

**KNOWLEDGE OF SEX EDUCATION IN PREVENTING UNWANTED PREGNANCY
AMONG SENIOR SECONDARY SCHOOL STUDENTS IN LUTHERAN HIGH
SCHOOL OBOT IDIM**

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ABSTRACT

This research investigates the role of sex education in preventing unwanted pregnancies among senior secondary school students at Lutheran High School, Obot Idim. The study addresses the global issue of unintended pregnancies, highlighting their implications for maternal health and societal well-being. Despite efforts to provide sex education, gaps persist due to cultural taboos and inadequate dissemination of information. This study aims to assess students' knowledge of sex education programs, identify factors influencing unwanted pregnancies, examine methods of sex education delivery, and explore the impact of sexual stigmas on program effectiveness. The research employed a sample of 200 students selected through simple random sampling. Data collection utilized a validated questionnaire administered face-to-face, ensuring comprehensive responses from participants. Data analysis included descriptive statistics and chi-square tests to examine relationships and test hypotheses. Key findings indicate that 63% of students reported receiving formal sex education, with 50% recognizing early sexual debut as a risk factor for unwanted pregnancies. Moreover, 65% affirmed that sex education covered contraception, gender issues, sexuality, abstinence, abortion, and sexually transmitted infections. Statistical analysis confirmed significant relationships between sex education exposure and knowledge levels, challenging initial hypotheses about knowledge adequacy. Recommendations from the study emphasize the need for enhanced sex education programs tailored to address cultural sensitivities and overcome stigmas. Comprehensive curricula should include practical information on contraception and healthy sexual behaviors, promoting informed decision-making among adolescents. Furthermore, collaboration between schools, health services, and community stakeholders is crucial to provide supportive environments that facilitate open discussions about sexual health. In conclusion, this research contributes valuable insights into the effectiveness of sex education in reducing unintended pregnancies among secondary school students. By addressing gaps in knowledge and access to information, policymakers and educators can better support adolescents in making responsible choices regarding their reproductive health, ultimately improving maternal outcomes and societal well-being.

KEYWORDS: Knowledge, Sex, Education, Unwanted Pregnancy, Students

INTRODUCTION

Tharakan (2023) stated that unintended pregnancy is essentially unwanted or unplanned pregnancy - it occurs at a time when the pregnant woman (or the couple) does not desire children or desire them at a much later date. Additionally, Wikipedia (2024) defined unintended pregnancies as pregnancies that are mistimed, unplanned or unwanted at the time of conception and sexual activity without the use of effective contraception through choice or coercion is the predominant cause of unintended pregnancy.

Pratasava (2022) documented that unintended pregnancies in the United States account for half of the pregnancies each year. The rates of unintended pregnancies vary based on the relationship status with the highest among those who are unmarried but cohabiting. There are two categories of unintended pregnancies: mistimed and unwanted. The former describes a pregnancy that has occurred earlier than desired, while the latter refers to the situation when a woman wanted no children at all.

A woman may have to deal with physical and emotional changes when the pregnancy is an unplanned one. There can be long term adverse effects on a woman's health. Most couples are unprepared for such an emergency and they can face major upheavals in their orderly lives. Since most women are not mentally ready for such a surprise, it could lead to sleepless nights, arguments and emotional upsets. There can be feelings of regret and there can be chances of serious complications like depression too. In case of negative feelings about the pregnancy, it can lead to a feeling of detachment with the baby and bonding can suffer in a major way. (Tian, 2020)

Women with unplanned pregnancies that were unwanted are more likely to smoke, use illicit drugs and be at greater risk for maternal anxiety and depression. The risk factors for unintended pregnancies are low socioeconomic status, maternal drug abuse, less education, sex trade, type of contraceptive used and younger age. Some research studies have also shown that unwanted pregnancies have been associated with poor maternal and child outcomes. For example, children born of unwanted pregnancies are at risk of behavioral and psychological issues in adolescence. There are multiple reasons unwanted pregnancies are associated with worse outcomes for children, and it is important to be aware of these risk factors in order to address the root cause of the problem. (Pratasava, 2022).

That is why it was necessary to investigate the knowledge of sex education on the prevention of unwanted pregnancy among Senior Secondary School Students in Lutheran High School, Obot Idim.

STATEMENT OF THE PROBLEM

United Nations Fund for Population Activities (2022) documented that nearly half of all pregnancies, totaling 121 million each year throughout the world are unintended and over 60 per cent of unintended pregnancies end in abortion, in which an estimated 45 per cent of all abortions are unsafe, causing 5 - 13 per cent of all maternal deaths.

With the complications of unintended pregnancy, Sreenivas and Johnson (2023) acknowledged that besides giving information, there should be a comprehensive sex education outline programs that put adolescents in touch with the right health services and a supportive environment at school. This can then help teens learn how to reduce risky sexual behaviors and prevent unintended pregnancies. Despite the availability of sex education, sexual matters are often inadequately explained to persons needing advice, whatever their age, because of religious beliefs or taboo. The inadequacy of education of children in practical matters of contraception and intercourse is often based on the belief that this information will encourage promiscuity. Older women and men may be given insufficient advice by doctors and hospitals. This lack of sexual education reinforces existing taboos

and leads to sex by trial and error, possible impotence or lack of satisfaction, guilt complexes and where contraceptive advice is lacking, unwanted pregnancies and abortion because of ignorance. While sexual repression may lead to sexual violence and deviancy. Anti-authoritarianism among young people may make them shy of using advice facilities. (The Encyclopedia of World Problems & Human Potential, 2021).

Also the association of unintended pregnancies that were unwanted with worse children's outcomes compared to intended pregnancies warrants the implementation of programs that emphasize the importance of pregnancy planning, free sexual education, accessible medical services and provision of support for those mothers who are already carrying an unintended pregnancy to term. (Pratasava, 2022).

Regardless of the introduction of sex education, there is still a limited understanding of how to prevent unwanted pregnancy. This had motivated the researcher in the search for knowledge that will contribute towards reducing the menace of unwanted pregnancy and its associated complications among Senior Secondary School Students in Lutheran High School, Obot Idim.

The specific objectives of study are to:

1. Assess the knowledge of students about sex education programs.
2. Determine the factors influencing unwanted pregnancy.
3. Identify the methods of sex education delivery in preventing unwanted pregnancy
4. Discover how sexual stigmas surrounding discussions on sex and contraception affect the implementation and effectiveness of sex education programs in schools.

RELEVANT RESEARCH QUESTIONS

1. What is the level of knowledge of students about sex education programs?
2. What are the factors influencing unwanted pregnancy?
3. Does the methods of sex education delivery influence its impact on preventing unwanted pregnancies?
4. How does sexual stigmas' surrounding discussion on sex and contraception affect the implementation and effectiveness of sex education programs in schools?

RESEARCH HYPOTHESIS

There is no significant relationship between the knowledge of sex education and the prevention of unwanted pregnancy among Senior Secondary School Students in Lutheran High School, Obot Idim.

