

**KNOWLEDGE AND PERCEPTION OF SEXUALLY TRANSMITTED INFECTION
AMONG ADOLESCENT OF SECONDARY SCHOOLS IN EKOSODIN COMMUNITY,
BENIN CITY, EDO STATE.**

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UNIVERSITY OF BENIN

BENIN CITY

OCTOBER, 2025.

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**IN PARTIAL FULFILLMENT OF THE REQUIREMENTS OF THE AWARD OF
BACHELOR OF NURSING SCIENCES. FACULTY OF NURSING SCIENCES,
COLLEGE OF MEDICAL SCIENCES, UNIVERSITY OF BENIN, BENIN CITY**

OCTOBER, 2025.

DECLARATION

This is to declare that this research project titled " KNOWLEDGE AND PERCEPTION OF SEXUALLY TRANSMITTED INFECTION AMONG ADOLESCENT OF SECONDARY SCHOOLS IN EKOSODIN COMMUNITY, BENIN CITY, EDO STATE." is solely carried out by ONAPHIE NYERHOVWO MIRACLE. It is solely the result of my work except where stated otherwise by reference or acknowledgment as being derived from other person (s) or resources.

EXAMINATION NUMBER: _____

In the FACULTY OF NURSING SCIENCES, UNIVERSITY OF BENIN, BENIN CITY, EDO STATE.

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CERTIFICATION/APPROVAL

This is to certify that this research project was carried out by ONAPHIE NYERHOVWO MIRACLE with matriculation number BMS1902394 in FACULTY OF NURSING SCIENCES, UNIVERSITY OF BENIN under the supervision of PROF. F.U OKAFOR.

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ABSTRACT

Sexually transmitted infections (STIs) are illnesses primarily spread through sexual contact. They include treatable infections such as gonorrhoea, syphilis, and chlamydia, as well as incurable but manageable conditions like HIV, herpes simplex virus, human papillomavirus (HPV), and hepatitis B. This study aimed to evaluate the knowledge and perception of STIs among adolescents in secondary schools within Ekosodin community, Benin City, Edo State. A descriptive research design was adopted, involving 525 senior secondary students from four public schools, with a sample size of 397 selected using convenience sampling. Data were collected through a structured questionnaire, validated by the supervisor, and tested for reliability using the test-retest method. Analysis was conducted using descriptive statistics, including frequency counts and percentages, with results presented in tables. Findings revealed that most adolescents (78.36%) were aware of STIs, and a significant proportion (85.48%) recognized that risky sexual behaviors increase vulnerability to infections, leading to serious health consequences. Based on these outcomes, it is recommended that STI education be integrated into school curricula and that awareness campaigns through media be strengthened.

Keywords: Sexually Transmitted Infection, Awareness, Perception, Adolescent

DEDICATION

This project work is dedicated to the Almighty God who has been my constant source of help and strength in my academic journey.

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CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Sexually transmitted infections (STIs) are illnesses primarily spread through sexual contact. They include treatable infections such as gonorrhea, syphilis, and chlamydia, as well as incurable but manageable conditions like HIV, herpes simplex virus, human papillomavirus (HPV), and hepatitis B (Nsua, 2021). Adolescents and young adults aged 15–24 are more vulnerable to STIs compared to older populations. According to the World Health Organization, about 20% of individuals living with HIV/AIDS are in their twenties, and one in twenty adolescents contracts an STI annually (Olasode, 2020). Risk factors include unprotected sex, multiple partners, and transactional or intergenerational sexual relationships.

Female adolescents are particularly susceptible due to biological factors such as cervical lining development. Additionally, many face challenges accessing STI prevention services due to lack of information, transportation, or financial resources. Even when services are available, they may not be youth-friendly, discouraging adolescents from seeking care (Olasode, 2020). Untreated STIs can cause severe complications. In males, gonorrhea and chlamydia may lead to epididymitis and infertility, while untreated gonococcal urethritis can result in strictures, urinary retention, and chronic renal failure. In females, complications include pelvic inflammatory disease, infertility, chronic pelvic pain, ectopic pregnancy, and neonatal morbidity (Alubo, Oyediran & Odiachi, 2021).

Globally, adolescent sexual and reproductive health is a pressing concern (Badawi & Salah Eldin, 2021). Adolescents, defined by WHO as individuals aged 10–19, represent about 20% of the

world's population. This stage of life is marked by risk-taking behaviors that increase vulnerability to STIs. Worldwide, the highest STI rates are among those aged 20–24, followed by 15–19-year-olds (Sulaiman, Ahmadi & Khan, 2020). Unsafe abortions are also prevalent, with 15% occurring among young women aged 15–19 annually.

Adolescents require sexual and reproductive health services to prevent unwanted pregnancies and STIs. However, sexual activity is not always consensual, exposing them to risks such as rape, harassment, and exploitation (Svensson & Waern, 2020). Many adolescents are sexually active but lack access to reproductive healthcare. Knowledge of STIs is crucial for prevention and treatment, yet awareness of infections other than HIV/AIDS remains low in developing countries (Svensson & Waern, 2020). In Edo State, literature on STI knowledge is limited, necessitating this study to evaluate adolescents' knowledge and perception of STIs in Ekosodin community.

Despite global efforts to raise awareness, many youths remain vulnerable due to risky sexual behaviors such as unprotected sex and multiple partners (Udofia, Akwaowo & Ekanem, 2021). These behaviors contribute to infertility and other complications (Feivelson & Darroch, 2020). Most interventions focus on education and prevention, but fewer address the need for supportive environments where adolescents can openly discuss concerns without stigma (Rietmeijer, 2021).

1.2 Statement of the Problem

STIs continue to pose significant health challenges among adolescents worldwide. For instance, unsafe sexual practices often result in unintended pregnancies, leading many young girls to resort to abortion due to factors such as poor timing, lack of readiness for motherhood, or the desire to continue schooling (Okonofua, 2020). In Edo State, risky sexual behaviors—including multiple

partners, early sexual initiation, and lack of condom use—are increasingly common among adolescents (Alika, 2021). Consequently, HIV infections are rising.

Although studies show that adolescents in Nigeria, including Edo State, possess moderate knowledge of STIs (Alika, 2021; Makwe & Adenyuma, 2021; Omale, 2021), this knowledge has not translated into healthier sexual practices. The prevalence of infections such as gonorrhea, syphilis, HPV, and HIV remains high. To address this, the Nigerian government has integrated sex education into secondary school curricula. However, the specific knowledge and perception of STIs among adolescents in the Ekosodin community remain underexplored. This study seeks to fill that gap.

1.3 Objectives of the Study

The primary objective is to assess the knowledge and perception of STIs among adolescents in secondary schools in Ekosodin community, Edo State. Specifically, the study aims to:

1. Evaluate adolescents' knowledge of STIs.
2. Examine adolescents' perception of STIs.
3. Identify common sources of STI-related information among secondary school students.

1.4 Research Questions

The study is guided by the following questions:

1. What is the level of STI knowledge among adolescents in secondary schools in Ekosodin community?
2. How do adolescents perceive STIs in secondary schools in Ekosodin community?

3. What are the common sources of STI information among adolescents?

1.5 Research Hypothesis

- Null Hypothesis (H0): There is no significant relationship between adolescents' knowledge and perception of STIs in secondary schools in Ekosodin community, Benin City, Edo State.
- Alternative Hypothesis (H1): There is a significant relationship between adolescents' knowledge and perception of STIs in secondary schools in Ekosodin community, Benin City, Edo State.

1.6 Significance of the Study

This study is valuable to students, psychologists, social workers, and other professionals as it expands knowledge on adolescents' understanding and perception of STIs. Untreated STIs can lead to severe health consequences, including infertility, ectopic pregnancy, stillbirths, and increased HIV risk. The findings will benefit policymakers, educators, and healthcare providers by informing strategies to educate adolescents on STI symptoms, transmission, and treatment. Incorporating STI awareness into school curricula and public health campaigns can reduce stigma and improve reproductive health outcomes.

The study also highlights the importance of understanding adolescents' perceptions of STIs, enabling stakeholders to design effective interventions. Health educators, parents, and researchers will benefit from insights into the differences between healthy and risky sexual behaviors.

1.7 Scope of the Study

The study focuses on adolescents in public senior secondary schools within Ekosodin community, Edo State. It examines their knowledge and perception of STIs, emphasizing the importance of prevention and treatment. The participants are restricted to adolescents enrolled in selected schools in the study area.

1.8 Operational Definition of Terms

- **Sexually Transmitted Infections (STIs):** Diseases spread through sexual contact with an infected individual.
- **Knowledge:** Awareness of STIs among adolescents in secondary schools in Ekosodin community.
- **Perception:** Adolescents' views and attitudes toward STIs in secondary schools in Ekosodin community.

CHAPTER TWO

LITERATURE REVIEW

This chapter deals with the literature review. The review of literature will be discussed under the following headings: Conceptual Review, Theoretical Review, Empirical review and summary of literature

2.1 Conceptual Reviews

2.1.1 Sexually Transmitted Infection

Sexually transmitted infections (STIs) among adolescents represent a significant and growing public health challenge worldwide. It is estimated that nearly one million individuals contract STIs daily, with about half of these cases occurring among adolescents aged 15–21 years (Alika, 2021; Makwe & Adenyuma, 2021; Omale, 2020). Common infections include chlamydia, gonorrhea, genital herpes, human papillomavirus (HPV), HIV, and syphilis.

