPV)

HPV is the most common STI globally, with over 100 strains, some of which are linked to cancers of the cervix, anus, penis, and throat. High-risk types (e.g., HPV-16 and HPV-18) are responsible for nearly all cases of cervical cancer (Odetola & Odukogbe, 2019). Vaccination is the most effective preventive measure. Despite this, HPV vaccine uptake remains low in many African countries due to cost, misinformation, and lack of political will (WHO, 2021).

c. Herpes Simplex Virus (HSV)

HSV exists in two forms: HSV-1 (oral) and HSV-2 (genital). Both can cause painful sores and recurrent outbreaks. Although antiviral drugs such as acyclovir can reduce symptom frequency and viral shedding, there is currently no cure (Looker., 2018). HSV-2 is a known co-factor in HIV transmission due to ulcerative lesions that facilitate viral entry.

d. Hepatitis B Virus (HBV)

HBV is a sexually transmissible virus that causes inflammation of the liver, potentially leading to cirrhosis or liver cancer. It is more infectious than HIV and can be spread through sexual contact, blood, and perinatal transmission (WHO, 2021). Fortunately, an effective vaccine exists, and universal childhood vaccination has significantly reduced its prevalence in some regions.

3. Parasitic STIs

Parasitic infections are less common but are still important to public health.

a. Trichomoniasis

Caused by the protozoan *Trichomonas vaginalis*, trichomoniasis affects both men and women, though symptoms are more pronounced in women. These include vaginal discharge, irritation, and a strong odor. It has been associated with preterm delivery and increased HIV susceptibility (Akinyemi ., 2017). Metronidazole is the most effective treatment, and reinfection is common if sexual partners are not treated simultaneously.

b. Pubic Lice and Scabies

Pubic lice (*Pthirus pubis*) and scabies (*Sarcoptes scabiei*) can be transmitted through sexual contact. Though often not classified as traditional STIs, their close contact transmission dynamics necessitate consideration in sexual health contexts. These infestations cause itching and rashes and are treatable with topical insecticides.

4. Fungal STIs

Although not always transmitted exclusively through sexual contact, some fungal infections are considered STIs when passed between partners.

a. Candidiasis (Yeast Infection)

Candidiasis is caused by an overgrowth of *Candida albicans*. It is not strictly an STI but can be triggered by sexual activity, antibiotics, or compromised immunity. Symptoms include itching, thick white discharge, and discomfort. It can be treated with antifungal medications.

Emerging Trends and Challenges

One of the most significant challenges in the management of STIs is the rise of antimicrobial resistance (AMR), particularly with gonorrhea. According to Wi . (2017), certain strains of gonorrhea have become resistant to nearly all available antibiotics, leaving very limited treatment options.

In addition, social and behavioral trends such as increased premarital sex, multiple sexual partners, and inconsistent condom use among youths contribute to rising STI rates

(Ijadunola ., 2020). Digital platforms and dating apps have also been linked to increased casual sexual encounters, creating new challenges for STI control.

Stigma remains a powerful barrier to accessing STI services. Many people avoid testing and treatment due to fear of being judged, leading to further transmission and health complications. Addressing stigma requires a cultural shift supported by comprehensive sexual education, public awareness campaigns, and youth-friendly healthcare services (Ogunyemi ., 2021). Sexually Transmitted Infections (STIs) are a major global health concern, affecting people of all age groups and socio-economic backgrounds. However, young people, particularly those within the university age range (typically 16–29 years), are disproportionately vulnerable. The World Health Organization (WHO, 2021) estimates that over 1 million STIs are acquired globally every day, with more than 374 million new infections annually from just four curable STIs: chlamydia, gonorrhea, syphilis, and trichomoniasis. This alarming statistic underscores the importance of STI awareness and the need to assess and improve knowledge levels among young populations, especially university students.

Awareness of Sexually Transmitted Infections (STIs) Among University Students

Awareness of STIs involves an individual's ability to recognize the existence of STIs, understand their transmission mechanisms, identify symptoms, adopt preventive measures, and seek appropriate medical attention when necessary. Despite the relatively high education level of university students, studies across the globe have consistently

shown that many students lack adequate knowledge about STIs, harbor misconceptions, and fail to engage in preventive practices (Adeniyi ., 2017; Adeoye & Dairo, 2020).

Understanding the level of awareness of STIs among university students is crucial for public health planning, intervention design, and the development of educational curricula that address the unique vulnerabilities of this age group.

Understanding STIs and the Concept of Awareness

Sexually transmitted infections are a group of infectious diseases primarily spread through sexual contact. This includes vaginal, anal, and oral sex. The pathogens responsible for STIs include bacteria (*Chlamydia trachomatis*, *Neisseria gonorrhoeae*, *Treponema pallidum*), viruses (HIV, HPV, HSV, Hepatitis B), protozoa (*Trichomonas vaginalis*), and in some cases, fungi such as *Candida albicans*. Many STIs can also be transmitted through non-sexual means, including mother-to-child transmission during childbirth, sharing of needles, or through infected blood transfusions (CDC, 2020).

The concept of "awareness" in this context refers to more than just recognition of an STI's name. It encompasses understanding symptoms (or lack thereof), prevention methods (such as condom use and vaccination), treatment availability, and long-term consequences of untreated infections. It also includes knowledge of the asymptomatic nature of many STIs, such as chlamydia and HPV, which can silently damage reproductive health and increase vulnerability to HIV infection (Fajewonyomi ., 2019).

Without adequate awareness, infected individuals may unknowingly spread infections to others or fail to seek timely treatment, leading to severe reproductive health issues such

as pelvic inflammatory disease (PID), infertility, ectopic pregnancy, chronic pelvic pain, and even cancer in the case of HPV (WHO, 2021).

Global Trends in University Students' STI Awareness

In both developed and developing countries, research has shown that university students often possess a fragmented understanding of STIs. In many instances, awareness is confined to the most popularized infections such as HIV/AIDS, while knowledge of other prevalent STIs like syphilis, chlamydia, and HPV remains low. In a survey conducted in Spain by Ferrer . (2016), 84% of university students could correctly identify HIV as a sexually transmitted infection, but only 23% were familiar with the symptoms of gonorrhea or trichomoniasis.

In the United States, despite numerous public health campaigns, a survey by Hogben . (2019) revealed that less than 50% of college students could correctly answer questions about the symptoms and transmission routes of common STIs. The situation is even more dire in countries where comprehensive sexual health education is not standard in school curricula.

In countries like India and Pakistan, traditional values and cultural taboos surrounding sexuality further hinder STI awareness. Khan . (2018) found that less than half of the university students in their Indian sample had accurate knowledge of chlamydia and syphilis, with many harboring false beliefs such as the transmission of STIs through casual contact or witchcraft.

These global patterns reveal a serious gap in sexual health education and stress the importance of tailored awareness strategies for university students, who are at a high-risk intersection of age, behavior, and autonomy.

STI Awareness Among University Students in Sub-Saharan Africa

In sub-Saharan Africa, the epidemiological burden of STIs is particularly high, and young adults are at the forefront of this crisis. A report by the WHO (2021) noted that sub-Saharan Africa accounts for over 50% of new HIV infections globally, and many of these cases are among adolescents and university-aged individuals. This suggests that despite efforts by governments and health agencies, the level of awareness remains suboptimal.