The research holds it significance by enhancing students' decision-making abilities related to sexual health, encouraging open dialogues between students, parents and educators and reducing the incidence of unwanted pregnancies through informed choices. Therefore, this study will help students maintain focus on academic pursuits without disruptions caused by unwanted pregnancies, promote healthier choices, reduce the physical and emotional toll of unwanted pregnancies and contribute to a more informed and responsible youth, fostering a positive impact on the community.

Knowledge of Students about Sex Education Programs.

U.S. Department of Health & Human Services (2023) opined that most unwanted pregnancies result from not using contraception or from not using it consistently or correctly. Also, certain negative sexual experiences could lead to sexually transmitted diseases (STI) such as gonorrhea and syphilis, human immunodeficiency virus (HIV), as well as unwanted pregnancy, maternal complications, intimate partner violence, depression and anxiety.

One of the key strategies to address these challenges is sexuality education interventions, which represent one of the most used preventive actions. These interventions can be delivered in person, remotely (through a computer or text messages), or in a mixed way. Some of the benefits of adolescent sexuality education include gaining a greater understanding of expected body changes, an important educational component that helps youth emotionally prepare for these changes. (BTorres-Cortés, Leiva, Canenguez, Olhaberry and Méndez, 2023).

Serenko (2024) stated that in many parts of the world, government officials, school principals, teachers and parents are not convinced of the need for sexuality education and are reluctant to teach it, because it is believed to promote sexual activity. In fact, no study to date has found evidence that providing young people with sexual and reproductive health information and education results in increased sexual activity. Moreover, comprehensive sexual education classes have been proven to reduce misinformation and increase young people's skills to make informed decisions about their health. The United Nations Population Fund has found that some programs delayed initiation of sexual intercourse by 37%, reduced the frequency of sex by 31%, reduced the number of sexual partners by 44 % and increased the use of condoms and contraception by 40 %.

Witmer (2020) documented that comprehensive sexuality education is a program that starts in early childhood and continues through high school. It teaches that sexuality is a natural, normal part of healthy living and brings up age-appropriate sexuality topics. Comprehensive Sexuality Education covers the broad spectrum of sex education, including: Safe sex, sexually transmitted infections, contraceptives, masturbation, body image, sexual expression, Relationship and culture. Therefore, Comprehensive Sexuality Education includes accurate medical information on sexually transmitted infections and HIV. Although abstinence is addressed, this curriculum also emphasizes strategies, which is a key component to reduce the risk of unwanted pregnancy and sexually transmitted infections.

Factors Influencing Unwanted Pregnancy

American Academy of Pediatrics (2023) stated that developing a healthy sexuality is a core developmental milestone for children and adolescent health. They deserve a strong foundation of developmentally appropriate information about gender and sexuality, and how these things relate to their bodies, community, culture, society, mental health, and relationships with family, peers, and romantic partners.

Barrow, Jobe, Touray & Ekholuenetale (2022) believed that unwanted pregnancy has been associated with many factors, including socio-demographic and economic factors, early sexual debut, accessibility to health care services, higher parity, failure of contraceptives, preference of the partner for children, and domestic abuse. Also, age and age at sexual debut, religion, marital status and parity, education, residence have been reported as determinants of unwanted pregnancy. Furthermore, Ayalew, Liyew, Alem and Tessema (2022) noted that unintended pregnancy predisposes adolescent girls and young women to several risk factors such as unsafe abortion, maternal death, malnutrition, mental illness and vertical transmission of Human Immuno Virus

(HIV) to children, and school dropout. Besides, in sub-Saharan Africa, unintended pregnancy predisposes about 1 in 16 women to psychosocial impacts of morbidity and mortality. It also induces stress, affects women's quality of life, and the economic status of families at large. They equally opined that education, parity, place of residence, wealth, age, healthcare decision-making, sexual violence, knowledge of contraceptive methods, marital status, occupation, sex of household head, birth interval, region and family planning message have a significant association with unintended pregnancy.

Also, the risk factors associated with unwanted pregnancy include: inadequate family planning services, low socioeconomic status, and lack of or improper use of family planning methods and unawareness of it. Unwanted pregnancy is associated with an increased risk of problems for the mother and fetus. If a pregnancy is not planned before conception, a woman may not be in optimal health for childbearing. Women with an unwanted pregnancy could delay prenatal care that may affect the health of the baby. In many developing countries, poverty, malnutrition, and lack of sanitation and education contribute to serious health consequences for women and their families experiencing an unwanted pregnancy. (Moges, Worku, Niguse and Kelkay, 2020).

Even though unintended pregnancy occurs at any age women, adolescent girls and young women (15–24 years) are at higher risk of unintended pregnancy. Consequently, the risk of maternal mortality is likely to be higher among this age group. Moreover, women in this age category have higher fertility, higher frequency of sexual intercourse, lower knowledge of contraceptive methods, and higher rates of contraceptive failure relative to older women. (Ayalew et al, 2022). With the above evidence if the youths and adolescents should have a good knowledge of the factors influencing unwanted pregnancy through sex education, a good number of them will understand their fertility and plan for their pregnancies thereby preventing unwanted pregnancies.

Sex Education Delivery in Preventing Unwanted Pregnancy

Hellyer (2023) asserted that most curriculums advocate the need for comprehensive sexual health education, where multiple topics are discussed and taught extensively. Issues taught include contraception, gender, sexuality, abstinence, abortion, sexually transmitted diseases and much more. Comprehensive sex education is correlated with lower rates of unwanted pregnancies, and slightly lower rates of teens reporting having vaginal sex. Other approaches include: **Family life education:** This program places emphasis on preparing children for family life and reproduction. **Population education:** This program focuses on the sociological, environmental and economic consequences of population growth. **Medical/disease education:** This program emphasizes on avoiding disease and provides medical information about sexual health. **Fear-based approach:** This program emphasizes the risks of sexually transmitted infections, diseases, and HIV. **Abstinence-based education:** This programs focuses on abstinence from sex a way to avoid pregnancy and does not provide much coverage on how to use contraceptives, how to have safe sex, and how STIs/HIV work. Research shows that it is not effective at preventing sex or teen pregnancies, and areas with abstinence-based education have higher teen birth rates.

Sexuality education: This approach places more emphasis on the individual, sexual activity, sexology, biology and behavior. It presents sexuality as a key part of life and includes the message that sexuality and sex can be pleasurable. Also, Career Counseling for 10th Class, Sex Education (2024) reported that there are several education skills and methods that can be used in sex education. Some of the most effective methods include: **Peer Education:** Peer education involves training individuals to

educate their peers on topics related to sex education. This method can be effective because it creates a safe and non-judgmental environment for individuals to discuss their sexuality.

Group Discussion: Group discussion involves bringing individuals together to discuss a particular topic related to sex education. This method can be effective because it allows individuals to share their experiences and learn from one another. **Role-Playing:** Role-playing involves individuals taking on different roles and acting out different scenarios related to sex education. This method can be effective because it allows individuals to practice different strategies for communicating with sexual partners and making decisions about their sexual health. **Interactive Presentations:** Interactive presentations involve using multimedia tools such as videos, images, and online quizzes to engage individuals in the learning process. This method can be effective because it allows individuals to learn at their own pace and in a way that is engaging and interactive.