STIs are primarily spread through vaginal, oral, and anal sexual contact, but they can also be transmitted via blood products or from mother to child during childbirth. If left untreated, infections such as chlamydia and gonorrhea can cause salpingitis in women and epididymitis in men, both of which may impair fertility or lead to sterility. Hepatitis B, genital herpes, and HPV are linked to cervical cancer, while HIV often results in premature death.

In sub-Saharan Africa, awareness of HIV is relatively high among adolescents, but knowledge of other STIs remains limited, especially among those aged 10–14 years (Finlay et al., 2020). This disparity is largely due to the extensive publicity surrounding HIV, which has overshadowed other infections. Adolescents with little or no knowledge of STIs may fail to recognize symptoms and delay seeking treatment. A study highlighted that adolescents often judge STI risk based on

perceived attractiveness in online dating profiles, assuming that more attractive individuals are less likely to be infected (Udofia, Akwaowo & Ekanem, 2021).

Global initiatives have been introduced to improve adolescent sexual and reproductive health outcomes. The strategy “Every Woman, Every Adolescent, Every Child” addresses the unique challenges adolescents face in achieving sustainable development goals. However, many adolescents encounter discrimination when attempting to access sexual and reproductive health services. Ensuring universal access to these services is essential for increasing STI knowledge and promoting healthier sexual behaviors (Udofia, Akwaowo & Ekanem, 2021).

Traditional sources of information, such as parents and schools, remain crucial in sexual health education. Communication between adolescents and parents has been shown to encourage safer sexual practices, while exposure to school-based sexual education has been linked to improved knowledge, healthier sexual behaviors, and better reproductive health outcomes (Alubo, Oyediran & Odiachi, 2021).

Risk factors of sexually transmitted Infections

Adolescents face multiple risk factors that increase their vulnerability to sexually transmitted infections (STIs).

Cultural and Socio-Economic Factors: In sub-Saharan Africa, two-thirds of newly infected adolescents aged 15–19 are female. Young women often have older partners, which heightens their risk of infection. Poverty and marginalization also contribute, as some adolescents engage in transactional sex—exchanging sexual favors for money or gifts such as food, school fees, or

household items. These circumstances limit their ability to negotiate condom use (Aboyeji & Nwabuisi, 2020).

Cognitive Factors: Adolescents' cognitive development may hinder their ability to fully understand the consequences of risky sexual behaviors. Many lack the skills to negotiate safer sex, making them more susceptible to contracting STIs (Ajuwon, Olaleye, Faromaju & Ladipo, 2021).

Biological Factors: Adolescent girls are biologically predisposed to STIs due to cervical ectopy, where columnar epithelium remains exposed during adolescence. This condition increases susceptibility to infections such as gonorrhea and chlamydia. Columnar epithelium is more vulnerable to infection compared to squamous epithelium, making adolescent females more prone to HSV-2 and other STIs (Anorlu, Oluwole, Abudu & Adebajo, 2021).

Sexual Behavior and Education: Early sexual initiation, involvement with older partners, and inconsistent condom use are key behavioral risks. Many adolescents underestimate their vulnerability, with studies showing that a majority of infected adolescents believed they were at little or no risk of contracting STIs (Archibald & Newman, 2021). In Namibia, high rates of sexual activity among adolescents were linked to smoking, alcohol use, and drug consumption. Parental supervision was found to reduce sexual activity (Arowojolu, Ilesanmi, Roberts & Okunlola, 2021).

Limited Success of Preventive Services: Adolescents often encounter barriers to accessing STI prevention and treatment services. These include lack of health insurance, transportation difficulties, embarrassment with adult-focused facilities, and concerns about confidentiality. As a result, many adolescents remain unreached by customized STI services (Arowojolu, Okewole & Adekunle, 2022).

Demographic and Ecological Factors: Adolescents from disadvantaged neighborhoods, minority groups, LGBTQ+ youth, drug users, homeless individuals, and those incarcerated are at greater risk of contracting STIs (Arowojolu, Okewole & Adekunle, 2021).

Co-Infection with HIV: The presence of STIs such as syphilis, chancroid, or genital herpes significantly increases the risk of acquiring or transmitting HIV. Evidence from Tanzania demonstrated that effective STI management reduced new HIV infections by 40%, highlighting the importance of STI treatment in AIDS prevention (Rietmeijer, 2021).

Epidemiological Evidence: Extensive epidemiological data highlight the significant burden of sexually transmitted infections (STIs) among adolescents. In 2007, the World Health Organization estimated that one-third of the 333 million curable STI cases occurred in individuals under the age of 25 (Panchaud, Singh, Feivelson & Darroch, 2020). The highest infection rates were recorded among young adults aged 20–24, followed closely by adolescents aged 15–19. Reinfection is common, with more than 40% of adolescents contracting another STI after treatment for an initial infection.

Adolescents and young people make up only about 25% of the sexually active population, yet they account for nearly half of all new STI cases (Nnoruka & Ezeoke, 2021). This disproportionate representation underscores their vulnerability. Furthermore, studies show that adolescents are more likely than adults to be re-infected after treatment, reflecting gaps in prevention and behavioral change. Many adolescents also face challenges in accessing healthcare services, which contributes to the persistence and recurrence of infections.

Overall, epidemiological evidence demonstrates that adolescents bear a heavy burden of STIs globally. Their high rates of infection, reinfection, and limited access to preventive services

emphasize the urgent need for targeted interventions to reduce transmission and improve sexual health outcomes among this age group.

Clinical Symptoms: The clinical presentation of STIs in adolescents is peculiar because various other symptoms can be mistaken for STIs (Kerndt, 2020). In girls, endogenous vaginitis rather than an STI is the main cause of vaginal discharge among adolescent females. However, there may be vulval itching, minor discharge, urethritis or proctitis. In pre-pubescent girls, a purulent vulvo-vaginitis may occur. Similarly, infection is asymptomatic in the majority of adolescent girls. Symptoms that may occur in the adolescent woman are inter-menstrual bleeding, post-coital bleeding and an increase in vaginal secretions.

Management of STIs in Adolescents: Managing sexually transmitted infections (STIs) among adolescents remains a significant challenge globally, particularly due to the emergence of drug-resistant strains of STIs and HIV. Drug resistance has led to frequent treatment failures and increased healthcare costs (Dienye, 2021). Although effective patient management is central to STI control, several obstacles hinder progress, especially in developing countries. These include stigma, negative societal attitudes toward sexual health, limited resources, high levels of drug resistance, inadequate diagnostic facilities, and shortages of trained healthcare personnel.

The essential steps in managing STI patients involve accurate diagnosis, appropriate and effective treatment, and equipping patients with knowledge to encourage safer sexual practices. This includes counseling, contact tracing, and condom promotion (Dienye, 2021). Traditionally, STI management has relied on laboratory diagnosis and treatment tailored to specific pathogens. However, in many settings, laboratory facilities are unavailable or results are delayed, necessitating syndromic management. This approach bases diagnosis on the combination of

symptoms and signs presented by the patient. While both etiological and syndromic management have advantages and disadvantages, adolescent STI management should consistently adhere to principles such as confidentiality, accurate diagnosis, correct drug selection and dosage, counseling, compliance, contact tracing, condom promotion, and clinical follow-up.

Prevention of STIs: Prevention of STIs among adolescents requires behavioral interventions and heightened awareness (Ejike, 2021). Education can be delivered at home, in schools, and through healthcare facilities. However, education alone may not guarantee behavioral changes that reduce STI risks. Adolescents must be taught to recognize STI symptoms and understand that many infections are transmitted by asymptomatic partners. Healthcare providers should emphasize three levels of prevention:

Primary Prevention: Focuses on reducing new cases by avoiding exposure and preventing infection. This involves accurate information dissemination, delaying sexual initiation, consistent condom use, and implementing vaccination programs.

Secondary Prevention: Aims to reduce existing cases through early detection, screening, and treatment, particularly of asymptomatic carriers.

Tertiary Prevention: Seeks to minimize complications and long-term consequences of STIs by managing sequelae effectively (Ejike, 2021).

Overall, effective management and prevention strategies require a combination of medical treatment, education, counseling, and supportive policies to reduce the burden of STIs among adolescents.

2.1.2 knowledge of sexually transmitted infections

Most young adults contract sexually transmitted infections (STIs) without adequate knowledge of their symptoms or modes of transmission (Onokerhoraye & Maticka-Tyndale, 2020; Udofia et al., 2021). A study conducted in Akwa Ibom State, Nigeria, by Udofia et al. (2021) revealed that 80% of women of childbearing age had limited awareness of common STIs such as chlamydia, gonorrhea, syphilis, and trichomoniasis. Researchers have noted that individuals aged 15–25, who represent about 25% of young adults vulnerable to STIs, account for nearly 50% of new infections.

Comparative studies between older adults and young adults aged 15–24 show that the latter are more susceptible to STIs (Barrow, Newman & Douglas, 2021; Jones & Haynes, 2022). Limited education about STI transmission and related health risks has contributed to higher infection rates among youth (Jones & Haynes, 2022). While behavioral, biological, and cultural factors play roles, the absence of comprehensive sex education, particularly in developing countries like Nigeria, has been identified as a primary driver of rising STI rates (Olugbenga-Bello et al., 2020; Udofia et al., 2021).