In Nigeria, which has the largest youth population in Africa, the challenge is compounded by limited access to reproductive health education, inadequate health services, and societal stigma surrounding sex. A study by Adeoye and Dairo (2020) among undergraduates at the University of Ibadan found that while 85% of respondents had heard of HIV/AIDS, only 29% could correctly identify chlamydia or HPV as sexually transmitted infections. Furthermore, only 18% understood that some STIs could be asymptomatic, which poses a serious public health risk due to undiagnosed and untreated cases.

Another study by Chima and Odu (2017) in Rivers State University revealed that although 76% of students recognized unprotected sex as a risk factor, only 34% could correctly identify symptoms of syphilis or trichomoniasis. Alarmingly, nearly 20% of the

respondents believed that STIs could be transmitted through handshake or sharing food, indicating the persistence of dangerous misconceptions.

These findings align with those of Adebayo . (2018), who observed that while university students may appear knowledgeable, their understanding is often superficial and limited to HIV-related content, with little appreciation of the broader landscape of sexually transmitted infections.

Gender Dimensions of STI Awareness

Gender differences in STI awareness have been widely reported in academic literature. In general, female students are found to have slightly higher awareness levels than their male counterparts, largely due to their increased vulnerability to reproductive health consequences and more frequent interaction with healthcare services (Okeke ., 2019). For instance, women are more likely to visit gynecologists, receive antenatal care, or undergo cervical cancer screening, all of which contribute to increased exposure to STI-related information.

However, in highly conservative societies, female students may be less informed due to restricted mobility, lack of access to information, and social expectations that discourage sexual autonomy or inquiry. In such contexts, discussions about sex are often taboo, and girls are expected to be passive recipients of information, if any. This contradiction means that both male and female students may possess dangerously limited knowledge, albeit for different reasons (Ogunbajo ., 2019).

In Nigeria, the gender gap in STI awareness is narrowing, but still evident. Studies have shown that male students are more likely to engage in high-risk sexual behavior, such as multiple sexual partnerships and low condom use, yet are less likely to seek STI testing due to stigma and false confidence in their immunity or knowledge (Iliyasu ., 2017).

Consequences of Inadequate STI Awareness among Students

The consequences of low STI awareness are far-reaching and multidimensional. At the individual level, a lack of knowledge increases vulnerability to infection, delays diagnosis, and reduces the likelihood of effective treatment. Many students misinterpret early STI symptoms as minor irritations or ignore them altogether, resulting in complications like infertility, chronic pain, or even systemic infections (Unemo & Shafer, 2021).

At the societal level, poor awareness contributes to the ongoing spread of infections, increased healthcare costs, and lost productivity. For university environments, STI outbreaks can lead to reputational damage, disruption of academic schedules, and psychological distress among affected students.

Furthermore, the stigma surrounding STIs, fueled by ignorance and fear, deters many students from seeking help. They fear being judged, ostracized, or shamed, which drives infections underground and allows them to proliferate unnoticed (WHO, 2021).

The impact is even more severe when we consider the intersection between STIs and HIV. The presence of an untreated STI can increase the risk of acquiring or transmitting HIV by several folds due to mucosal inflammation and ulcers (Fajewonyomi ., 2019). In this

sense, STI awareness is not just a reproductive health issue but a critical component of HIV prevention.

The Role of Universities in Improving STI Awareness

As centers of learning and social development, universities have a vital role to play in enhancing STI awareness. This includes providing access to accurate information, health services, and counseling in a stigma-free environment. University health centers should be equipped not only to treat infections but also to educate students on prevention and responsible behavior.

One effective approach is to integrate comprehensive sexuality education into general studies or first-year orientation programs. This education should go beyond abstinence and include information on condom use, regular testing, consent, and navigating peer pressure. Moreover, using peer educators and student ambassadors can help normalize STI discussions and make them more relatable (Adeniyi ., 2017).

Digital tools also offer opportunities for scalable interventions. Mobile apps, social media campaigns, and online counseling services can reach students where they spend most of their time, especially in post-pandemic academic structures that include hybrid learning environments.

Students' Knowledge of Sexually Transmitted Infections (STIs): A Comprehensive Review

Sexually Transmitted Infections (STIs) represent a significant public health concern worldwide. Globally, more than one million STIs are acquired daily, and young people

aged 15–24, including students at secondary and tertiary institutions, bear a disproportionate share of the burden (World Health Organization [WHO], 2021). The level of knowledge students possess about STIs plays a pivotal role in determining their risk perception, preventive behavior, sexual practices, and health-seeking tendencies. Unfortunately, despite increasing access to education and digital information sources, numerous studies have reported significant gaps and misconceptions among students regarding STIs (Ferrer ., 2016; Adeniyi ., 2017).

Students, by virtue of their developmental stage and social exposure, often find themselves in environments that encourage exploration of identity and relationships, sometimes leading to risky sexual behaviors. While education is expected to empower students with the knowledge and skills needed for healthy decision-making, research has shown that academic enrollment alone does not guarantee accurate or sufficient knowledge of STIs (Adeoye & Dairo, 2020).

Understanding STI Knowledge

STI knowledge refers to an individual's understanding of sexually transmitted infections, encompassing aspects such as causative agents, symptoms, transmission routes, risk factors, prevention methods, available treatment, and complications. Comprehensive STI knowledge involves more than just naming a few infections it includes the ability to recognize asymptomatic cases, distinguish between curable and incurable infections, and understand the link between STIs and other health outcomes, particularly HIV.

According to the WHO (2021), a lack of comprehensive STI knowledge among adolescents and youth remains a barrier to successful prevention and control efforts. Young people may engage in high-risk behaviors such as unprotected sex, multiple sexual partnerships, and avoidance of testing services due to ignorance or misinformation. Furthermore, misconceptions such as the belief that STIs can be contracted through casual contact or witchcraft persist in many settings, compounding the problem of stigma and delayed treatment (Iliyasu ., 2017).

The importance of accurate STI knowledge in schools and universities is therefore paramount. It directly affects students' choices regarding contraception, sexual partners, testing habits, and healthcare utilization.

Global Overview of Students' Knowledge of STIs

Worldwide studies demonstrate that while students often possess basic knowledge of HIV/AIDS, awareness of other STIs such as syphilis, chlamydia, trichomoniasis, and HPV is generally low. In Spain, Ferrer . (2016) surveyed 1,000 university students and found that although 92% could correctly identify HIV as an STI, only 24% were aware of HPV, and less than 20% could recognize trichomoniasis or its symptoms. Similarly, a United States study by Hogben . (2019) revealed that university students were more informed about viral STIs than bacterial ones and that many did not understand the asymptomatic nature of some infections.

In Asia, Khan . (2018) studied undergraduate students in northern India and found that only 45% were aware that untreated chlamydia could lead to infertility. The majority

could not identify common STI symptoms, and a significant proportion believed STIs could be contracted through toilet seats or handshakes. This shows that despite high academic achievement, misinformation and stigma remain deeply rooted.