One-on-One Counseling: One-on-one counseling involves meeting with an individual in a private setting to discuss their concerns or questions related to sex education. This method can be effective because it creates a safe and confidential environment for individuals to discuss their sexuality.

Comprehensive Sex Education Programs: Comprehensive sex education programs cover a wide range of topics related to sex education, including reproductive health, sexual anatomy, sexual behavior, contraception, and sexually transmitted infections. These programs are typically delivered through a combination of classroom instruction, interactive activities, and one-on-one counseling.

Sexual Stigmas

Sexual stigma refers to the negative attitudes, beliefs and stereotypes that the society holds towards individuals who express their sexuality in ways that fall outside the norm. This stigma can have a devastating impact on people's self-esteem, mental health and relationships. It can also lead to discrimination, violence, and legal sanctions, particularly for those who identify as lesbian, gay, bisexual, transgender, queer or questioning (LGBTQ+). In order to create a more open and inclusive society, we need to break down this stigma and embrace sexual diversity in all its forms. Sexual stigma has deep historical and cultural roots that have been shaped by centuries of religious, political and social norms. For example, throughout history, there has been a tendency to view sexuality as sinful or shameful, particularly when it falls outside the confines of heterosexual marriage. This has led to the persecution of individuals who identify as LGBTQ+, as well as those who engage in non-monogamous or unconventional forms of sexual expression. In many cultures, there are also strict gender roles and expectations that limit people's sexual expression and reinforce traditional power structures. (Allo Health, 2024).

It is important to note that sexual stigma is not limited to any one culture or time period. While the specific beliefs and practices may vary, the underlying attitudes towards sexuality and sexual expression are often similar. The negative impact of sexual stigma is far-reaching and can affect individuals in a multitude of ways. For example, those who are stigmatized may experience higher rates of depression, anxiety, and suicidal ideation. They may also face discrimination and harassment in the workplace, housing, and healthcare systems. In addition, sexual stigma can have a chilling effect on people's ability to express their sexuality openly and freely, leading to a culture of shame and secrecy. This, in turn, can create barriers to communication and intimacy, and perpetuate cycles of inequality and oppression. (Herdt, 2019). Furthermore, sexual stigma can also have a significant impact on society as a whole. It can perpetuate harmful stereotypes and prejudices. This can result in a lack of diversity and representation in various industries and institutions, as well as a lack of understanding and empathy towards those who are different from us. Moreover, sexual stigma can

also have economic consequences, as it can limit opportunities for individuals who are stigmatized. For example, if someone is discriminated against in the workplace due to their sexual orientation or gender identity, they may be less likely to be hired or promoted, which can lead to financial instability and hardship. This can also have a ripple effect on the wider economy, as it can limit the potential for innovation and growth when certain groups are excluded from participating fully in society. (Allo Health, 2024)

Most schools appear afraid to talk about sex openly, with programs erring on the side of caution and using a "sex is bad" narrative which further stigmatizes sex and sexuality. When sex is talked around and not discussed more explicitly, this creates further shame, stigma and taboo around the notion of sex, thus further contributing to sexual violence. If individuals were able to communicate more effectively about sex and obtaining it, engaging it, or safely refusing it if unwanted, there would be far more enjoyable and safe sexual experiences occurring. (Edith Cowan University Newsroom, 2023).

Thompson (2020) documented that discussing sex is often seen as a very taboo topic, something only to be done by the morally loose. As a result, conversations around sexual consent, sexual health and contraception are often quickly and effectively shut down. The information we provide to adolescents often relies on the concept of abstinence. Abstinence certainly is a way to stay clear of unwanted pregnancies and contraction of (most) sexually transmitted infections (STIs), but the preaching of it is largely ineffective and not centered in the reality of human impulses and behaviors. Implementation of well-designed sex education programmes has been found to delay the initiation of sex and to promote the use of contraceptives for those who are sexually active. Information saves lives. Yet it is heavily resisted against because we still move forward with the idea that to educate someone on something is encouraging them to participate in it. The fact is that they will participate regardless. Refusing to provide accurate information just ensures that they are doing so in an unhealthy/unsafe manner. If it is one thing that we know, mass media is never short on sex but the ideas/behaviors it promotes on it are often not in line with established considerations of consent and safety. This is why in addition to persistently high teenage pregnancy rates; large majorities of our population also have contracted/ have STIs. Given how heavily stigmatized STIs are, this can often result in persons not getting frequently tested as they are afraid of the results or persons not wanting to get their required treatment due to the fear of "being found out" and experiencing stigma.

Furthermore, Harwood (2023) noted that sexual health education across the United States is inconsistent and inadequate in providing the information necessary to allow individuals to make informed, healthy decisions about their sexuality and sexual activity. Only about half of states require sex education to be taught, and only a quarter require medically accurate information to be taught. This incomplete and sometimes inaccurate curriculum results from contradicting morals and religious teachings, legislation created by state and national governments, and misconceptions about the effects of comprehensive teachings. This inadequate education leads to high rates of unwanted pregnancies, sexually transmitted diseases transmissions and social stigma for LGBTQ+ individuals. Organizations have attempted to intervene by creating comprehensive curriculums, providing assistance for implementation into school curriculums, and providing information on websites so that individuals can access them for free. In other countries, this form of intervention has proved successful through outcome and impact evaluations. However, while these organizations working in the United States have completed output and outcome measurements, they have done little to evaluate their impacts.

Sex Education Delivery in Preventing Unwanted Pregnancy

A study carried out by Eziaku (2021) to examine the impacts of sex education in preventing unwanted pregnancy among teenagers in Osisioma Ngwa Local Government Area of Abia State with Four hundred (400) teachers and students (SS2) as the target population. Findings of the research revealed that teachers and students agreed that sources (agents) of sex education programme include parents, school, teachers, church, peers, mass media. It was also found that practices involved in sex education to prevent unwanted pregnancy were abstinence, surgical methods and female sterilization. Also the impact of sex education in preventing unwanted pregnancy includes: avoidance of dating violence, help teens develop healthy relationships, delay sexual initiation etc.

However, stages (ages) sex education should be introduced to children as agreed by teachers and students were older children (7-12), adolescent (13-18) and adult (19yrs and above). The researcher also recommended more stations in television (TV), Radio and other accessible media to increase the accessibility of knowledge of sex education to teenagers and parents should seriously embark on sex education programme to catch these teenagers early. This research showed the means of sex education delivery and the practices such as abstinence which can prevent unwanted pregnancy which means that there is a positive influence of sex education on the prevention of unwanted pregnancy.