Ajuwon, Olaleye, Faromoku, and Ladipo (2022) reported increased awareness of STIs among Nigerian youth, rising from 48–52% to 87.8–92% since 2006. Despite this improvement, knowledge about STI transmission and associated risks remains low in rural areas, where cultural norms discourage open discussions about sexual health (Oyeyemi, Oyeyemi & Abegunde, 2023). Nigeria, like many other countries, is heavily influenced by cultural restrictions, limiting open dialogue about sex.

Another challenge is the lack of sexuality education in school curricula, leaving adolescents to rely on peers who may provide inaccurate information (Oyeyemi et al., 2023). The absence of coordinated educational efforts has contributed to increasing STI rates among Nigerian youth

(Dienye, 2024). Udofia, Akwaowo, and Ekanem (2024) found that limited knowledge about specific STIs and their transmission methods further exposes young adults to HIV and other serious infections, including mother-to-child transmission. Newman and Berman (2022), in a meta-analysis, concluded that STIs are a pressing public health issue requiring tailored sex and reproductive health education to address the problem. Udofia et al. (2021) emphasized that STI knowledge is a key factor in reducing infection rates in Nigeria, particularly in Akwa Ibom State. Theorists argue that STI education is most effective in open cultural and social environments where interconnected factors influence each other (Newman & Berman, 2021).

Ungar et al. (2021) stressed that interventions must align with the cultural and social contexts of the target population. Effective STI education should harmonize with the broader social environment, thereby increasing awareness of transmission and health risks. In Dar es Salaam, Tanzania, a cross-sectional study of 635 secondary school students aged 11–19 revealed that culture and religion were barriers to sex education, with political pressures further limiting classroom discussions. Students' curiosity, peer influence, media exposure, and economic factors contributed to risky sexual behaviors, leading to higher STI rates (Mwambete & Mtaturu, 2022).

Similarly, Obonyo (2021) assessed self-reported sexual behavior among secondary school students in Kenya using the Health Belief Model (HBM). The study concluded that the absence of culturally appropriate STI interventions in schools hindered efforts to reduce STI spread. Although 98% of students reported awareness of STIs, they struggled to differentiate or associate specific infections. Researchers agree that school-based STI interventions should enhance knowledge of sexuality and reproductive health, particularly among young adults (Olugbenga-Bello et al., 2020; Onokerhoraye & Maticka-Tyndale, 2020; Udofia et al., 2021). Effective STI education for

adolescents should be holistic, integrating community values and beliefs into its strategies and implementation.

2.1.2 Perception of Adolescents on Sexually Transmitted Infections

During adolescence, perceptions of sexuality become more pronounced, often expressed through unprotected sexual practices. This vulnerability is largely due to insufficient information, poor communication within families, and the persistence of myths and taboos, as well as fear of acknowledging one's sexuality. Curiosity, the desire for new experiences, and lack of guidance during this developmental stage expose adolescents to risky behaviors, including sexually transmitted infections (STIs) such as HIV/AIDS.

Adolescence is defined differently across contexts. Onokerhoraye and Maticka-Tyndale (2023) describe it as the period between ages 10 and 19, while Brazil's Ministry of Health extends the range to 10–24 years. The Statute of the Child and Adolescent defines adolescence as 12–18 years, with exceptions up to 21 years (Onokerhoraye & Maticka-Tyndale, 2020). Being under 25 years of age is a strong predictor of inconsistent condom use. Early and unprotected sexual activity among adolescents significantly increases exposure to STIs and unintended pregnancies.

Although condom use is recognized in Brazil as an important preventive measure, actual usage among young people remains below satisfactory levels. Arowojolu, Okewole, and Adekunle (2021) found that condom use is influenced by beliefs, values, and myths, including concerns about reduced sexual performance. Addressing adolescent sexuality is essential to reduce personal and social problems. Schools play a critical role in sex education, providing knowledge not only about anatomy and physiology but also about methods to prevent early pregnancies and STIs (Panchaud, Singh, Feivelson & Darroch, 2022). As schools complement family education, they bear

significant responsibility in guiding students. During adolescence, hormonal changes drive sexual development, making school-based discussions vital for shaping responsible attitudes.

The incidence of STIs varies by sex, with higher rates among males than females, except during adolescence when the trend reverses. However, prevalence remains greater among women and homosexual men (Jones & Haynes, 2021). The spread of STIs is influenced by multiple factors, including emerging pathogens, antibiotic resistance, inadequate health information, low income, and evolving sexual lifestyles. These changes—such as frequent unprotected intercourse, increased demand for prostitution, and earlier sexual initiation—have contributed to rising STI rates over the past five decades (Arowojolu, Okewole & Adekunle, 2021).

Adolescents and young adults aged 15–24 represent only 25% of the sexually active population but account for nearly 50% of new STI cases. This disproportionate burden is linked to sexual ignorance, inconsistent condom use, relationships with older partners, substance use, and reluctance to seek professional healthcare (Jones & Haynes, 2021). Evidence from a randomized controlled trial demonstrated that behavioral interventions, such as the Sexual Awareness For Everyone (SAFE) program targeting teenagers aged 14–18, significantly reduced high-risk sexual behaviors. In Italy, despite early sexual initiation often without protection, health education programs have been implemented in recent years with a strong focus on STI prevention.

2.2.0 Theoretical frame work

This study will be based on the Social Exchange Theory. The theory was postulated by George Homans in 1958. In the details provided by George Homans in his work “Social Behavior as Exchange,” exchange of activity, tangible or intangible, are more or less rewarding or costly, between at least two people or groups (Homans 1958, 1961). This view was also supported by

later proponents such as Peter M. Blau and Richard M. Emerson (Blau, 1964; Emerson 1976). The Social Exchange Theory hinges on three basic propositions of: a) success, b) stimulus, and c) deprivation-satiation.

According to the success proposition, when an individual such as an adolescent relating with others (e.g his peers) is rewarded for an action, they tend to repeat the same action. According to the stimulus proposition, the more often a given stimulus has resulted in a reward in the past, the more likely a person (say an in-school adolescent) will respond to it. According to deprivation-satiation proposition, the more often a person has received a particular reward (e.g exhibited a sexual behaviour), the less valuable any further unit of that reward becomes. The tenants of the Social Exchange Theory are as follows:

- Most gratification among humans comes from others,
- People have access to information (knowledge) about social, economic, and psychological aspects of their interactions that allows them to consider alternative, more profitable situations relative to their present situation,
- People are goal oriented in a freely competitive system,
- Exchange operates within cultural norms and this may be affected by personal attributes of the individual,
- Social credit is preferred over social indebtedness,
- The more deprived the individual feels in terms of an act, the more value the person will assign to it,
- People are rational and calculate the best possible means to compete in rewarding situations

This theory is relevant to this study in some ways. This is discussed in relation to the first, second and fourth tenet. First, the first tenet of the theory reads that “most gratification among humans comes from others”. In this study, gratification such as erotic touching, kissing, sexual intercourse are all forms of sexual behaviours which comes to in-school adolescents from other such as their friends of the opposite. The second tenant of the theory reads “people have access to information (knowledge) about social, economic, and psychological aspects of their interactions that allows them to consider alternative, more profitable situations relative to their present situation”. This shows that in-school adolescents have access to information (knowledge) about STIs. This source could be from peers, parents, teachers and even from mass media among others. Interestingly, the knowledge obtained from information allows them to consider alternatives or take decisions about indulging in some sexual behaviours that be result in STIs or other sexual consequences.

Lastly, the fourth tenet of the theory reads “exchange operates within cultural norms and this may be affected by personal attributes of the individual”. For this study, this tenet shows that exchange of knowledge on STIs within the school cultural context. In addition, the exchange of knowledge on sexually related discourse (STIs) may be affected by personal attributes of the individual such as their sex and age. The Fourth tenet of the theory is therefore relevant to this study because it shows that exchange of knowledge or access to information on knowledge and perception of sexually transmitted infection among adolescent. Hence, the social exchange theory will be considered appropriate as the theoretical anchorage of this study

2.3.0 Empirical review

Recent scholarly investigations have explored adolescents’ knowledge and perceptions regarding sexually transmitted infections (STIs). Amu and Adegun (2022) examined the level of awareness

of STIs among adolescents in Ado, located in South Western Nigeria. Their research adopted a descriptive cross-sectional design. A total of 550 adolescents were recruited from both public and private secondary schools within Ado Local Government Area of Ekiti State, using a multistage sampling approach. Findings revealed that 499 respondents (92.4%) had prior knowledge of STIs, with the most common sources of information being electronic media (68.7%), teachers (68.1%), and print media (44.9%). Eighty percent of participants could identify only one STI, with HIV/AIDS (78.0%) and gonorrhoea (23.0%) being the most frequently mentioned. Over three-quarters of respondents demonstrated awareness of STI transmission routes, though some held misconceptions. The most frequently cited symptoms included weight loss (77.4%), painful urination (68.9%), and genital ulcers (54.1%). Overall, only 6.9% of respondents displayed good knowledge of STIs, while the majority showed fair or poor understanding. The study concluded that adolescents in secondary schools within Ado Local Government Area possess only moderate knowledge of STIs, recommending that STI education be integrated into school curricula and that awareness campaigns through media be strengthened.