In Eastern and Southern Africa, STIs are a leading cause of morbidity among adolescents and young adults. A cross-sectional study in South Africa by Adeniyi . (2017) showed that although 80% of surveyed university students were sexually active, only 32% had good knowledge of STI symptoms and prevention. Moreover, only 24% had ever undergone testing for STIs, reflecting a mismatch between knowledge, behavior, and utilization of healthcare services.

Empirical Studies on Students' Knowledge of STIs in Nigeria

In Nigeria, research shows that many students lack adequate and accurate information about STIs. For instance, Adeoye and Dairo (2020) conducted a study among undergraduate students at the University of Ibadan. They found that while over 85% had heard of HIV, only 38% could name at least three other STIs, and less than 25% understood that some infections might be asymptomatic. Moreover, misconceptions such as transmission through casual contact or supernatural means were common among respondents.

A similar pattern was found in a study by Chima and Odu (2017) in Rivers State University. Although 70% of students had basic knowledge of HIV transmission, only 31% knew that STIs such as gonorrhea and syphilis could cause infertility. Additionally, only 19% could accurately identify early symptoms of STIs. Alarmingly, the study

showed that over 60% of respondents had never discussed STIs with a healthcare provider or undergone STI testing.

Fajewonyomi . (2019) also reported low awareness levels of chlamydia among students and young adults in Osun State. The study revealed that more than half of the female respondents did not know that untreated chlamydia could affect their reproductive organs. This aligns with broader findings across Nigeria showing that STI knowledge is often centered around HIV, while other infections receive limited attention in school curricula and public health campaigns.

In Kano State, Iliyasu . (2017) examined STI knowledge among 600 university students and found significant gender and faculty-based differences. Science students had higher knowledge scores compared to their peers in arts and humanities. Furthermore, female students showed a better understanding of long-term health implications of untreated STIs, although they were less likely to seek testing due to fear of stigma and judgment.

Another recent study by Adedokun . (2020) among students in a Federal University in Southwest Nigeria found that less than 35% of students could accurately distinguish between curable and incurable STIs. Although many expressed confidence in their knowledge, objective assessments revealed critical gaps, especially regarding HPV, trichomoniasis, and the importance of early treatment.

Challenges Affecting Students' Knowledge of STIs

Several interrelated challenges continue to hamper STI knowledge among students in Nigeria and other lowand middle-income countries:

1. **Inadequate Sexual Health Education** Many secondary schools in Nigeria either lack structured sex education programs or deliver content that is incomplete or morality-driven rather than evidence-based. The result is that students arrive at university with significant knowledge gaps.
2. **Cultural and Religious Taboos** In many Nigerian communities, open discussions about sex and sexual health are discouraged, particularly for young women. This limits the avenues through which students can access accurate information.
3. **Misinformation from Peers and Social Media** In the absence of formal education, students often rely on peers, blogs, or social media for information. These sources may not always be accurate and can reinforce myths and stigma.
4. **Healthcare Barriers** Even when students are aware of STIs, access to testing and treatment is often hindered by cost, fear of judgment, or lack of privacy at campus clinics.

Implications for Sexual Health Education

The low level of STI knowledge among students poses a serious threat to their sexual and reproductive health. It increases the likelihood of unprotected sex, delayed diagnosis, complications such as infertility, and the spread of infections including HIV. To address this challenge, a comprehensive and student-centered approach is needed:

- **Curriculum Integration** Sexual and reproductive health should be embedded into university curricula, especially in general studies courses. This content should be evidence-based and culturally sensitive.
- **Peer Education Programs** Students may be more receptive to information delivered by their peers. Training peer educators to deliver accurate information can help bridge the gap between knowledge and behavior.
- **Use of Technology** Leveraging social media, mobile apps, and online platforms can facilitate the dissemination of credible, youth-friendly information about STIs.
- **Youth-Friendly Health Services** On-campus clinics should offer confidential, stigma-free testing and counseling services to encourage utilization and early detection.

Factors Influencing Knowledge of Sexually Transmitted Infections (STIs) Among Undergraduates

Sexually Transmitted Infections (STIs) continue to pose a major global public health challenge, especially among young adults, including university undergraduates. According to the World Health Organization (WHO, 2021), more than 1 million people acquire an STI every day, with the highest prevalence occurring among those aged 15–24 years. This demographic corresponds closely with the undergraduate population, making them particularly vulnerable to STI transmission and its health consequences. Inadequate knowledge about STIs among undergraduates leads to poor risk perception, risky sexual

behaviors, delayed diagnosis, and under-utilization of health services (Adeniyi ., 2017; Adeoye & Dairo, 2020).

Demographic Factors

- *Gender*

Gender is a key factor influencing STI awareness and knowledge. In many studies, female students have demonstrated greater concern and better knowledge of reproductive health issues, including STIs. This is largely attributed to their increased biological vulnerability and more frequent interaction with healthcare services (Okeke ., 2019). However, in patriarchal societies, gender roles and expectations can limit open access to sexual health information for females, while promoting overconfidence and misinformation among males (Ogunbajo ., 2019).

Educational and Academic Background

- *Faculty or Discipline of Study*

The academic field of study significantly influences STI knowledge among undergraduates. Students from faculties such as medicine, nursing, biology, or other health-related disciplines are more likely to possess higher STI knowledge than those in the humanities or social sciences (Adedokun ., 2020). For example, a study conducted at the University of Lagos found that 75% of medical students could correctly identify multiple STIs and their symptoms, compared to only 42% of students in the arts faculty (Chima & Odu, 2017).

- *Prior Exposure to Sexual Health Education*

Students who had formal sex education during secondary school or through public health programs tend to exhibit better knowledge of STIs. Unfortunately, in many Nigerian schools, sex education is either poorly implemented or omitted altogether due to cultural and religious opposition (Adebayo ., 2018). The absence of comprehensive sexuality education prior to university results in knowledge gaps that persist into undergraduate years.

Sociocultural Influences

- *Cultural Beliefs and Norms*

Culture profoundly shapes perceptions of sexuality and sexual health. In many African settings, discussions about sex are shrouded in secrecy and moral judgment, often inhibiting students' willingness or ability to learn about STIs. According to Ajayi and Olasupo (2017), deeply ingrained cultural taboos limit the dissemination of factual STI information, especially among female students, who are discouraged from speaking openly about sexual matters. This cultural reticence not only perpetuates ignorance but also encourages the spread of myths and misinformation.

Family and Parental Communication

Family attitudes toward sex and sexuality greatly impact students' knowledge levels. In households where parents avoid discussions about sex or provide vague, fear-based messages, young adults often grow up with distorted or incomplete information. In contrast, students from open, communicative homes tend to be better informed and more

confident in seeking accurate information (Adeniyi ., 2017). However, due to the conservative nature of many Nigerian families, sex remains a taboo subject in most homes, contributing to the knowledge deficit among students.

Religious Beliefs and Doctrines

Religion often plays a dual role in shaping STI knowledge among undergraduates. On one hand, religious institutions promote moral behavior, abstinence, and ethical living. On the other hand, strict doctrines may discourage comprehensive sexual education, reduce students' access to factual STI content, and promote feelings of shame or guilt associated with sexual health inquiries (Akinyemi ., 2019). A study by Adeoye and Dairo (2020) found that students who identified as highly religious were less likely to attend STI workshops or seek testing, even when they had active sexual lives.