Sexual Stigmas

A study by Everett, B. G., McCabe, K. F, and Hughes, T. L. (2018) to examine the Disparities in Mistimed and Unwanted Pregnancy Among Adult Women. Data from the 2006–2010 National Survey of Family Growth, logistic regression and mixed-effects hazard models were fitted to examine sexual orientation disparities in mistimed and unwanted pregnancies among 9,807 women aged 20–45 and 5,238 pregnancies.

Reports of the findings revealed that Eighty-five percent of respondents were heterosexual women with only male partners, 10% were heterosexual women who have sex with women, 4% were bisexual and 1% were lesbian. Eight percent of the sample reported at least one mistimed pregnancy in the past five years, and 6% reported at least one unwanted pregnancy in the same time frame. However, bivariate analyses revealed that 12% of heterosexual women who have sex with women reported a mistimed pregnancy, compared with 8% of heterosexual women with only male partners. Also, bisexual women were more likely than heterosexual women with only male partners to report an unwanted pregnancy (12% versus 6%). Many sexual minority women, regardless of sexual identity, engage in heterosexual behavior across the life course, which provides them opportunities to experience an unintended pregnancy. In addition, sexual minority women are more likely than others to report characteristics that may make them vulnerable to unintended pregnancy. Compared with heterosexual women reporting only male partners, heterosexual women who have sex with women had higher odds of reporting a mistimed pregnancy (odds ratio, 1.4), and bisexual women had higher odds of reporting an unwanted pregnancy (1.8). When compared with pregnancies reported by heterosexual women with only male partners, those reported by heterosexual women who have sex with women were more likely to be mistimed (hazard ratio, 1.7), and those reported by bisexual and lesbian women were more likely to be unwanted (1.7–4.4). Compared with heterosexuals who only have sex with men, adult sexual minority women are at equal or greater risk of reporting an unintended pregnancy. More research addressing the reproductive health care needs of sexual minority women is needed to develop strategies to improve family planning for this population

This research work is based on two Nursing Theories which are:

- Health Belief Model, Social Cognitive Theory

Health Belief Model

This research study is supported by The Health Belief Model (HBM) that was developed in the 1950s by a group of U.S. Public Health Service social psychologists who wanted to explain why few people were participating in programs to prevent and detect disease. The HBM proposes that a person's health-related behaviour depends on the person's perception of four critical areas:

- The severity of a potential illness
- The person's susceptibility to that illness
- The benefits of taking a preventive action
- The barriers to taking that action.

HBM postulates that health-seeking behaviour is influenced by a person's perception of a threat posed by a health problem and the value associated with actions aimed at reducing the threat. HBM addresses the relationship between a person's beliefs and behaviours. It provides a way to understanding and predicting how clients will behave in relation to their health and how they will comply with health care therapies.

There are six major concepts in HBM and these are:

- Perceived Susceptibility: refers to a person's perception that a health problem is personally relevant or that a diagnosis of illness is accurate.
- Perceived severity: even when one recognizes personal susceptibility, action will not occur unless the individual perceives the severity to be high enough to have serious organic or social complications.
- Perceived benefits: refers to the patient's belief that a given treatment will cure the illness or help to prevent it.
- Perceived Costs: refers to the complexity, duration, and accessibility and accessibility of the treatment.
- Motivation: includes the desire to comply with a treatment and the belief that people should do what.
- Modifying factors: include personality variables, patient satisfaction, and socio-demographic factors. (Nursing Theories, 2024).

Application of the Health Belief Model to the Study

Applying the Health Belief Model (HBM) to the research involves analyzing the students' perceptions and beliefs regarding their susceptibility to unwanted pregnancy and the benefits and barriers associated with sex education.

- Perceived Susceptibility investigates how students perceive the relevance of unwanted pregnancy to their personal lives and whether they believe they are susceptible to it.
- Perceived Severity explores students' views on the seriousness of unwanted pregnancy, including potential social and personal complications, to determine if they consider it a significant issue.
- Perceived Benefits assesses students' beliefs in the effectiveness of sex education as a means to prevent unwanted pregnancy, emphasizing the positive outcomes they associate with such knowledge.

- Perceived Costs examines the students' perceptions of the complexity, duration, and accessibility of sex education, as well as any perceived barriers that might hinder their engagement.
- Motivation investigates the desire of students to comply with sex education and their beliefs in the importance of adopting preventive measures to avoid unwanted pregnancies.
- Modifying Factors considers how personality variables, satisfaction with sex education programs, and socio-demographic factors influence students' attitudes and behaviors towards sex education.

By integrating the HBM concepts into the research, it is possible to gain insights into the factors influencing secondary school students' health-related behavior regarding unwanted pregnancies and guide the development of effective sex education programs tailored to their perceptions and needs.

Social Cognitive Theory

Social Cognitive Theory (SCT) started as the Social Learning Theory (SLT) in the 1960s by Albert Bandura supported this research work. It developed into the SCT in 1986 and posits that learning occurs in a social context with a dynamic and reciprocal interaction of the person, environment, and behavior. The unique feature of SCT is the emphasis on social influence and its emphasis on external and internal social reinforcement. SCT considers the unique way in which individuals acquire and maintain behavior, while also considering the social environment in which individuals perform the behavior. The theory takes into account a person's past experiences, which factor into whether behavioral action will occur. These past experiences influences reinforcements, expectations, and expectancies, all of which shape whether a person will engage in a specific behavior and the reasons why a person engages in that behavior.

The goal of SCT is to explain how people regulate their behavior through control and reinforcement to achieve goal-directed behavior that can be maintained over time. The five constructs SCT are:

- Reciprocal Determinism - This refers to the dynamic and reciprocal interaction of person (individual with a set of learned experiences), environment (external social context), and behavior (responses to stimuli to achieve goals).
- Behavioral Capability - This refers to a person's actual ability to perform a behavior through essential knowledge and skills. In order to successfully perform a behavior, a person must know what to do and how to do it. People learn from the consequences of their behavior, which also affects the environment in which they live.
- Observational Learning - This asserts that people can witness and observe a behavior conducted by others, and then reproduce those actions. This is often exhibited through "modeling" of behaviors. If individuals see successful demonstration of a behavior, they can also complete the behavior successfully.
- Reinforcements - This refers to the internal or external responses to a person's behavior that affect the likelihood of continuing or discontinuing the behavior. Reinforcements can be self-initiated or in the environment, and reinforcements can be positive or negative. This is the construct of SCT that most closely ties to the reciprocal relationship between behavior and environment.
- Expectations - This refers to the anticipated consequences of a person's behavior. Outcome expectations can be health-related or not health-related. People anticipate the consequences of their actions before engaging in the behavior, and these anticipated consequences can influence successful completion of the behavior. Expectations derive largely from previous experience. While expectancies also derive from previous experience, expectancies focus on the value that is placed on the outcome and are subjective to the individual.

- Self-efficacy - This refers to the level of a person's confidence in his or her ability to successfully perform a behavior. Self-efficacy is unique to SCT although other theories have added this construct at later dates, such as the Theory of Planned Behavior. Self-efficacy is influenced by a person's specific capabilities and other individual factors, as well as by environmental factors (barriers and facilitators). (LaMorte, 2022).