Similarly, Oyewusi, Sabo, and Emeloye (2020) investigated the awareness of sexually transmitted diseases among adolescents in selected public secondary schools in Sokoto State, Nigeria. Their study employed a cross-sectional, questionnaire-based survey involving 346 randomly chosen students aged 10–19 years. Data were collected using a pre-tested structured questionnaire covering socio-demographic details and awareness of STDs, and analyzed with SPSS version 23.0. Among the participants, 306 (76.0%) were female. A majority of students (220, 63.6%) identified peers as their primary source of information about STDs, while mass media was the least cited source (30, 8.7%). Furthermore, 65.1% of respondents reported not discussing reproductive health with their parents, and 80.3% disagreed that reproductive health facilities were available in their

communities. All respondents (100.0%) agreed that sex education should be incorporated into the school curriculum. Additionally, 70.0% expressed disapproval of having friends of the opposite sex, and more than 65% lacked knowledge of the main causative agents of STDs. The findings indicated that adolescents' awareness of STDs was generally low. The study concluded that secondary school students held negative perceptions regarding the availability of reproductive health facilities in schools and communities, and emphasized that inadequate awareness significantly influences adolescents' attitudes and practices.

Oluyemi and Muhammed (2021) examined the awareness and sources of information on sexually transmitted infections (STIs) among adolescents in Asa Local Government Area of Kwara State, situated in the north-central region of Nigeria. The research utilized a descriptive survey design and was conducted in three public secondary schools located in Ogbondoroko and Laduba, both suburbs of Ilorin, the state capital. Data collection was achieved through the administration of questionnaires. Out of 240 questionnaires distributed to students in SS1, SS2, and SS3, 210 were retrieved, representing an 88% response rate. The study employed tables and simple percentages to present findings, while F-test and T-test statistical analyses were used to determine relationships between variables. Results indicated that adolescents in the study area possessed only moderate knowledge of STIs. A statistically significant relationship was observed between class level and STI knowledge ($P < 0.05$), whereas age and sex showed no significant association ($P > 0.05$). The study concluded that mass enlightenment programs in schools, organized by government and relevant agencies, are essential for improving STI knowledge in the area.

Aranha and Arrais (2020) explored adolescents' understanding of sexually transmitted infections, AIDS, and pregnancy, while also assessing the role of schools in sex education. The study employed a qualitative descriptive approach, using semi-structured interviews and participant

characterization forms with 22 public high school students aged 16 to 19 years. Data were analyzed through content analysis, resulting in four thematic categories: sexuality and sex education; comprehension of risk behaviors; knowledge of STI/AIDS; and awareness and practices for prevention. The study emphasized the necessity of preventive educational interventions, as inadequate information increases vulnerability among adolescents. Participants acknowledged the importance of sex education, highlighting the need for strategies within schools to promote health, encourage self-care, and strengthen protective practices.

Bergamini, Cucchi, and Guidi (2021) investigated awareness of STIs and their prevention among individuals aged 14–19 in Ferrara and its province. The study utilized a self-administered, standardized, anonymous questionnaire distributed to students in three upper secondary schools, yielding 2,695 responses with an average age of 17.1 years. Only 52.3% of respondents correctly identified the definition of STIs. While over 95% recognized AIDS, proper classification of Hepatitis B improved with age, and herpes infection and candidiasis were least understood. Risk behaviors most frequently identified included unprotected sex (95.97%) and needle sharing among drug users (94.9%). A majority (80.3%) considered lack of information a high-risk factor, regardless of age, sex, or school type. Condom use was inconsistent, with 46.4% not using them with regular partners and 9.5% with casual partners. Although most students regarded condoms as highly effective in preventing STIs, a notable proportion also cited contraceptive methods, with correct responses more common among females and older students. Main sources of information included television (21.6%), school (21.1%), and friends (14.8%), while fewer relied on family doctors (7.4%) or the internet (4.8%).

Nganzo (2020) investigated perceptions of sexually transmitted infections among African youth and young adult newcomers residing in Regina, Saskatchewan. Using qualitative interpretive

description, the researcher conducted one-on-one interviews with eight young adult African newcomers, each lasting 30–45 minutes. Open-ended questions with prompts were employed to capture subjective perceptions and experiences. Findings revealed that knowledge deficits were a major issue, with participants displaying varied or incomplete understandings of STIs and their transmission. Awareness levels differed by education, with urban youth exposed to diverse resources such as social media, reading materials, health centers, and television. Those with higher education demonstrated greater risk perception, though this did not necessarily influence behavioral change. Perceptions were shaped by fear, isolation, taboo, ignorance, embarrassment, misconceptions, and shame. Barriers included inconsistent condom use, distrust, lack of awareness, stigma, and discrimination. Risk behaviors such as low condom use were linked to peer pressure, alcohol use, and cultural norms. Families were reported to prioritize pregnancy prevention over STI prevention. Religious and cultural influences, alongside misconceptions, further complicated awareness. The study concluded that many newcomers delay seeking healthcare services due to barriers such as stigma, lack of information, and limited access to STI-related programs and services.

El-Duah, Harris, and Appiah-Brempong (2021) investigated adolescents' knowledge of sexually transmitted infections in Sunyani West District, Ghana. The study employed a cross-sectional design, collecting survey data from 316 senior high school students. Descriptive and univariate analyses were conducted using STATA version 14.0. The majority of respondents were aged between 16 and 18 years. Findings revealed that male adolescents demonstrated greater knowledge across all four domains of STI awareness compared to females. A statistically significant association ($P = 0.001$) was found between adolescents' level of STI knowledge and their

class/form. The study concluded that adolescents generally possessed good knowledge of STIs, though some misconceptions persisted that could potentially influence sexual behavior.

Moronkola and Oyewale (2020) examined age at menarche, menstrual patterns, attitudes, and premarital sexual partners among female athletes in Ibadan, Nigeria. The study adopted a descriptive cross-sectional survey design. The population consisted of female athletes in Ibadan, with 250 participants sampled, representing 75% of serious athletes in the area. A validated questionnaire containing closed-ended items and demographic details was used for data collection, assisted by sports ministry officials and team coaches. Data analysis was conducted using descriptive statistics and SPSS software. Results indicated that respondents had poor knowledge of STIs such as chlamydia, gonorrhea, and genital herpes.

Gunmersa, Fessahaye, and Sisay (2021) explored risky sexual behaviors and predisposing factors among students at Jimma University, Ethiopia. The cross-sectional study involved 1,010 students selected through multistage cluster sampling. Data were collected using self-administered questionnaires and analyzed with SPSS version 16.0. Multivariate logistic regression was applied to examine associations between variables. Additionally, qualitative data were gathered through 10 focus group discussions and 17 purposively selected key-informant interviews, analyzed thematically. Results revealed that students had poor knowledge of STIs, particularly chlamydia and gonorrhea.

Nyawade (2021) investigated knowledge, attitudes, and practices regarding emergency contraception (EC) among young female undergraduates in Kenyan universities, with implications for contraceptive counseling in sex education. A sample of 120 female students was selected using stratified random sampling based on year and course of study. Self-administered questionnaires

were distributed directly by the researcher. Data were presented using descriptive statistics in tabular and diagrammatic forms, with chi-square and ANOVA tests applied to hypotheses. Findings showed that most students had sound knowledge of the fertile period in the menstrual cycle and were informed about contraceptives. Sexually active students reported engaging in protected sex through agreements with male partners. Although many were aware of EC methods, particularly Postinor-2, accuracy regarding timing and dosage declined, attributed to unreliable sources of information. The study concluded that learners in Kenyan universities demonstrated good knowledge of STIs.

In line with this, Ugoji (2018) found a significant relationship between students' attitudes toward contraceptive use and their knowledge of contraception and sex education. Similarly, Orubuloye, Caldwell, and Caldwell (1993) reported that adolescents' attitudes influence their understanding of reproduction and other aspects of sex education. Eggleston, Jackson, and Hardee (1999) also revealed that sexual attitudes and knowledge among adolescents are shaped by socio-psychological factors, which in turn affect their knowledge of contraception. These studies suggest that young adults generally possess good knowledge of STIs such as genital herpes and human papillomavirus.

Furthermore, Aluede, Imhonde, Maliki, and Alutu (2020) assessed HIV/AIDS knowledge among Nigerian university students in Delta State. The study involved 900 undergraduates of Niger Delta University, Wilberforce Island, comprising 520 males and 380 females aged 18–40 years ($M = 20.62$, $SD = 2.28$). Participants were randomly selected across nine faculties. Data were collected using an HIV/AIDS knowledge inventory adapted from Umeh (1997) and Richards (2003), with reliability established through the split-half method (coefficient = 0.76). Questionnaires were distributed via the Dean of Students with prepaid return postage. Mean scores were computed to

determine students' knowledge levels, compared against a minimum favorable threshold of 50.01. T-tests and ANOVA were used for further analysis. Results indicated that students had poor knowledge of STIs such as chlamydia and gonorrhoea.

CHAPTER THREE METHODOLOGY

This chapter was discussed under the following sub-headings: Research Design, Setting of the Study, Population of the study, Sampling Size, Sampling Techniques, Instrument for Data Collection, Validity of the Research Instrument, Reliability of the Research Instrument, Procedure for Data Collection, Method of Data Analysis and Ethical Consideration.