In some cases, religious institutions also disseminate misleading information, such as the belief that premarital sex inevitably leads to divine punishment in the form of STIs, which may increase stigma and deter testing and open dialogue (Fajewonyomi ., 2019).

Peer Influence and Social Networks

University students are highly susceptible to peer pressure, and their social circles often influence their attitudes and behaviors, including those related to sexual health. According to Iliyasu . (2017), students who regularly interact with peers knowledgeable about STIs are more likely to possess accurate information themselves. Conversely, those whose peers rely on myths or cultural misrepresentations are prone to internalizing the same misinformation.

Peer education programs have shown promise in promoting STI knowledge, as students often feel more comfortable discussing sensitive topics with their peers than with authority figures (Adeniyi ., 2017). However, when untrained peers become primary sources of information, the risk of spreading incorrect or incomplete STI knowledge increases.

Media Exposure and Use of Technology

Access to media and technology especially the internet and social media has become a powerful factor in shaping STI awareness among undergraduates. Platforms like YouTube, Instagram, Twitter, and TikTok expose students to sexual health information, though not always from verified sources (Ogunbajo ., 2019). While digital platforms have democratized access to health information, they have also become breeding grounds for misinformation.

Empirical evidence suggests that students who frequently use digital media for health information tend to have broader awareness of STIs, though not necessarily a deeper or more accurate understanding (Ferrer ., 2016). For example, a student may know that HPV exists from an online influencer but remain unaware of its link to cervical cancer or the availability of a vaccine.

Mobile health applications and e-learning platforms also serve as valuable tools for enhancing STI knowledge. In Nigeria, initiatives such as MyHealthApp and NAIJASEXED have begun to provide youth-friendly, medically accurate sexual health content to young adults across the country (WHO, 2021).

Institutional Environment and Campus Policies

The structure and policies of universities themselves play a significant role in shaping students' STI knowledge. Institutions that incorporate health education programs, organize awareness campaigns, and provide access to counseling and testing services are more likely to produce knowledgeable and health-conscious students (Adebayo ., 2018). Unfortunately, in many Nigerian universities, sexual health is not a priority, and health centers are often underfunded or underutilized due to lack of privacy, stigma, or low student trust.

Orientation programs for new students often exclude sexual health topics, leaving many first-year students vulnerable. When campus clinics provide STI testing and treatment, the absence of confidentiality policies or fear of being seen by peers can prevent students from utilizing these services (Chima & Odu, 2017).

Moreover, student unions and organizations can either facilitate or hinder STI education, depending on their engagement. Student-led health awareness clubs have the potential to close knowledge gaps, yet their activities are often underfunded or overlooked by university management.

Psychological and Emotional Factors

Individual psychological traits such as self-esteem, openness, anxiety, or curiosity also affect how undergraduates seek and absorb STI knowledge. Some students may avoid STI-related information due to fear of being judged or discovering something unsettling about their health. Others may dismiss the importance of STI education due to a sense of

invulnerability, especially if they consider themselves to be in monogamous or "safe" relationships (Adeniyi ., 2017).

Students with high health literacy and critical thinking skills are more likely to challenge myths, seek credible sources, and apply knowledge practically. On the other hand, those who feel overwhelmed or embarrassed by sexual health topics may avoid opportunities for education and testing altogether (Adedokun ., 2020).

Influence of Age in Knowledge of STIs

Sexually transmitted infections (STIs) remain a significant public health issue among young people, particularly undergraduates in Nigeria. Among the various socio-demographic factors influencing students' STI knowledge, age plays a central role. In a study conducted in Kwara State, older undergraduates (21 years and above) were shown to have better knowledge of STI symptoms, modes of transmission, and preventive measures compared to their younger counterparts Adekeye, (2016). The research attributed this to increased exposure to sexual health content and life experiences that often come with age.

Likewise, a comparative study across four tertiary institutions in southwestern Nigeria indicated that students in higher academic levels who are generally older had higher STI knowledge levels than their younger peers (Oluwole, 2018). According to the findings, the age difference accounted for variations in sexual maturity and academic exposure, which in turn influenced understanding.

The Nigeria Demographic and Health Survey (NDHS, 2018) also supports this trend, showing that awareness of STIs such as HIV/AIDS, gonorrhea, and syphilis increased progressively with age among Nigerian youths. Notably, individuals aged 20–24 exhibited stronger awareness and understanding of STI preventive strategies than those aged 15–19.

At the University of Nigeria, Nsukka, researchers discovered that younger students frequently harbored myths and incorrect beliefs about STI transmission, while older undergraduates exhibited more accurate knowledge and used credible sources like lectures and seminars (Nwankwo, 2019). These findings suggest that age-related maturity contributes significantly to better health literacy.

However, some scholars argue that information quality is a more critical determinant than age alone. For example, a northern Nigerian study found that even younger students showed good STI knowledge when provided with targeted, accessible, and culturally appropriate sexual health education (Adamu, 2020). The study suggested that structured information delivery could close the knowledge gap between age groups.

Similarly, in Kano, findings revealed that students aged 22 years and above had more exposure to health talks and STI awareness campaigns than younger students, correlating with higher STI knowledge (Ibrahim, 2021). However, the study recommended that sexual health education should begin early in the university experience to bridge gaps.

Research carried out in southeastern Nigeria reiterated this point, concluding that both age and academic level significantly affected the depth of STI knowledge among students

(Okonkwo, 2022). Older students were more likely to identify STI symptoms and complications correctly and exhibited better attitudes toward prevention.

Sources of Information on Sexually Transmitted Infections (STIs) Among Students

Sexually Transmitted Infections (STIs) represent one of the most pressing global health challenges, particularly among young people, including secondary school and university students. The World Health Organization (WHO, 2021) estimates that more than 1 million STIs are acquired every day worldwide, with a significant number of new infections occurring in individuals aged 15–24. In this vulnerable age group, awareness, prevention, and timely treatment largely depend on the availability, quality, and credibility of information about STIs.

For students, access to accurate and timely sexual health information is essential in promoting safe practices, reducing risky behavior, and seeking appropriate healthcare services. However, the source from which students obtain their information plays a critical role in shaping their knowledge, attitudes, and behaviors related to STIs. Different sources such as schools, peers, health professionals, parents, religious institutions, and mass media provide varying levels of accuracy, depth, and influence. In recent years, digital platforms such as social media, blogs, and mobile applications have become increasingly prominent, especially among youth populations (Adeniyi ., 2017; Ogunbajo ., 2019).

1. Formal School-Based Sources

Comprehensive Sexuality Education

One of the most structured and reliable sources of STI information is formal sexual health education delivered in schools. Comprehensive sexuality education (CSE) includes instruction on the biology of reproduction, the nature of STIs, prevention methods, and responsible decision-making. Numerous studies affirm the positive impact of CSE on STI knowledge among students (UNESCO, 2018).

In Nigeria, however, sexuality education is not uniformly implemented across secondary and tertiary institutions. Where present, the curriculum is often limited to abstinence-only messages, and teachers may feel unprepared or unwilling to discuss sexual matters in depth due to personal beliefs or cultural taboos (Adebayo ., 2018). This results in missed opportunities for students to access accurate, science-based STI information during their formative years.