Application of the Social Cognitive Theory to the Study

Applying Social Cognitive Theory (SCT) to this research allows the researcher to explore how students learn and regulate their behavior in the context of sex education. Utilizing the five construct of SCT in this study entails:

- Reciprocal Determinism analyzes how the dynamic interaction of students (individuals with learned experiences), the school environment (external social context), and their behaviors regarding sex education contribute to the prevention of unwanted pregnancies.
- Behavioral Capability evaluates the students' actual ability to engage in safe practices and make informed decisions about sexual health through sex education. Assess whether they possess the necessary knowledge and skills for responsible behavior.
- Observational Learning explores how students observe and learn from modeled behaviors in the context of sex education. Consider whether successful demonstrations of responsible sexual behavior influence students to adopt similar practices.
- Reinforcements: examine internal and external responses to students' behaviors related to sex education. Identify positive reinforcements that encourage responsible behavior and negative reinforcements that may deter risky actions.
- Expectations: investigate students' anticipated consequences of engaging in safe or risky sexual behaviors. Explore how health-related and non-health-related outcome expectations influence their decisions, drawing from their previous experiences.
- Self-efficacy: assesses the students' confidence in their ability to make informed decisions and engage in responsible sexual behavior. Explore how self-efficacy is influenced by individual capabilities, environmental factors, and specific barriers or facilitators within the school setting.

By applying SCT to this research, the researcher was able to gain insights into how social cognitive factors play a role in shaping students' behaviors and attitudes toward sex education, contributing to the prevention of unwanted pregnancies in the specific context of Lutheran High School, Obot Idim.

Summary of the Literature Review

This chapter showed the conceptual literature review which is based on the stated objectives of the study such as: the knowledge of students about sex education programs, factors influencing unwanted pregnancy, the methods of sex education delivery in preventing unwanted pregnancy and how social stigmas surrounding discussions on sex and contraception affect the implementation and effectiveness of sex education programs in schools and these delves into foundational concepts related to sex education, exploring key theories and principles that form the basis for understanding its role in preventing unwanted pregnancies among students at Lutheran High School, Obot Idim.

The empirical review examined existing studies, research, and findings pertinent to the effectiveness of sex education programs in reducing the risk of unwanted pregnancies among students. It provided a comprehensive overview of empirical evidence and outcomes in similar educational settings. Furthermore, the theoretical framework outlined two theories (the Health Belief Model and Social Cognitive Theory) which established a theoretical foundation for the research. Drawing from

conceptual, empirical, and theoretical perspectives, this comprehensive analysis sets the stage for the subsequent investigation into the specific dynamics of sex education within the mentioned educational context.

METHODOLOGY

The study utilized a cross-sectional descriptive research design was used in this study. The research was conducted in Lutheran High School, Obot Idim, Akwa Ibom State. The target Population used for the study was 400 senior secondary school students in Lutheran High School, Obot Idim, irrespective of their age, gender, religion and class. A sample size of 200 was statistically drawn using Yaro Yamene’s formula. Data was collected using structured questionnaires. The questionnaires were validated by experts and pilot testing. Reliability was assessed using Cronbach’s alpha coefficient for internal consistency yielding a coefficient of 0.805 indicating a good reliability. A pilot study was conducted by using 80 Senior Secondary School students in Ibesikpo Asutan who were considered to have similar characteristics with the group under study. Data obtained were analyzed using descriptive statistical methods such as simple percentages, frequency table, pie chart, and histogram. The hypotheses were tested using Pearson Product Moment Correlation Coefficient

RESULTS/DISCUSSION

4.2 Presentation and Analysis of Data According to Research Questions

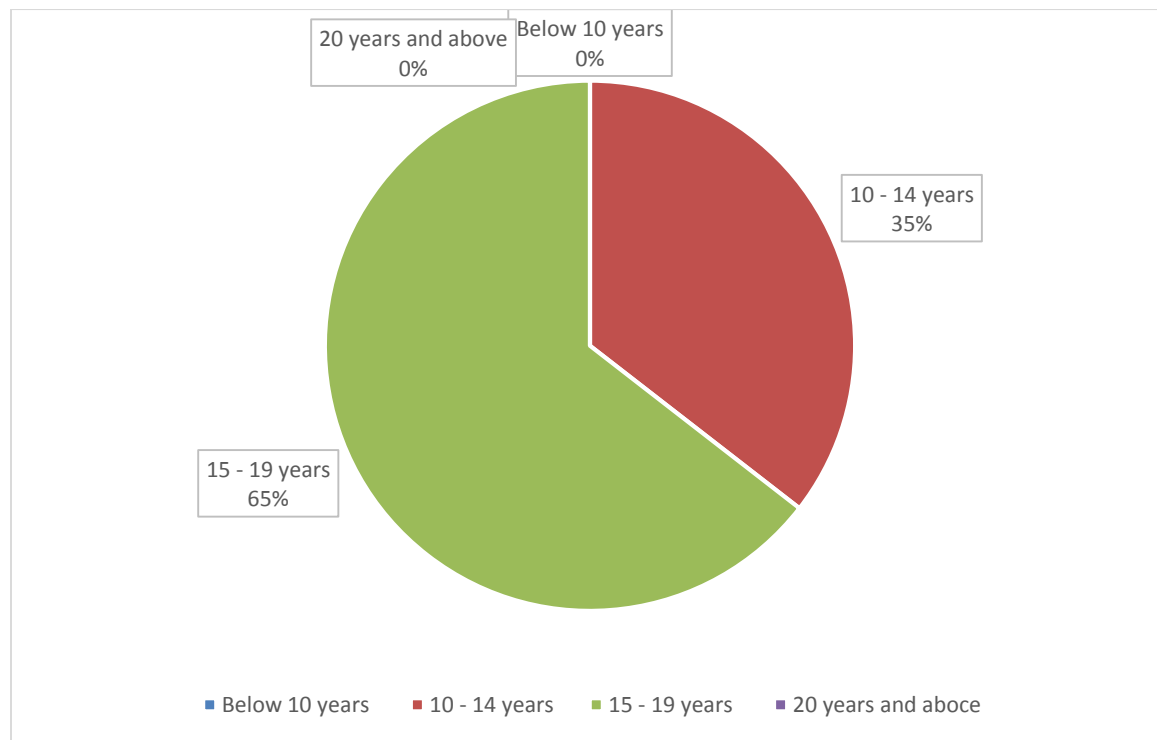


Figure 1: A Pie chart showing age distribution of respondents.

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Table 4.1: Demographic Data of Students in Lutheran High School, Obot Idim.