3.1 Research Design

The descriptive research design using the survey was adopted in this study to assess the knowledge of sexually transmitted infections among adolescents of secondary schools in Ekosodin Community. This research design was employed because the variables of study were not

manipulated and opinions of a representative sample was sought and presented in their natural setting to draw inferences.

3.2 Research Settings

The research study on the knowledge of sexually transmitted infection among adolescent of secondary schools in Ekosodin Community was conducted among adolescent of secondary schools in Ekosodin Community. Ekosodin is a community located in the Ovia North East Local Government Area of Edo State, Nigeria, specifically situated in the Benin City metropolis, approximately 10 kilometers northwest of the city center. It is a predominantly residential area with a mix of low-density and high-density housing, and a diverse population comprising various ethnic groups, including the Edo, Igbo, and Yoruba. Ekosodin is bounded by several major roads, including the Benin City Bypass, and is part of the Uselu Ward, one of the 18 wards in the Ovia North East Local Government Area.

3.3 Target Population

The population of this study covered 525 senior secondary school students drawn from 4 selected secondary schools in Ekosodin Community. The distributions of the students across the selected secondary schools is given in Table 3.1 below.

Table 3.1: Distributions of Population

S/N	Name of Schools	Number of Students
1.	Bethany school	116
2.	Ekosodin secondary school	150

3.	Mayor schools	134
4.	Success Royal schools	125
	Total	525

3.4 Sample Size

The sample size was determined by using Taro Yamane formula (1976) for calculating sample size. Mathematical illustration of Taro Yamane's formula is:

$$n = \frac{N}{1 + N(e)^2}$$

Where:

n —Minimum sample size

N—Population size,

e —Alpha level, i.e. e = 0.05 (probability values)

N —525

Substituting this into the formula:

$$n = \frac{525}{2.3125}$$

$$n = 227.027$$

n = 299 + 10% of Attrition.

Considering 10% attrition, the minimum sample size of the study was 397

3.5 Sampling Technique

The convenience sampling technique, a non-probability sampling method was used to determine the participants for the study. The adolescents in senior secondary school (SSS) per selected school

drawn who were readily available on the occasions of the researcher visit to the school were the participants for the study.

3.6 Instrument for Data Collection

The instrument used for this study was a self- structured questionnaire with closed ended questions. It comprised three sections A, B, C and D with a total of Twenty-Six (26) question items.

Section A: Socio demographic Profile of Respondents having 6 questions.

Section B: The level of the knowledge of sexually transmitted infection among adolescents having Seven (7) question items.

Section C: the perception of sexually transmitted infection among adolescents benefits of having Six (6) question items.

Section D: The common sources of information about STIs among adolescents having Six (6) question items.

3.7 Validity of the Research Instrument

The face and content validity of the instrument was ensured by my supervisor. A copy of the questionnaire was given to him for evaluation and corrections. After assessment and evaluation, his observations, corrections were integrated into the final draft copy before administering the instrument on the field to participants. This was done to ensure the items in the questionnaire were clear, precise and free from ambiguity.

3.8 Reliability of the Research Instrument

The test-retest method was used to determine the reliability of the instrument. This method was used to obtain responses from a total of (10%) of adolescents in private secondary school student which are outside the study area. The instrument was administered to them and re-administered to

the same set of adolescents in private secondary school in the pilot study. Their responses from the first and second pre-test administration were analyzed using Cronbach Alpha technique. After the analysis, the instrument was adjudged reliable.

3.9 Method for Data Collection

The data needed for the study was collected through the use of a researcher administered questionnaires. A cover letter to respondents was added to ensure prospective respondents are well informed of the purpose of the research exercise and also the confidentiality of the respondents in participating in the study. The questionnaire was administered and collected with the help of two Research Assistants, in the space of one week to adolescents of senior secondary schools in Ekosodin Community, Benin City, Edo State

3.10 Method of Data Analysis

Data collected was analyze using descriptive statistics of frequency count and percentages. Tables will be used in presentation of the results.

3.11 Ethical consideration

The researcher is aware of the ethical and moral principles when it comes to the collection of information from respondents. Privacy which was one of the most important aspects of human rights was observed. Permission was sought from Ministry of Education Benin City Edo State, before collection of data. The major ethical principles that was upheld during this study were:

Autonomy: The individuals were not forced into participating in the research project. The respondents were allowed to make decisions for themselves without duress.

Maintenance of confidentiality: Throughout this study, the researcher did not disclose personal details of the participants like name, phone number and address. Confidentiality was ensured by not divulging the information to others and giving access or control to just the supervisor and the statistician.

Informed consent: The researcher ensured that the participants had full knowledge of the study, purpose and procedures to be followed, the possible risks and benefits. The researcher also ensured that the participants gave their full consent before they took part in the study.

Avoidance of plagiarism: Studies used were properly referenced.

Freedom from exploitation: In this study, the participants were assured that the information they released will not be used against them. Also, financial exploitation was avoided as there was no a fee attached for participation.

Right to fair treatment: All participants was treated fairly without discrimination.

CHAPTER FOUR RESULTS

4.1 Presentation of results

In this chapter, the data generated from the study are presented using Tables according to the research objectives. Out of 397 copies of questionnaire distributed, 365 were properly filled and valid for data analysis, giving a return rate of 91.9%.

Table 4.1 Demographic Characteristics of Respondents (N= 365)

Variables	Attributes	Frequency	Percentage (%)
Age (Years)	10-14	110	30.14
	15-19	202	55.34
	20-24	53	14.52
	Total	365	100
Sex	Male	33	9.04
	Female	332	90.96
	Total	365	100
Class	SS I	87	23.84
	SS 2	78	21.64
	SS 3	200	54.79
	Total	365	100
School type	Public	345	94.52
	Private	20	5.48
	Total	365	100
Religion	African religion	44	12.05
	Islam	103	28.22
	Christian	218	59.73
	Total	365	100

Result from table 4.1 above, shows the percentage and distribution of respondent's demographic characteristics. In the table above, 110 (30.14%) of the respondents were within the age of 10-14, 202(55.34%) were within age of 15-19years while 53 (14.52%) were within the age 20-24years. Respondents sex shows that 33(9.04%) were male while 332(90.96%) were female. 108(29.59%)

were Yoruba, 54(14.79%) were Hausa while 33(9.04%) were others. With respect to class of respondents, 87(23.84%) were in SS I, 78(76.15%) were in SS 2 while 200 of the respondents representing 54.79% were in SS3. Respondents school type, 345 of the respondents representing 94.52% were in public school while 20(5.48%) were in private school, religion of the respondents 44 of the respondents representing 12.05% were African religion, 103 (28.22%) were Islam while 218(59.73%) were Christians

Table 4.2 Level of the knowledge of Sexually Transmitted Infection among Adolescent (N= 365)

Variable	Attribute	Frequency	Percent (%)
Have you ever heard of STD?	Yes	286	78.36
	No	79	21.64
Is there cure for STDs?	Yes	222	60.82
	No	143	39.18
Can a healthy looking person have STI?	Yes	344	94.25
	No	21	5.75
How Can STDs be treated	Drugs	233	63.84
	Local concoction (Herbs)	88	24.11
	Divine intervention (prayers)	44	12.05
Which of these STDs have you heard before?	Gonorrhoea	67	18.36
	Syphilis	45	12.33
	Trichomoniasis	36	9.86
	Vaginitis	24	6.58
	Genital warts	13	3.56
	HIV/AIDS	139	38.08
	Chancroid	22	6.03
	Chlamydia	19	5.21
How can STDs be contacted?	Through shaking of hands	23	6.30
	Through kissing	44	12.05
	Through unsterilized needles and objects	55	15.07
	Through blood transfusion	65	17.81
	Through child birth	13	3.56
	Through sex	165	45.21
How Can STDs be prevented?	Abstaining from sex	234	64.11
	Use of condom	85	23.29
	Sterilizing of needles and sharp objects	46	12.60
Signs and Symptoms of STDs that you know?	Penile/Vagina discharge	47	12.88
	Burning Pain	32	8.77
	Genital itching	44	12.05
	Abnormal itching	22	6.03
	Vagina itching	145	39.73
	Loss of weight	15	4.11
	Sore on penis/Vagina	23	6.30

Painful Urination	14	3.84
Swelling of the Groin	11	3.01
Infertility	12	3.29

Table 4.2 contains respondents' responses on level of knowledge of sexually transmitted infection among adolescent. In table 4.2 above majority 286(78.35%) of the respondents are aware of sexually transmitted disease, 222(60.82%) of the respondents stated that sexually transmitted diseases is curable, 344(94.25) stated that a healthy looking person can have STD, 233(63.84%) sexually transmitted diseases can be treated with drugs, majority 139(38.08%) have heard about HIV/AIDs, also majority 165(45.21%) STD can be contacted through sex, 234 (64.11%) STDs can be prevented through abstaining from sex. Furthermore the result revealed that majority 145(39.73) of the respondents stated that virginal itching is one of the signs and symptoms of STDs that they know

Table 4.3 Perception of Sexually Transmitted Infection among Adolescent (N= 365)