Adedokun . (2020) found that students in health-related faculties at Nigerian universities, who received structured reproductive health education as part of their coursework, demonstrated significantly higher knowledge of STIs compared to their peers in humanities and management sciences. This suggests that the inclusion of STI content in academic syllabi enhances students' awareness.

Orientation and Campus Programs

Some universities provide sexual health information during orientation programs or through health education initiatives run by student affairs departments. Peer-education

programs, workshops, seminars, and outreach campaigns are designed to inform students about STIs, safe sex practices, and available campus health services (Akinyemi ., 2019). However, the reach and effectiveness of these programs vary across institutions, and student participation is often voluntary, leading to limited coverage.

2. Healthcare Professionals and Clinics

Hospitals, clinics, and campus health centers are trusted sources of STI information, offering medical advice, counseling, diagnosis, and treatment. Students who interact with trained health professionals are more likely to receive accurate, evidence-based information about STI transmission, symptoms, complications, and prevention strategies (Iliyasu ., 2017).

Unfortunately, the accessibility and utilization of health centers by students is often constrained by several factors. Many Nigerian university health centers suffer from underfunding, lack of privacy, stigma, and student mistrust (Chima & Odu, 2017). As a result, students may avoid visiting clinics for STI-related concerns, missing the opportunity to obtain credible information.

A study by Adeoye and Dairo (2020) revealed that only 28% of university students in Ibadan had ever discussed STIs with a health professional. The majority expressed concern over confidentiality and feared being stigmatized by healthcare providers.

3. Mass Media

Mass media, including television, radio, newspapers, and magazines, have historically played a significant role in STI awareness campaigns. Governments and non-

governmental organizations (NGOs) frequently use these platforms to disseminate health messages to large audiences.

Television and radio, especially in vernacular languages, are accessible even to students in rural and low-income areas. Public service announcements (PSAs) often contain messages about condom use, abstinence, HIV testing, and symptoms of STIs (Adeniyi ., 2017).

However, media messages can sometimes be inconsistent or lack depth. Adedokun . (2020) noted that while students in southwestern Nigeria reported frequent exposure to STI-related messages on television, only a fraction could recall accurate details or cite sources. Furthermore, sensationalized or fear-based messaging in the media can deter students from seeking help or further information.

4. Social Media and the Internet

In the digital age, the internet has become the most dominant and immediate source of information for many young people. Students increasingly rely on search engines (e.g., Google), online forums, blogs, and social media platforms such as Facebook, Twitter, Instagram, WhatsApp, and TikTok to obtain information on STIs and sexual health (Ogunbajo ., 2019).

Advantages of Digital Sources

Digital platforms offer rapid access to a vast amount of information and are available 24/7. They allow students to search for information anonymously, reducing the fear of stigma. Health organizations such as WHO, CDC, and Planned Parenthood maintain

websites with accurate, youth-friendly content, which are valuable resources for curious students.

Mobile health (mHealth) applications and YouTube channels dedicated to sexual health education also provide interactive and visual learning experiences (Akinyemi ., 2019). In Nigeria, apps like "myPaddi" and platforms like "NaijaSexEd" have emerged to provide culturally sensitive, youth-focused STI information.

Limitations and Risks

Despite their accessibility, digital sources also pose significant challenges. Not all online information is credible, and students may struggle to distinguish reliable sources from misinformation or clickbait content. A study by Ferrer . (2016) in Spain found that although university students frequently used the internet to search for STI information, less than 40% verified the credibility of the websites they consulted.

In Nigeria, Ogunbajo . (2019) observed that social media was the leading source of STI information for over 60% of students surveyed, yet only a minority could accurately identify symptoms or prevention strategies. This suggests that while exposure is high, retention and understanding may be low, especially when content is misleading or oversimplified.

5. Peer Groups and Friends

Peers are a major source of information for students, especially during adolescence and young adulthood. Friends often share experiences, stories, or advice on relationships, sexual activity, and STIs. These peer interactions can either reinforce correct information

or spread myths and misconceptions, depending on the peer group's knowledge base (Adeniyi ., 2017).

Peer influence plays a dual role: on one hand, trained peer educators have been shown to positively influence STI knowledge among students. On the other hand, informal peer discussions often lack scientific rigor and may promote risky behavior (Iliyasu ., 2017).

For instance, Chima and Odu (2017) found that many male students in Rivers State learned about STIs from older friends or roommates who had little or no formal knowledge, leading to beliefs such as the use of antibiotics after sex as a substitute for condom use.

6. Family and Parental Communication

Although family is traditionally considered a primary source of knowledge and values, discussions about sexual health are rare in many households, particularly in conservative or religious communities. Students from families where sexuality is openly discussed are more likely to have accurate information and engage in safe practices (Ajayi & Olasupo, 2017).

However, in most Nigerian settings, parents avoid discussing STIs due to cultural taboos or the fear that such discussions may encourage sexual experimentation. Adebayo . (2018) found that only 17% of adolescents had ever received STI-related information from their parents. The majority described parental communication on the subject as vague or non-existent.

The absence of parental guidance often drives students to seek information from peers, media, or unverified online sources, which may perpetuate misinformation or increase risk-taking behavior.

7. Religious and Community Institutions

Religious leaders and faith-based organizations wield significant influence over youth in many societies. They often act as moral guides and community educators. In some cases, religious sermons and youth programs address sexual health and STI prevention, emphasizing abstinence and moral responsibility.

However, religious messages may be overly simplistic or judgmental, focusing on abstinence while neglecting other crucial aspects of STI education such as condom use, STI symptoms, and testing. Akinyemi . (2019) note that many religious leaders lack formal training in sexual health, and their teachings may stigmatize those who are sexually active or infected.

In a study by Adeoye and Dairo (2020), students who reported high involvement in religious activities were less likely to use condoms or seek STI testing, despite being sexually active, due to fear of spiritual condemnation. This highlights a critical gap between religious messaging and the realities of student behavior.

8. Non-Governmental Organizations (NGOs) and Community Outreach

NGOs and civil society organizations are increasingly involved in promoting sexual and reproductive health among youth. These organizations provide workshops, distribute educational materials, and run media campaigns targeted at increasing awareness of STIs.

For example, in Nigeria, organizations like Action Health Incorporated and Education as a Vaccine (EVA) have implemented school and community-based programs to equip adolescents with STI-related knowledge. Such interventions have been shown to improve knowledge, increase testing rates, and reduce risky sexual behavior (UNESCO, 2018).

Empirical studies have confirmed the effectiveness of NGO-led interventions. Adeniyi . (2017) reported that students who participated in NGO-sponsored health programs had significantly higher STI knowledge scores and were more likely to seek testing and practice safe sex.

Summary of Literature Reviewed

The level of awareness of STIs among university students varies across regions and institutions, but studies consistently show that while general awareness is high, detailed knowledge of specific STIs, symptoms, transmission routes, and prevention methods is often low. Many students may have heard of HIV or gonorrhea but lack awareness of other infections such as HPV or syphilis. The gap between awareness and in-depth knowledge can be attributed to misinformation, inadequate sex education, and limited access to youth-friendly health services. While some students correctly identify condoms as a protective measure, others hold misconceptions like the belief that oral sex is completely safe or that antibiotics can prevent infections after intercourse. This limited understanding hinders early testing and prevention efforts.