Variables	Frequency	Percentage (%)
GENDER		
MALE	98	49%
FEMALE	102	51%
RELIGION		
CHRISTAINITY	200	100%
MUSLIM	0	0
OTHERS	0	0
RELATIONSHIP STATUS		
SINGLE	135	67.5
DATING	16	8
CASUAL RELATIONSHIP	18	9
CAUSAL SEX	6	3
OPEN RELATIONSHIP	25	12.5
PARENT'S RELATIONSHIP STATUS		
SINGLE	09	4.5
ENGAGED	03	1.5
MARRIED	108	54
DIVORCED	18	9
SEPERATED	27	13.5
WIDOWED	23	11.5
WIDOWER	12	6
SOCIOECONOMIC STATUS		23.9
LOW INCOME	34	17
AVERAGE INCOME	137	68.5
HIGH INCOME	29	14.5

Table 4.1 showed that no respondents were in the age group of below 10 years, 71 respondents were in the age group of 10 to 14 years, 129 respondents were in the age group of 15 to 19 years, no respondents were in the age group of 20 years and above. Also, 98 (41%) respondents were male, 102 (51%) respondents were at female, 200 (100%) respondents are Christians; 135 (67.5%) respondents are single, 16 (8%) respondents are dating, 18(9%) respondents are in causal relationship, 6 (3%) respondents are in casual sex relationship 25 (12.5%) respondent are in an open relationship; 09 (4.5%) respondents parent relationship status are single, 03 (1.5%) respondents parent relationship status is engaged, 108 (54%) respondents parent relationship status is married, 18 (9%) respondents parent relationship status is divorced, 27 (13.5%) respondents parent relationship status is separated, , 23 (11.5%) respondents parent relationship status is widowed, 12 (6%) respondents parent relationship status is widower. It also showed that 34 (17%) of the respondents were low - income earners, 137 (68.5%) of the respondents were average - income earners, while 29 (14.5%) of the respondents were high - income earners.

Research Question 1

What is the level of knowledge of students about sex education programs?

No 1 -5 in the questionnaire will answer this question

Figure 4.1: Histogram showing responses of students on the level of knowledge of students about sex education programs.

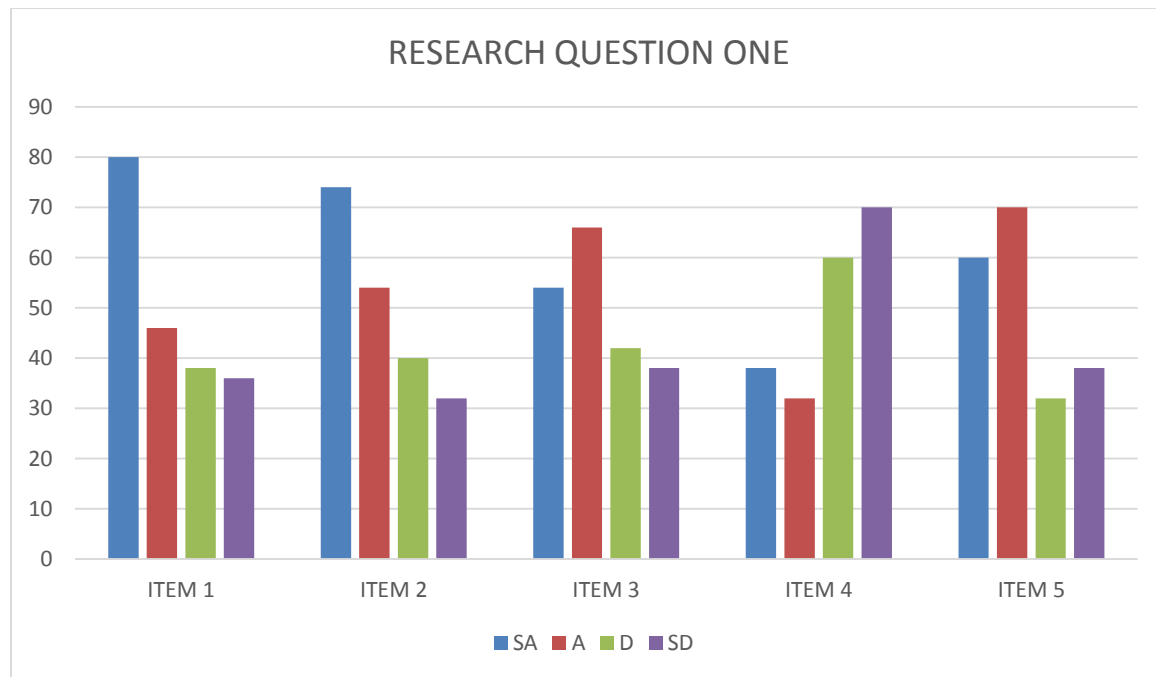


Table 4.2: The level of Knowledge of students about sex education programs .

n = 200

S/N	ITEMS	SA	A	D	SD
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1.	Have received formal sex education	80 (40%)	46 (23%)	38 (19%)	36 (18%)
2.	Have conversant knowledge about contraception	74 (37%)	54 (27%)	40 (20%)	32 (16%)
3.	Have been taught about sexually transmitted infection.	54 (27%)	66 (33%)	42 (21%)	38 (19%)
4.	The concept of consent in sexual activity is understood	38 (19%)	32 (16%)	60 (30%)	70 (35%)
5.	Have been educated about the risk of unprotected sex	60 (30%)	70 (35%)	32 (16%)	38 (19%)

Table 4.2 shows that 80 (40%) strongly agreed that they've received formal sex education, 46 (23%) agreed, 38 (19%) disagreed and 36 (18%) strongly disagreed to this fact

74 (37%) strongly agreed that they have conversant knowledge about contraception, 54 (27%) agreed, 40 (20%) disagreed and 32 (16%) strongly disagreed to this fact.

54 (27%) strongly agreed that they've been taught about sexually transmitted infection, 66 (33%) agreed, 42 (21%) disagreed and 38 (19%) strongly disagreed to this fact

38 (19%) strongly agreed that they concept of consent in sexuality is understood, 32 (16%) agreed, 60 (30%) disagreed and 70 (35%) strongly disagreed to this fact

60 (30%) strongly agreed that they've been educated about the risk of unprotected sex, 70 (35%) agreed, 32 (16%) disagreed and 38 (19%) strongly disagreed to this fact.

Research Question 2

What are the factors influencing unwanted pregnancy?

No 6 -10 in the questionnaire will answer this question

Figure 3: Histogram showing responses of students on the factors influencing unwanted pregnancy.