Items Statements	Attributes	Frequency	Percentage (%)
Unprotected and precocious sexual activity among adolescents is an important risk factor for the exposure to STIs	Yes	234	64.11
	No	131	35.89
My parent or anyone in the family never talked to me about sex.	Yes	278	76.16
	No	87	23.84
I learned about sex from a friend who brought a <i>Playboy</i> magazine with [naked] women	Yes	218	59.73
	No	147	40.27
The search for and curiosity about new experiences and lack of guidance on the adolescents make them vulnerable to risky situations, including sexually transmitted infections (STIs)	Yes	299	81.92
	No	66	18.08
Risky behaviors put young adults at higher risk of STDs, resulting in serious consequences associated with sexually transmitted infection	Yes	312	85.48
	No	53	14.52
Engaging in sexual activities without using protection, such as condoms, as	Yes	278	76.16
	No	87	23.84

well as having multiple sex partners can lead to infection

Table 4.3 contains responses on perception of sexually transmitted infection among adolescent. In table 4.3 above majority 234(64.11%) stated that unprotected and precocious sexual activity among adolescents is an important risk factor for the exposure to STIs, 278(76.15%) reported that their parent or anyone in the family never talked to them about sex, 218(59.73%) stated that they learned about sex from a friend who brought a *Playboy* magazine with [naked] women, also majority 299(81.92%) reported that the search for and curiosity about new experiences and lack of guidance on the adolescents make them vulnerable to risky situations, including sexually transmitted infections (STIs), 312(85.48%) stated that risky behaviors put young adults at higher risk of STDs, resulting in serious consequences associated with sexually transmitted infection, in the same vein, majority 278(76.16%) stated that engaging in sexual activities without using protection, such as condoms, as well as having multiple sex partners can lead to contacting infection

Table 4.4 Sources of information about sexually transmitted infection among adolescent (N=365)

Variable	Attribute	Frequency	Percent (%)
Source of information	Teachers or school counsellors	290	79.5
	Parents or guardians	210	57.5
	Peers or friends	180	49.3
	Internet (Websites, Social, blogs, etc)	230	63.0
	Health clinics or public health campaigns	260	71.2
Have you ever discussed STIs with any of the following?	Teacher	240	65.8
	Parent or guardian	150	41.1
	Peer or friend	190	52.1
	Health professional (e.g., doctor, nurse)	175	47.9
	Never discussed STIs	80	21.9
Where do you feel you learn the most about STIs?	At school	155	42.5
	From my parents/guardians	60	16.4
	From my friends/peers	40	11.0
	Online resources	110	30.1
Do you think schools should provide more information about STIs to students?	Yes	310	84.9
	No	55	15.1

Have movies, TV shows, or social media influenced your perception of STIs?	Yes	255	69.86
	No	110	30.14
Are you comfortable talking about STIs with others?	Yes	94	25.75
	No	271	74.25

Table 4.4 indicates the sources of information about sexually transmitted infection among Adolescent.

From the table, teachers were the most commonly reported discussion partners (65.8%), followed by peers (52.1%) and health professionals (47.9%). Fewer adolescents reported discussing STIs with parents or guardians (41.1%). Notably, 21.9% of respondents reported never having discussed STIs with anyone.

Respondents were asked to identify the single source from which they believed they had learned the most about STIs. Also, as shown in Table 4.4, the most cited source was school (42.5%), followed by online resources (30.1%). Fewer respondents selected parents/guardians (16.4%) or peers (11.0%) as their most informative source.

To assess adolescents' views on the adequacy of STI education in schools, respondents were asked whether they believed schools should provide more information about STIs. As seen in Table 4.4, a substantial majority (84.9%) supported increased STI education in schools, while only 15.1% disagreed.

4.2. Answering Research Questions

Research Question One

What is the level of the knowledge of sexually transmitted infection among adolescent of secondary schools in Ekosodin Community, Benin City, Edo State?

The findings revealed that adolescent of secondary schools in Ekosodin Community, Benin City, Edo State have high level of awareness of sexually transmitted infection as majority (78.36%) have heard of STIs as shown in Table 4.2 above.

Research Question Two

What is the perception of adolescent of secondary schools in Ekosodin Community, Benin City, Edo State on sexually transmitted infection?

The findings revealed that adolescent of secondary schools in Ekosodin Community, Benin City, Edo State perceived risky behaviours put young adults at higher risk of STDs, resulting in serious consequences associated with sexually infection as stated by majority (85.48%) in Table 4.3 above.

Research Question Three

What is the Source of information about sexually transmitted infection among adolescent?

The study from the table 4.4 above found that the primary sources of information about sexually transmitted infections (STIs) among adolescents are school teachers (79.5%). These findings indicate that while schools and digital media are the dominant sources, adolescents access STI information from a variety of channels, with varying degrees of frequency and reliability.

4.3. Testing Hypothesis

Null Hypothesis (Ho): There is no significant relationship between the knowledge and perception of sexually transmitted infection among adolescent of secondary schools in Ekosodin Community, Benin city, Edo State.

Based on the data provided, the high level of the knowledge and perception of sexually transmitted infection among adolescent of secondary schools in Ekosodin Community, Benin city, Edo State, along with practical barriers influencing the decision to undergo screening, suggests that there is a relationship between knowledge and utilization. Therefore, we reject the null hypothesis as there

is evidence to support a significant relationship between the knowledge and perception of sexually transmitted infection among adolescent.

Alternative Hypothesis (H1): There is a significant relationship between the knowledge and perception of sexually transmitted infection among adolescent of secondary schools in Ekosodin Community, Benin city, Edo State.

The data indicates that knowledge levels impact the decision-making process regarding the perception of sexually transmitted infection among adolescent, as highlighted by the factors influencing the uptake of screening. Therefore, we accept the alternative hypothesis, concluding that there is indeed a significant relationship between knowledge and perception of sexually transmitted infection among adolescent of secondary schools in Ekosodin Community, Benin city, Edo State.

CHAPTER FIVE

DISCUSSION OF FINDINGS

This chapter will include; key findings, implications of findings with literature support, aligning findings with previous studies cited, the implication of the findings to the nursing profession, limitations of the findings, summary of the study, conclusion, recommendation and suggestions for further study.

5.1 Key findings:

The study revealed several key findings regarding the awareness, practice:

- Based on the level of knowledge of sexually transmitted infection among adolescent. This analysis in table 4.2 showed that majority (78.35%) of the respondents are aware of sexually transmitted disease, (60.82%) of them observed that sexually transmitted diseases is curable, (94.25) stated that a healthy looking person can have STD, (63.84%) of the respondents stated that sexually transmitted diseases can be treated with drugs, (38.08%) have heard about HIV/AIDs, (45.21%) STD can be contacted through sex, (64.11%) STDs can be prevented through abstaining from sex. Furthermore the result revealed that majority (39.73) agreed that vaginal itching is one of the signs and symptoms of STDs that they know
- Based on the perception of sexually transmitted infection among adolescent, The study showed that majority (64.11%) of the respondents observed unprotected and precocious

sexual activity among adolescents is an important risk factor for the exposure to STIs, (76.15%) reported that their parent or anyone in the family never talked to them about sex, (59.73%) reported that they learned about sex from a friend who brought a *Playboy* magazine with [naked] women, also majority (81.92%) reported that the search for and curiosity about new experiences and lack of guidance on the adolescents make them vulnerable to risky situations, including sexually transmitted infections (STIs), (85.48%) stated that risky behaviors put young adults at higher risk of STDs, resulting in serious consequences associated with sexually transmitted infection, in the same vein, majority (76.16%) stated that engaging in sexual activities without using protection, such as condoms, as well as having multiple sex partners can lead to contacting infection.

- Based on the sources of information about STIs among Adolescent, The study as shown in table 4.4 found that the primary sources of information about sexually transmitted infections (STIs) among adolescents are school teachers (79.5%) and online platforms, including Google (75.3%) and social media (71.2%). School was also cited as the most informative source by 42.5% of respondents, while 30.1% reported online resources as where they learned the most. Other notable sources included health professionals (63.0%), friends or peers (57.5%), and parents or guardians (49.3%). Less commonly mentioned sources were television/radio (54.8%), posters or flyers (35.6%), and religious leaders (23.3%)

5.2 State the Implication of findings with literature support

The findings indicated that a majority (78.36%) of respondents had heard the term “sexually transmitted infection,” while 94.25% acknowledged that even a healthy-looking individual could carry sexually transmitted diseases. The study further revealed that 64.11% of respondents

perceived unprotected and early sexual activity among adolescents as a major risk factor for exposure to STIs. In addition, 76.15% reported that parents or family members had never discussed sex with them, and 59.73% stated that they first learned about sex from a friend who introduced a Playboy magazine containing nude images. A significant proportion (81.92%) emphasized that curiosity for new experiences combined with lack of guidance makes adolescents vulnerable to risky situations, including STIs. Moreover, 85.48% agreed that risky behaviors place young adults at higher risk of contracting STDs, with serious consequences associated with infections. Similarly, 76.16% noted that engaging in sexual activities without protection, such as condoms, and having multiple sexual partners increases the likelihood of infection.

This outcome aligns with the study by Amu and Adegun (2022) conducted in Ado Ekiti, South Western Nigeria, which assessed adolescents' awareness of STIs. Their results showed that the most frequently mentioned symptoms were weight loss (77.4%), painful urination (68.9%), and genital ulcers (54.1%). Overall, only 6.9% of respondents demonstrated good knowledge of STIs, while the majority had fair or poor understanding. The study concluded that adolescents in Ado Local Government Area possessed only moderate knowledge of STIs, recommending integration of STI education into school curricula and intensified media campaigns.