Several factors influence the level of STI knowledge among undergraduates. These include demographic variables such as age, gender, and academic discipline, with

students in health-related courses generally displaying better knowledge. Cultural and religious backgrounds also play a role, as students from conservative environments may have limited exposure to sexual health discussions. Peer influence, relationship status, and sexual activity levels further affect how much STI information students seek or retain. In addition, access to credible sources, exposure to sexual health campaigns, and previous education on reproductive health all contribute to knowledge variation. Students who participate in university health programs or NGO-led seminars tend to be better informed compared to those who rely solely on peers or social media for information.

Sources of information on STIs among students are diverse and vary in quality. Traditional sources such as school-based sex education, healthcare professionals, and printed materials remain important but are often underutilized. Many students turn to the internet and social media platforms for quick answers, though this exposes them to misinformation. Peer groups also serve as a significant source, but the accuracy of information shared informally is questionable. While a few students learn about STIs from parents or religious institutions, these channels are often limited by cultural taboos and discomfort discussing sexual matters. University health centers, NGOs, and awareness campaigns play a critical role in bridging these gaps, especially when they provide confidential, youth-centered, and engaging content. Overall, the quality, credibility, and accessibility of these sources directly influence how well students understand STIs and how they apply that knowledge in making safer health decisions.

CHAPTER THREE

METHODOLOGY

This chapter describes the method and procedures used by the researcher in conducting the study. It is presented under the following sub-headings:

- Design of the Study.
- Population of the study.
- Sample and Sampling Techniques.
- Research Instrument.
- Validity of the Instrument.
- Reliability of the Instrument.
- Method of Data Collection.
- Method of Data Analysis.

Design of the Study

The research design adopted for this study is the descriptive survey research design. The descriptive survey design involves observing and collecting data on a given topic without manipulating variables. The survey research method becomes acceptable because it will enable the researcher to directly investigate the phenomenon.

Population of the study

The population of the study comprises of the 16 faculties of the University of Benin. The target population comprises of full time Undergraduate students of the various facilities

during 2024/2025 academic session. The present population of the University of Benin undergraduates is **43,679**. The faculties are shown in the table below:

Table 3.1

S/N	FACULTY	POPULATION
1.	Agriculture	1685
2.	Arts	6262
3.	Basic Medical Science	3437
4.	Dentistry	111
5.	Education	7416
6.	Engineering	5481
7.	Environmental Science	1015
8.	Law	1078
9.	Life Science	5132
10.	Management Science	3506
11.	Medicine	685
12.	Pharmacy	1107
13.	Physical Science	3283
14.	Social Science	3411
15.	Veterinary Medicine	70
	TOTAL	**43,679**

Source: Academic Planning Unit, Student Affairs Division, University of Benin, Ugbowo campus.

Sample and Sampling Technique

A total number of two hundred and forty (240) undergraduates will be used for the study. The multistage sampling technique will be adopted for this study. Firstly, the systematic

sampling technique will be used to select the Faculties for the study. The Faculties will be arranged in alphabetical order where the first and every other third Faculty will be selected making a total of five (5) Faculties to be sampled, they include; Faculty of Agriculture, Dentistry, Environmental sciences, Management sciences and physical sciences. Secondly, the proportionate sampling technique will be adopted to select 2.5% from each of the five Faculties selected. This will give a total of two hundred and forty (240) respondents. Thirdly, the simple random sampling will be used to select respondents for the study.

Table 3.2: sampling and sampling technique

S/N	FACULTY	POPULATION	NO OF SAMPLED STUDENTS (2.5%)
1.	Agriculture	1685	**42**
2.	Dentistry	111	**3**
3.	Environmental Science	1015	**25**
4.	Management Sciences	3506	**88**
5.	Physical Sciences	3283	**82**
	TOTAL	**9600**	**240**

Research Instrument

A structured questionnaire will be designed by the researcher to elicit information from respondents. The questionnaire will be divided into two sections. Section A covers the demographic data of the respondents, while section B consist of items relating to the research questions. A four-point scoring scale drawn along the modified Likert summated

rating scale for measurement will be adopted by the researcher (Strongly Agree, Agree, Disagree, Strongly Disagree).

Validity of Instrument

The instrument will be validated by the researcher's supervisor and two other experts in the department of health, safety and environmental education (HSE). Their suggestions and corrections will be incorporated in the final document.

Reliability of the Instrument

The reliability of the Instrument will be established using test-retest method of estimating reliability. This involves giving copies of the instrument to 20 persons outside the population of the study. After a time lapse of two weeks, the same instrument will be administered to the same respondents. Data generated from the two administration will be subjected to Pearson Product Moment Correlation. A correlation coefficient of 0.75 will be considered for the instrument to be reliable.

Method of Data Collection

The instrument will be administered by the researcher, with the aid of research assistants. The questionnaire will be completed by the respondents and personally retrieved by the researcher.

Method of Data Analysis

In analyzing the data, the researcher made use of frequency count, simple percentage, mean and standard deviation to compute the findings from the research.

CHAPTER FOUR

PRESENTATION OF RESULTS AND DISCUSSION OF FINDINGS

This chapter is concerned with the analysis of data collected from field, presentation of data analyzed and discussion of findings.

Table 1: Student's level

S/N	Level	Respondents	PERCENTAGE
1	100 Level	54	22.5
2	200 Level	33	13.8
3	300 Level	34	14.2
4	400 Level	55	22.9
5	500 Level	31	12.9
6	600 Level	33	13.7
	Total	240	100%

Table 1 shows the level of the population of students used for this study. From the table above, out of the 240 students used for this study, 54 students were 100 level students, 33 were 200 level students, 34 were 300 level students, 55 were 400 level students, 31 were 500 level students, while 33 were 600 level students.

Table II: Faculty

S/N	Faculty	Respondents	PERCENTAGE
1	Agriculture	54	22.5
2	Dentistry	68	28.3
3	Environmental Science	40	16.7
4	Management Science	37	15.4
5	Physical Science	41	17.1
	Total	240	100%

Table 2 shows the faculty of the respondents used for this study. From the table above. Out of the 240 students used for this study, 54 students were from the department of

agriculture, 68 students were from the department of dentistry, 40 students were from the department of environmental science, 37 students were from the department of management science, while 41 students were from the department of physical science.

Table III: Age Group

S/N	Age Group	Respondents	PERCENTAGE
1	16 – 19	61	22.5
2	20 – 23	100	28.3
3	24 & above	79	16.7
	Total	240	100%

Table 3 shows the age group of students who participated in this study. From the table above, out of the 240 students used in this study, 61 respondents were between the ages of 16 – 19, 100 were between the ages of 20 – 23, while 79 were 24 years and above.

Research Question 1: What is the level of awareness of STIs among undergraduate students at the University of Benin?