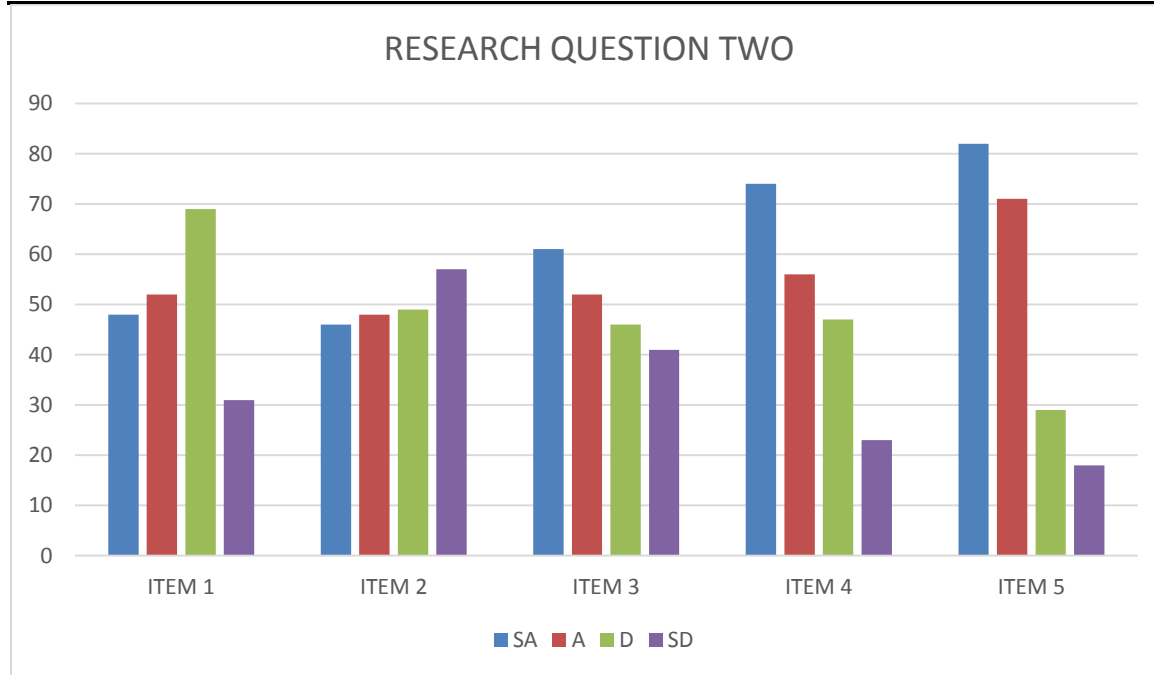


Table 4.3: Factors Influencing Unwanted Pregnancy.

n = 200

S/N	ITEMS	SA	A	D	SD
6.	Early sexual debut increases unwanted pregnancies.	48 (24%)	52 (26%)	69 (34.50%)	31 (15.50%)
7.	Parental communication about sexual health	46 (23%)	48 (24%)	49 (24.5%)	57 (28.5%)
8.	Influence of peer pressure on sexual activity.	61 (30.50%)	52 (26%)	46 (23%)	41 (20.5%)
9.	Relationship status influences unwanted pregnancies.	74 (37%)	56 (28%)	47 (23.5%)	23 (11.5%)
10	Poverty contributes to serious health consequences for women experiencing unwanted pregnancy.	82 (41%)	71 (35.50%)	29 (14.50%)	18 (9%)

Table 4.3 shows that 48 (24%) strongly agreed that early sexual debut increases unwanted pregnancies, 52 (26%) agreed, 69 (34.5%) disagreed and 31 (15.5%) strongly disagreed to this fact.

46 (23%) strongly agreed that parental communication about sexual health, 48 (24%) agreed, 49 (24.5%) disagreed and 57 (28.5%) strongly disagreed to this fact.

61 (30.5%) strongly agreed that influence of peer pressure on sexual activity, 52 (26%) agreed, 46 (23%) disagreed and 41 (20.5%) strongly disagreed to this fact

74 (37%) strongly agreed that relationship status influences unwanted pregnancies, 56 (28%) agreed, 47 (23.5%) disagreed and 23 (11.5%) strongly disagreed to this fact

82 (41%) strongly agreed that poverty contributes to serious health consequences for women experiencing unwanted pregnancies, 71 (35.5%) agreed, 29 (14.5%) disagreed and 18 (9%) strongly disagreed to this fact.

Research Question 3

What are the methods of sex education delivery in preventing unwanted pregnancy?

No 11 - 15 in the questionnaire will answer this question

Figure 4.3: Histogram showing responses of students on the methods of sex education delivery in preventing unwanted pregnancy.

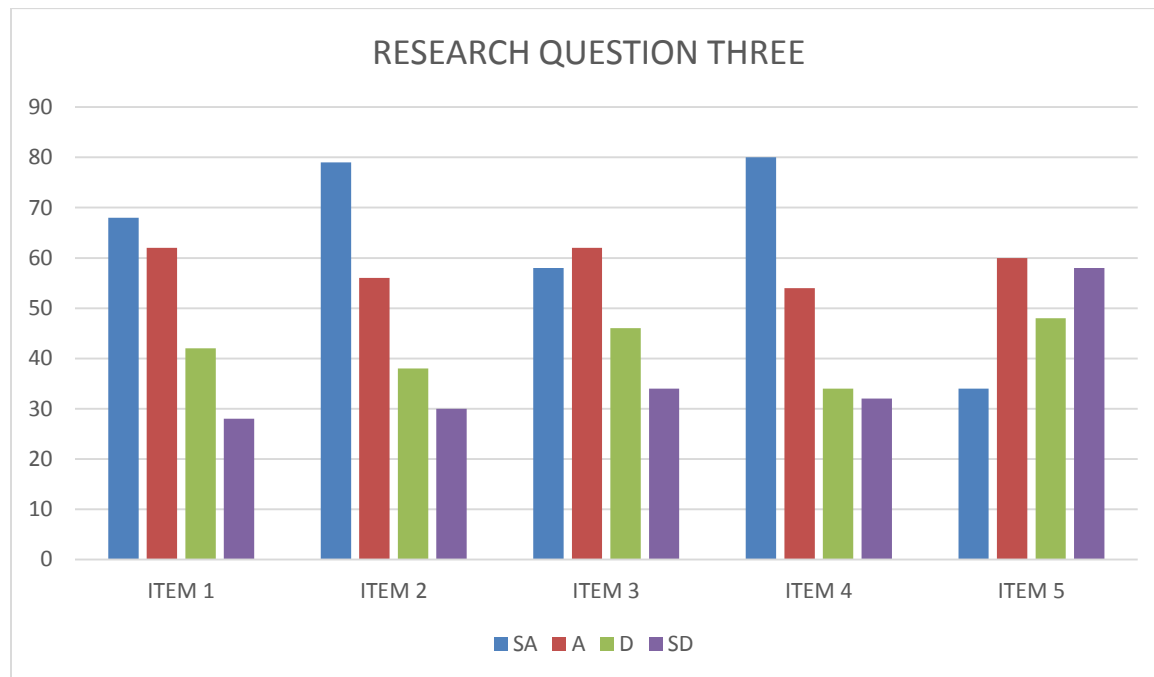


Table 4.4: The methods of sex education delivery in preventing unwanted pregnancy

n = 200

S/N	ITEMS	SA	A	D	SD
11.	Sex education covers contraception,	68	62	42	28

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	gender, sexuality, abstinence, abortion, sexually transmitted diseases and much more	(34%)	(31%)	(21%)	(14%)
12.	Family life education should be included in comprehensive sex education	76 (38%)	56 (28%)	38 (19%)	30 (15%)
13.	Medical/disease education is a part of comprehensive sex education	58 (29%)	62 (31%)	46 (23%)	34 (17%)
14.	Peer education and group discussions are effective methods of sex education	80 (40%)	54 (27%)	34 (17%)	32 (16%)
15.	Interactive presentations should not be a method of sex education delivery	34 (17%)	60 (30%)	48 (24%)	58 (29%)

Table 4.4 shows that 68 (34%) strongly agreed that sex education covers contraception, gender, sexuality, abstinence, abortion, sexually transmitted and much more 62 (31%) agreed, 42 (21%) disagreed and 28 (14%) strongly disagreed to this fact

76 (38%) strongly agreed family life education should be included in comprehensive sex education, 56 (28%) agreed, 38 (19%) disagreed and 30 (15%) strongly disagreed to this fact.