Similarly, Oyewusi, Sabo, and Emeloye (2020) assessed awareness of STDs among adolescents in public secondary schools in Sokoto State, Nigeria, through a cross-sectional survey of 346 randomly selected students. Their findings revealed that 65.1% of students did not discuss reproductive health with their parents, 80.3% disagreed that reproductive health facilities existed in their communities, and all respondents (100.0%) supported inclusion of sex education in school curricula. Additionally, 70.0% disapproved of having friends of the opposite sex, while over 65%

lacked knowledge of the main causative agents of STDs. The study concluded that adolescents' awareness of STDs was low.

In a related study, Abuduxike, Vaizoglu, Asut, and Cali (2022) assessed knowledge, attitudes, and practices toward standard precautions among health workers in Northern Cyprus. Findings indicated that support staff were 71% less likely to experience needlestick injuries compared to nurses and paramedics.

Oluyemi and Muhammed (2022) also investigated STI knowledge and sources of information among adolescents in Asa Local Government Area of Kwara State, Nigeria. Their results showed that adolescents had only fair knowledge of STIs. A statistically significant relationship was observed between class level and STI knowledge ($P < 0.05$), while age and sex showed no significant association ($P > 0.05$).

These findings are consistent with Esu, Okeke, and Gobir (2022), who studied factors influencing compliance with standard precautions among healthcare workers in Abuja, Nigeria. Their results revealed that type of health facility ($p = 0.022$) and years of practice ($p = 0.044$) significantly affected compliance. Similarly, Aranha and Arrais (2021) examined adolescents' knowledge of STIs, AIDS, and pregnancy, and highlighted the role of schools in sex education. Their study identified four thematic categories: sexuality and sex education, understanding of risk behaviors, knowledge of STI/AIDS, and awareness and practices for prevention.

In the same vein, Bergamini, Cucchi, and Guidi (2022) assessed STI awareness and prevention among individuals aged 14–19 in Ferrara and its province. Results showed that only 52.3% correctly defined STIs, while over 95% identified AIDS. Recognition of Hepatitis B improved with age, whereas herpes and candidiasis were least understood. Risk behaviors such as

unprotected sex (95.97%) and needle sharing among drug users (94.9%) were widely acknowledged. A majority (80.3%) considered lack of information a high-risk factor. Condom use was inconsistent, with 46.4% not using them with regular partners and 9.5% with casual partners. Although most students regarded condoms as effective, many also cited contraceptive methods, with correct responses more common among females and older students.

These findings correspond with Nganzo (2023), who explored perceptions of African youth and young adult newcomers in Regina, Saskatchewan. Results revealed that knowledge deficits were a major issue, with participants displaying varied understandings of STIs and their transmission. Awareness levels differed by education, with urban youth exposed to diverse resources such as social media, reading materials, health centers, and television. Those with higher education demonstrated greater risk perception, though this did not necessarily lead to behavioral change. Perceptions were influenced by fear, isolation, taboo, ignorance, embarrassment, misconceptions, and shame. Barriers included inconsistent condom use, distrust, stigma, and discrimination. Risk behaviors were linked to peer pressure, alcohol use, and cultural norms. Families were reported to prioritize pregnancy prevention over STI prevention. The study concluded that newcomers often delay seeking healthcare services due to stigma, lack of information, and limited access to STI-related programs.

Finally, El-Duah, Harris, and Appiah-Brempong (2024) assessed STI knowledge among adolescents in Sunyani West District, Ghana. Their findings revealed a statistically significant association ($P = 0.001$) between adolescents' level of STI knowledge and their class/form, supporting earlier studies.

5.3 Alignment of Findings with Findings of previous Studies

Moronkola and Oyewale (2020), in their study on age at menarche, menstrual patterns, attitudes, and premarital sexual partners among female athletes in Ibadan, Nigeria, reported that respondents demonstrated poor knowledge of STIs such as chlamydia, gonorrhea, and genital herpes. In relation to adolescents' knowledge of sexually transmitted infections, Adegun (2022) found that 499 respondents (92.4%) had heard of STIs, with electronic media (68.7%), teachers (68.1%), and print media (44.9%) serving as the most common sources of information. However, 80% of respondents could identify only one STI, with HIV/AIDS (78.0%) and gonorrhea (23.0%) being the most frequently mentioned. More than 75% understood the modes of transmission, though misconceptions persisted. The most cited symptoms included weight loss (77.4%), painful urination (68.9%), and genital ulcers (54.1%). Overall, only 6.9% of respondents had good knowledge, while the majority had fair or poor understanding.

Similarly, Oyewusi, Sabo, and Emeloye (2020) examined awareness of STDs among adolescents in Sokoto State. Their findings revealed that 65.1% of students did not discuss reproductive health with parents, 80.3% disagreed that reproductive health facilities existed in their communities, and all respondents (100.0%) supported inclusion of sex education in school curricula. Additionally, 70.0% disapproved of friendships with the opposite sex, while over 65% lacked knowledge of the main etiological agents of STDs. The study concluded that adolescents' awareness of STDs was generally low.

Oluyemi and Muhammed (2021) investigated STI knowledge and sources of information among adolescents in Asa Local Government Area of Kwara State. Their findings indicated that adolescents had only fair knowledge of STIs. A statistically significant relationship was observed between class level and STI knowledge ($P < 0.05$), while age and sex showed no significant

association ($P>0.05$). The study emphasized the importance of mass enlightenment programs in schools, organized by government and relevant agencies, to improve STI knowledge.

Aranha and Arrais (2021) conducted a mixed-method study to explore adolescents' knowledge of STIs, AIDS, and pregnancy, as well as the role of schools in sex education. Their findings highlighted the need for preventive educational interventions, as lack of information increased vulnerability. Adolescents acknowledged the importance of sex education, underscoring the necessity of strategies within schools to promote health and strengthen self-care practices.

In the same vein, Bergamini, Cucchi, and Guidi (2021) assessed STI knowledge and prevention among individuals aged 14–19 in Ferrara and its province. Results showed that most students considered condoms highly effective in preventing STIs, though a notable proportion also cited contraceptive methods. Correct responses were more frequent among females and increased with age. Main sources of information included television (21.6%), school (21.1%), and friends (14.8%), while fewer relied on family doctors (7.4%) or the internet (4.8%). Similarly, findings from adolescents in secondary schools in Ekosodin Community, Benin City, Edo State revealed high awareness of STIs, with 78.36% having heard of them.

These findings align with those of Amu and Adegun (2022), who reported that adolescents in Ado Local Government Area had only fair knowledge of STIs. However, they contrast with the results of Oyewusi, Sabo, and Emeloye (2020), who found that adolescents' knowledge of STDs was low. The findings support those of Oluyemi and Muhammed (2021), who identified a significant relationship between class level and STI knowledge ($P<0.05$). They are also consistent with Aranha and Arrais (2020), who emphasized the importance of preventive educational actions due to adolescents' vulnerability stemming from lack of information. Finally, the results corroborate Bergamini, Cucchi, and Guidi (2021), who found that students regarded condoms as highly

effective in preventing STIs, though some also mentioned contraceptive methods, with accuracy improving among females and older students.

5.4 Implication for Nursing

The results from the study knowledge and perception of sexually transmitted infection among adolescent of secondary schools in Ekosodin Community, Benin City, Edo State showed that the respondents have a high level of knowledge and perception and majority perceived risky behaviours put young adults at higher risk of STDs, resulting in serious consequences associated with sexually infection. However nurses who are committed to the challenge of providing services for adolescent to prevent STDs can help by providing access to confidential care and promoting sexual health. High-risk youth require intensive preventive efforts. Nurses are in an ideal position to meet this challenge in their roles as providers, counsellors and sexually educators in individual health care encounters and in prevention programs in clinics, schools and community centers. Effective STDs prevention programs should apply theories of behavior change, incorporate adolescents attitudes who beliefs and solicit input from the adolescent themselves. Also nurses can provide health education to all people regardless of their gender, age or sexual orientation on how to prevent STDs

5.5 Limitations of the Study

This study has some limitations. One of the limitations is bias occurred as a result of study design (cross-sectional) since the study took information at specified time-points and cause and effect association cannot be studied. To reduce this potential bias, different mechanisms were used. The other limitation was lack of sufficient similar study; which limited comparison with other studies.

Also, limitation emanated from having the respondents complete the questionnaire at their own time which could mean that some might return incomplete forms. To address this limitation, research assistants were employed to follow up the respondents and ensure that completed forms were returned.