S/N	Question	Yes	No
1	I am aware that both males and females can contract STIs	184 (76.7%)	56 (23.3%)
2	I know some STIs can exist without showing any visible symptoms	173 (72.1)	67 (27.9)
3	I know that having multiple sexual partners can increase the likelihood of contracting STIs	177 (73.8%)	63 (26.2%)
4	I am aware that the use of condoms can reduce the risk of contracting STIs	181 (75.4%)	59 (24.6%)
5	I am aware that some STIs are incurable	162 (67.5%)	78 (32.5%)

Table 4 displays the level of awareness of STIs among undergraduate students at the University of Benin. From the table, 76.7% are aware that both males and females can

contract STIs, 72.1% are aware that STIs can exist without showing any visible symptoms, 73.8% are aware thar having multiple sexual partners can increase the likelihood of contracting STIs, 75.4% know that condoms reduce the risk of contracting STIs, and 67.5% know that some STIs are incurable. The data shows that students at the University of Benin have a high level of awareness about STIs, especially regarding transmission and prevention. However, the lower awareness that some STIs are incurable highlights a gap in knowledge,

Research Question 2: What is the level of knowledge of STI's among undergraduates in the University of Benin?

SN	Knowledge Category	Scoreline	Frequency	Percentage
1	High Knowledge	**>50**	**176**	**73.3**
2	Low Knowledge	**<50**	**64**	**26.7**
	Total		**240**	**100.0**

The distribution of respondents according to their level of knowledge of sexually transmitted infections shows that a greater proportion of the students, representing 176 respondents (73.3%), fell into the high knowledge group. This indicates that the majority of the respondents demonstrated adequate awareness of the causes, prevention, and consequences of STIs. On the other hand, 64 respondents (26.7%) were categorized as having low knowledge, suggesting that about one-quarter of the population still lack

sufficient understanding of STIs. This distribution highlights a generally high level of STI knowledge among the students, with the presence of a sizeable minority with low knowledge.

Research Question 3: What are the factors influencing knowledge of STIs among undergraduates in the University of Benin?

What are the factors influencing the knowledge of STIs among undergraduates in the University of Benin?	SA	A	D	SD	Mean	Standard Deviation	Remark
Participation in health awareness campaigns or outreach programs contributes positively to student knowledge.	162 (67.5%)	53 (22.1%)	2 (0.8%)	23 (9.6%)	3.48	.79	Accepted
Peer influence plays a strong role in shaping perceptions and awareness of STI-related issues.	143 (59.6%)	66 (27.5%)	13 (5.4%)	18 (7.5%)	3.39	.84	Accepted
Access to credible information through online platforms and university resources enhances understanding.	134 (65.8%)	62 (25.8%)	4 (1.7%)	16 (6.7%)	3.68	.74	Accepted
Religious beliefs promotes open discussions and learning about STIs,.	134 (55.8%)	55 (22.9%)	35 (14.6%)	16 (6.7%)	3.28	.96	Accepted
Students who have had STI symptoms or perceive themselves as at risk are more likely to seek information about STIs.	134 (55.8%)	83 (34.6%)	7 (2.9%)	16 (6.7%)	3.40	.78	Accepted
Cluster Mean					3.45		

Criterion Mean: 2.50

Table 6 display the mean responses students on the factors influencing knowledge of STIs among undergraduates in the University of Benin. The conclusion is drawn from them meeting the criterion mean of 2.50. From the table above, it can be inferred that health awareness campaigns, peer influence, access to credible information, religious beliefs, and risk factor are the factors influencing knowledge of STIs among undergraduates in the University of Benin

Research Question 3: What are the source of information regarding STIs among undergraduates in the University of Benin?

What are the source of information regarding STIs among undergraduates in the University of Benin	**SA**	**A**	**D**	**SD**	**Mean**	**SD**	**Remark**
Academic courses, especially general studies and health science classes, serve as formal sources of STI knowledge.	142 (59.2%)	73 (30.4%)	8 (3.3%)	17 (7.1%)	3.48	.78	Accepted
University-organized health outreaches and seminars contribute to structured awareness efforts.	141 (58.8%)	77 (32.1%)	7 (2.9%)	15 (6.3%)	3.39	.81	Accepted
Social media platforms expose students to both accurate and STI information.	145 (60.4%)	68 (28.3%)	9 (3.7%)	18 (7.5%)	3.68	.74	Accepted
Peer education groups and student-led initiatives often disseminate STI-related information informally.	136 (56.7%)	75 (31.9%)	13 (5.4%)	16 (6.7%)	3.38	.85	Accepted
Family and religious institutions dish out information about STIs from religious and cultural perspective	137 (57.1%)	57 (23.8%)	11 (11.2%)	19 (7.9%)	3.39	.89	Accepted
Cluster Mean					3.46		

Criterion Mean: 2.50

Table 3 Display the mean responses students on the sources of information regarding STIs among undergraduates in the University of Benin The conclusion is drawn from them meeting the criterion mean of 2.50. From the table above, it can be inferred that academic courses, health outreaches, social media platforms, peer education groups, and family and religious institutions are the sources of information regarding STIs among undergraduates in the University of Benin

Discussion of Findings

Firstly, University of Benin students have a high level of awareness about STIs, especially regarding transmission and prevention. This is supported by Ferrer 2016 who purported that In both developed and developing countries, research has shown that university students often possess a fragmented understanding of STIs. In many instances, awareness is confined to the most popularized infections such as HIV/AIDS, while knowledge of other prevalent STIs like syphilis, chlamydia, and HPV remains low.

Secondly, There is a high level of STI knowledge among the students, with the presence of a sizeable minority with low knowledge. This is supported by Adeoye and Dairo (2020) conducted a study among undergraduate students at the University of Ibadan. They found that while over 85% had heard of HIV, only 38% could name at least three other STIs, and less than 25% understood that some infections might be asymptomatic. Moreover, misconceptions such as transmission through casual contact or supernatural means were common among respondents.

Thirdly, health awareness campaigns, peer influence, access to credible information, religious beliefs, and risk factor are the factors influencing knowledge of STIs among undergraduates in the University of Benin. The structure and policies of universities themselves play a significant role in shaping students' STI knowledge. Institutions that incorporate health education programs, organize awareness campaigns, and provide access to counseling and testing services are more likely to produce knowledgeable and health-conscious students (Adebayo., 2018).

Lastly, academic courses, health outreaches, social media platforms, peer education groups, and family and religious institutions are the sources of information regarding STIs among undergraduates in the University of Benin. For students, access to accurate and timely sexual health information is essential in promoting safe practices, reducing risky behavior, and seeking appropriate healthcare services. However, the source from which students obtain their information plays a critical role in shaping their knowledge, attitudes, and behaviors related to STIs. Different sources such as schools, peers, health professionals, parents, religious institutions, and mass media provide varying levels of accuracy, depth, and influence. In recent years, digital platforms such as social media, blogs, and mobile applications have become increasingly prominent, especially among youth populations (Adeniyi ., 2017; Ogunbajo ., 2019).

CHAPTER FIVE

SUMMARY CONCLUSION AND RECOMMENDATIONS

This chapter presents summary of the study alongside the conclusion drawn from the analysis of data collected and the results obtained in the course of this study. The recommendations offered based on the findings of the study are also highlighted.

Summary

This study adopted a descriptive survey research design which allowed the researcher to investigate the phenomenon among undergraduate students of the University of Benin without manipulating variables. The population consisted of 43,679 full-time undergraduates across 16 faculties during the 2024/2025 academic session, from which a sample of 240 students was drawn using a multistage sampling technique. Faculties were first selected systematically, after which 2.5% of students were proportionately chosen from each of the five selected faculties (Agriculture, Dentistry, Environmental Science, Management Sciences, and Physical Sciences), and respondents were finally selected through simple random sampling. Data were collected using a structured questionnaire divided into two sections, with Section A covering demographic data and Section B containing items on the research questions based on a four-point Likert scale ranging from Strongly Agree to Strongly Disagree. The instrument was validated by the supervisor and two experts in Health, Safety, and Environmental Education, while its reliability was established using the test–retest method and Pearson Product Moment Correlation, with a coefficient of 0.75 deemed acceptable. Administration and retrieval of

the questionnaires were carried out by the researcher with the assistance of trained helpers. Data obtained were analyzed using frequency counts, simple percentages, mean, and standard deviation to provide clear and accurate answers to the research questions.

Findings

Findings from the study revealed that:

1. University of Benin students have a high level of awareness about STIs, especially regarding transmission and prevention.
2. There is a high level of STI knowledge among the students, with the presence of a sizeable minority with low knowledge.
3. Health awareness campaigns, peer influence, access to credible information, religious beliefs, and risk factor are the factors influencing knowledge of STIs among undergraduates in the University of Benin.
4. Lastly, academic courses, health outreaches, social media platforms, peer education groups, and family and religious institutions are the sources of information regarding STIs among undergraduates in the University of Benin.

Conclusion

The study revealed that undergraduate students of the University of Benin generally possess a high level of awareness and knowledge of sexually transmitted infections, particularly concerning their transmission and prevention. However, a notable minority of the students still demonstrated low levels of knowledge, indicating that gaps in understanding persist. The findings also showed that factors such as health awareness

campaigns, peer influence, religious beliefs, and access to credible information play significant roles in shaping students' knowledge of STIs. Furthermore, academic courses, health outreaches, social media platforms, peer education groups, and family and religious institutions were identified as the primary sources of information on STIs among the students. Overall, the research underscores that while awareness is commendably high, continuous education and effective information dissemination remain necessary to close the knowledge gap and promote safer sexual practices among undergraduates.

Recommendations

1. The University of Benin should sustain and expand existing STI awareness programmes, particularly those focused on modes of transmission and preventive measures, to maintain the high level of awareness among students.
2. Special interventions such as targeted workshops, seminars, and peer mentoring programmes should be designed to specifically reach students with lower levels of STI knowledge in order to bridge the existing gap.
3. Stakeholders such as university management, health professionals, and faith-based organizations should collaborate to strengthen the quality and frequency of health awareness campaigns, while ensuring that accurate and culturally sensitive information is provided.
4. The university should integrate STI education more comprehensively into academic curricula and promote the use of credible social media campaigns. Peer

education groups should also be supported, and families and religious institutions should be encouraged to continue playing a constructive role in sexual health education.

Suggestions for Further Studies

1. The Relationship Between Students' Demographic Characteristics and Their Level of STI Knowledge
2. The Impact of Students' Level of STI Knowledge on Their Sexual Behaviours and Practices
3. A Comparative Study of STI Knowledge Between Students in Public and Private Universities in Edo State

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APPENDIX

DEPARTMENT OF HEALTH, SAFETY AND ENVIRONMENTAL EDUCATION
FACULTY OF EDUCATION
UNIVERSITY OF BENIN

QUESTIONNAIRE
ON
AWARENESS AND KNOWLEDGE OF SEXUALLY TRANSMITTED INFECTIONS AMONG UNDERGRADUATES IN THE UNIVERSITY OF BENIN

Dear Respondents,

I am a student of the above-named Department and I am carrying out research on topic **AWARENESS AND KNOWLEDGE OF SEXUALLY TRANSMITTED INFECTIONS (STIs) AMONG UNDERGRADUATES IN THE UNIVERSITY OF BENIN** Therefore, your candid opinion to these questions will be highly appreciated as they will help the research. Be rest assured that all information given will be specifically used for academic purposes and will be treated with ultimate confidentiality.

Thanks for your co-operation.

SECTION A

DEMOGRAPHIC INFORMATION

Please complete the information below by ticking (√) where appropriate.

Level: 100 ( ) 200 ( ) 300 ( ) 400 ( ) 500 ( ) 600 ( )

Religion: Christian ( ) Muslim ( ) Others ( )

Marital Status: Single ( ) Married ( ) Divorced ( ) Widow ( )

Age: 16 – 19 yrs ( ) 20 – 24 yrs ( ) 25 yrs and above ( )

Faculty:_____

SECTION B

KEY

Yes

No

RQ1: To what extent are the students of the University of Benin aware of STIs?

S/N	Items	Yes	NO
1	I am aware that both males and females can contract STIs		
2	I know some STIs can exist without showing any visible symptoms		
3	I know that having multiple sexual partners can increase the likelihood of contracting STIs		
4	I am aware that having the use of condoms can reduce the risk of contracting STIs		
5	I am aware that some STIs are incurable		

RQ 2: What is the level of knowledge of STIs among undergraduates in the university of Benin?

6. Which of the following is a common mode of STI transmission?

a. Holding hands
b. Kissing on the cheek
c. Vaginal or Anal Sex
d. Sharing food

7. Which of the following helps reduce the risk of contracting STIs during sex?

a. Taking antibiotics before sex
b. Using traditional medicine
c. Using a condom
d. Bathing after sex

8. Which of the following STIs is currently considered incurable
    a. Syphilis
    b. HIV
    c. Chlamydia
    d. Gonorrhoea
9. What does HIV stand for
    a. Human infectious Virus
    b. Human Infected Virus
    c. Human Immunodeficiency virus
    d. Human immune vaccine
10. Which symptom is common in many STIs?
    a) Coughing
    b) Genital discharge
    c) Headache
    d) Skin rash only on the face

KEY

Strongly Agree - SA

Agree - A

Disagree - D

Strongly Disagree – SD

RQ 3: What are the factors influencing knowledge of STIs among undergraduates in the University of Benin?

S/N	Items	SA	A	D	SD
11	Participation in health awareness campaigns or outreach programs contributes positively to student knowledge.				
12	Peer influence plays a strong role in shaping perceptions and awareness of STI-related issues.				

13	Access to credible information through online platforms and university resources enhances understanding.				
14	Religious beliefs promotes open discussions and learning about STIs.				
15	Students who have had STI symptoms or perceive themselves as at risk are more likely to seek information about STIs				

RQ 4: What are the source of information regarding STIs among undergraduates in the University of Benin?

S/N	Items	SA	A	D	SD
16	Academic courses, especially general studies and health science classes, serve as formal sources of STI knowledge.				
17	University-organized health outreaches and seminars contribute to structured awareness efforts.				
18	Social media platforms expose students to both accurate STI information.				
19	Peer education groups and student-led initiatives often disseminate STI-related information informally.				
20	Family and religious institutions dish out information about STIs from religious and cultural perspectives				