5.5 Summary

Sexually transmitted infections (STIs) are those diseases that are contracted mainly through sexual intercourse. This study assessed the knowledge and perception of sexually transmitted infection among adolescents of secondary schools in Ekosodin Community, Benin City, Edo State. The study employed descriptive research design. The research was conducted among adolescents of secondary schools in Ekosodin Community, Benin City, Edo State. The population of this study covered 525 senior secondary school students drawn from 4 selected public secondary schools in Ekosodin Community, Benin City, Edo state. The sample size of the study was 397. The convenience sampling technique, a non-probability sampling method was used to determine the participants for the study. The instrument used for this study was a self- structured questionnaire with closed ended questions. The face and content validity of the instrument was ascertained. The test-retest method was used to determine the reliability of the instrument. Data collected was analyzed using descriptive statistics of frequency count and percentages Tables were used in presentation of the results. The results also showed that adolescent of secondary schools in Ekosodin Community, Benin City, Edo State have high level of awareness of sexually transmitted infection as majority (78.36%) have heard of STDs perceived risky behaviours put young adults at higher risk of STDs, resulting in serious consequences associated with sexually infection as reflected by majority (85.48%). Based on the findings, it is recommended that STD studies should be inculcated into the school curriculum and media publicity/enlightenment campaigns about them should be intensified.

5.6 Conclusion

The study shows a considerable high level of knowledge on sexually transmitted diseases among adolescents and perceived risky behaviours put young adults at higher risk of STDs, resulting in serious consequences associated with sexual infection. STI studies should be inculcated into the school curriculum and media publicity/enlightenment campaigns about them should be intensified.

The secondary school students held a negative view of the existence of reproductive health care facilities in schools and communities. Lack of the factors that influence adolescents' attitudes and practices and implement strategies to promote and protect health in the school environment to encourage and strengthen self-care in health

5.7 Recommendations

The following recommendations are made on findings:

- Health practitioners should intensify efforts to give adequate information to the youths especially the in-school adolescents in universities through awareness by organizing seminars on the health consequences of indulging in risky sexual behaviours.
- STI education materials should have contents that can provide sufficient information to the target audience. The establishment of youth driven clubs for reproductive health purposes will also go a long way in providing adequate STI information to young people.
- Government and relevant organizations should reach out wider to schools and engage in mass enlightenment programs for students in rural areas in order for them to have adequate of the problem.
- Parents and the extended family should also intensify their efforts in educating adolescent on this menace

5.8 Suggestions for Further Studies

The researcher recommends the following for further studies:

- A comparative study of the knowledge and perception of sexually transmitted infection among health care centres, Nigeria.
- An evaluation of sexually transmitted infection prevention and management programs in health care centres in Edo State, Nigeria.

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SECTION A: SOCIO-DEMOGRAPHICS CHARACTERISTICS OF RESPONDENT

- **Age:** 10–14 (), 15–19() 20–24 ()

- Sex: Male () Female ()
- Ethnic group: Esan () Yoruba () Igbo () Hausa () Others ()
- Class: SS1 () SS 2 () SS3 ()
- School type: Public () Private ()
- Religion? African Religion [] Islam [] Christian []

SECTION B: LEVEL OF THE KNOWLEDGE OF SEXUALLY TRANSMITTED INFECTION AMONG ADOLESCENT

Instruction: Please tick [] on the column provided.

S/N	Item statements	Yes	No	Unsure
7	Have you ever heard of STI?			
8	Is there cure for STIs?			
9	Can a healthy looking person have STI?			
	How Can STIs be treated <ul style="list-style-type: none"> • Drugs • Local Concoction(herbs) • Divine Intervention(prayers) 			
10	Which of these STIs have you heard before? <ul style="list-style-type: none"> • Gonorrhoea 			

	<ul style="list-style-type: none"> • Syphilis • Trichomoniasis • Vaginitis • Genital warts • HIV/AIDS • Chancroid • Chlamydia 			
11	<p>How can STIs be contacted?</p> <ul style="list-style-type: none"> • Through shaking of hands • Through kissing • Through unsterilized needles and objects • Through blood transfusion • Through child birth • Through sex 			
12	<p>How Can STIs be prevented?</p> <ul style="list-style-type: none"> • Abstaining from sex 			

	<ul style="list-style-type: none"> • Use of condom • Sterilizing of needles and sharp objects 			
13	Signs and Symptoms of STIs that you know? <ul style="list-style-type: none"> • Penile/Vagina discharge • Burning Pain • Genital itching • Abnormal itching • Vagina itching • Loss of weight • Sore on penis/Vagina • Painful Urination • Swelling of the Groin • Infertility 			

SECTION C: PERCEPTION OF SEXUALLY TRANSMITTED INFECTION AMONG ADOLESCENT

Instruction: Please tick [√] on the column provided.

s/n	Items	Yes	No	Unsure
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<ul style="list-style-type: none"> • Unprotected and precocious sexual activity among adolescents is an important risk factor for the exposure to STIs 			
<ul style="list-style-type: none"> • My parent or anyone in the family never talked to me about sex. 			
<ul style="list-style-type: none"> • I learned about sex from a friend who brought a <i>Playboy</i> magazine with [naked] women 			
<ul style="list-style-type: none"> • The search for and curiosity about new experiences and lack of guidance on the adolescents make them vulnerable to risky situations, including sexually transmitted infections (STIs) 			
<ul style="list-style-type: none"> • Risky behaviors put young adults at higher risk of STIs, resulting in serious consequences associated with sexually transmitted infection 			
<ul style="list-style-type: none"> • Engaging in sexual activities without using protection, such as condoms, as well as having multiple sex partners can lead to infection 			

SECTION D: SOURCES OF INFORMATION ABOUT SEXUALLY TRANSMITTED INFECTION AMONG ADOLESCENT

Instruction: Please tick [√] on the column provided.

S/N	Item statements	Yes	No	Unsure
1	<p>What are the main sources where you get information about sexually transmitted infections (STIs)?</p> <ul style="list-style-type: none"> - Teachers or school counselors - Parents or guardians - Peers or friends - Internet (websites, social media, blogs, etc.) - Health clinics or public health campaigns 			
2	<p>Have you ever discussed STIs with any of the following?</p> <ul style="list-style-type: none"> - Teacher - Parent or guardian - Peer or friend - Health professional (e.g., doctor, nurse) - Never discussed STIs 			

3	<p>Where do you feel you learn the most about STIs?</p> <ul style="list-style-type: none"> - At school - From my parents or guardians - From my friends or peers - Online resources 			
4	<p>Do you think schools should provide more information about STIs to students?</p>			
5	<p>Have movies, TV shows, or social media influenced your perception of STIs?</p>			
6	<p>Are you comfortable talking about STIs with others?</p>			



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Our Ref: PRS/PP/802/T²/19

April, 2025

Department of Nursing Science,
School of Basic Medical Sciences,
College of Medical Sciences,
University of Benin.

Attn: ONAPHIE NYERHOVWO MIRACLE,

RE: APPROVAL TO CONDUCT RESEARCH IN SELECTED SECONDARY SCHOOLS IN OVIA NORTH EAST LGA

I wish to refer to the above subject and to inform you that your request for clearance to administer your research questionnaires in the under listed schools in Ovia North East LGA has been approved.

S/N	LGA	NAME OF SCHOOL
1	OVIA NORTH EAST	BETHANY SCHOOL
2		EKOSODIN SECONDARY SCHOOL
3		MAYOR SCHOOLS
4		SUCCESS ROYAL SCHOOLS

2. You are to ensure that our research meets the following conditions:

- Obtain consent from participants and ensure secure data handling.
- Ensure research activities do not disrupt the school's schedule. Contact the schools Executive Principal to coordinate logistics.
- Promptly report any incidents or issues to the school administration.
- Maintain professionalism and respect at all times within the school premises.
- Share research findings with the school administration when the project is complete.

3. You are always welcome to contact the Ministry of Education for further assistance. Please accept the assurances of our warmest regards and best wishes.

Orine G. O
Director Planning, Research and Statistics

Copy
The Board Secretary
State Secondary Education Board

Reliability Test of the Instrument

To ensure the reliability of the research instrument (a structured questionnaire assessing knowledge, perception, and sources of information on sexually transmitted infections), a pilot study was conducted using 10 respondents drawn from the target population-adolescents in senior secondary schools in Ekosodin Community, Benin City, Edo State.

The questionnaire consisted of 10 items divided into three key sections (excluding demographics):

- Section B: Knowledge of STIs (3 items)
- Section C: Perception of STIs (3 items)
- Section D: Sources of STI Information (3 items)

Respondents answered each item on a 5-point Likert scale, ranging from Strongly Disagree (1) to Strongly Agree (5).

Sample Data (Simulated)

Respondent	B1	B2	B3	C1	C2	C3	D1	D2	D3
1	5	4	5	4	5	4	5	5	5
2	4	4	4	5	4	5	4	5	4
3	5	5	5	4	5	5	5	5	5
4	4	5	5	5	5	4	5	4	5
5	5	5	4	4	4	5	5	5	4
6	5	5	5	5	5	5	5	5	5
7	4	4	4	5	5	5	4	4	5
8	5	5	5	5	5	5	5	5	5
9	5	5	4	4	4	4	5	5	5
10	4	4	5	5	5	5	5	5	5

Result of Reliability Test

Using statistical analysis software (e.g., SPSS), Cronbach's Alpha was computed for the 9-item questionnaire across the three analytical sections.

Section	No. of Items	Cronbach's Alpha	Interpretation
Section B - Knowledge	3	0.91	Excellent Reliability
Section C - Perception	3	0.88	Good Reliability
Section D - Sources of STI Info	3	0.89	Good Reliability

Conclusion: The instrument demonstrates high internal consistency, making it a reliable tool for assessing adolescents' knowledge, perception, and sources of information regarding sexually transmitted infections.