58 (29%) strongly agreed that medical/disease education is a part of comprehensive sex education, 62(31%) agreed, 46 (23%) disagreed and 34 (17%) strongly disagreed to this fact

80 (40%) strongly agreed that peer education and group discussion are effective methods of sex education, 54 (27%) agreed, 34 (17%) disagreed and 32 (16%) strongly disagreed to this fact

34 (17%) strongly agreed that interactive presentations should not be a method of sex education delivery, 60 (30%) agreed, 48 (24%) disagreed and 58 (29%) strongly disagreed to this fact.

4.3 Test of Hypotheses

Hypothesis 1: There is no significant relationship between the knowledge of students about sex education and prevention of unwanted pregnancy among Senior Secondary School Students in Lutheran High School, Obot Idim.

Table 4.5: Pearson Product Moment Correlation Analysis of the knowledge of students about sex education and prevention of unwanted pregnancy among Senior Secondary School Students in Lutheran High School, Obot Idim.

X - Strongly Agreed and Agreed

Y - Disagreed and Strongly Disagreed

X	Y	X ²	Y ²	XY
126	74	15876	5476	9324
128	72	16384	5184	9216
120	80	14400	6400	9600
70	130	4900	16900	9100
130	70	16900	4900	9100
574	426	68460	38860	46340

n = 5, df = 3, calculated value= 1.0, critical value = 0.805

Decision Rule: Reject the null hypothesis (H_0) if calculated value is greater than critical value. Since the calculated value is 1.0 and its greater than the critical value 0.805 at the level of significance of 0.05 and at the degree of freedom 3, the null hypothesis is rejected indicating that there is a significant relationship between the knowledge of students about sex education and prevention of unwanted pregnancy among Senior Secondary School Students in Lutheran High School, Obot Idim.

Research Question 1

Findings from table 2 shows that out of 200 respondents 126 (63%) strongly agreed that they've received formal sex education, 128 (64%) strongly agreed that they have conversant knowledge about contraception, 120(60%) strongly agreed that they have been taught about sexually transmitted infection, 70 (35%) strongly agreed that they concept of consent in sexuality is understood, 130 (65%) strongly agreed that they have been educated about the risk of unprotected sex.

This is in support with the findings from Agbor, Chile and Ogu (2021) the knowledge of sex education helps in preventing unwanted pregnancy ant the study showed a positive correlation between sex education and the prevention of unwanted pregnancy. This is in consonance with Hellyer (2023) who asserted that most curriculum advocate the need for comprehensive sexual health education where multiple topics are discussed and taught extensively such topics include contraception, gender, sexuality, abstinence, abortion and many more.

Research Question 2

Findings from table 3 shows that out of 200 respondents 100 (50%) agreed that early sexual debut increases unwanted pregnancies, 94 (47%) agreed that parental communication about sexual health, 113 (56.5%) agreed that influence of peer pressure on sexual activity, 130 (65%) agreed that relationship status influences unwanted pregnancies, 153 (76.5%) agreed that poverty contributes to serious health consequences for women experiencing unwanted pregnancies.

This is in support with the findings from Barrow, Jobe, Touray & Ekholuenetale (2022) who believed that unwanted pregnancy has been associated to many factors such as early sexual debut, accessibility to health care services, higher parity, failure of contraceptives, preference of the partner for children and domestic abuse. This finding is also in support with the findings from Ayalew, Liyew, Alem and Tessema (2022) that unintended pregnancy disposes adolescent girls and young women to several risk factors such as unsafe abortion, maternal death, malnutrition, mental illness and vertical transmission of Human Immuno Virus (HIV) to children, and school dropout.

Research Question 3

Findings from table 4 shows that out of 200 respondents (100%) 130 (65%) agreed that sex education covers contraception, gender, sexuality, abstinence, abortion, sexually transmitted and much more, 132 (66%) agreed family life education should be included in comprehensive sex education, 120 (60%) agreed that medical/disease education is a part of comprehensive sex education, 134 (67%) agreed that peer education and group discussion are effective methods of sex education, 94 (47%) strongly agreed that interactive presentations should not be a method of sex education delivery.

This is in line with study from Eziaku (2021) which ascertain that the means of sex education delivery can prevent unwanted pregnancy which means that here is a positive influence of sex education on the prevention of unwanted pregnancy.

Hypothesis 1

The null hypothesis indicating that there is no significant relationship between the knowledge of students about sex education and prevention of unwanted pregnancy among Senior Secondary School Students in Lutheran High School, Obot Idim was rejected and an alternate hypothesis was accepted which states that there is a significant relationship the knowledge of students about sex education and prevention of unwanted pregnancy among Senior Secondary School Students in Lutheran High School, Obot Idim since the calculated value was greater than the critical value.

This is in support with the findings from Agbor, Chile and Ogu (2021) the knowledge of sex education helps in preventing unwanted pregnancy and the study showed a positive correlation between sex education and the prevention of unwanted pregnancy. This is in consonance with Hellyer (2023) who asserted that most curriculum advocate the need for comprehensive sexual health education where multiple topics are discussed and taught extensively such topics include contraception, gender, sexuality, abstinence, abortion and many more.

5.2 Implication of the Study to Nursing

Based on the findings of the study, it has been observed that if knowledge of sex education in preventing unwanted pregnancy are enhanced among students, it will have a positive impact on the job satisfaction of nurses by reducing the workload of the nurses on personal or individualized counseling and also other means through which nurses can help in rendering their services to the public.

5.3 Limitation of the Study

Difficulties encountered in the course of study were:

Participants under-reported or over-reported their knowledge levels perceived expectations.

The study's focus solely on senior secondary school students in one specific school limits the generalizability of the findings to other schools or educational settings. Factors unique to Lutheran

High School, Obot Idim, such as its location, socio-economic status of students, or specific curriculum on sex education may not be representative of other schools.

The study may not fully account for social and cultural factors that influence students' knowledge and attitudes towards sex education and pregnancy prevention. These factors could include parental attitudes, religious beliefs, community norms, and cultural taboos surrounding discussions of sexuality.

Conducting research on sensitive topics like sex education required careful consideration of ethical guidelines, particularly regarding informed consent, privacy, and ensuring participants' emotional well-being during data collection. This sensitive topic made some students unwilling to partake in the research.

Financial constraint to carry out extensive research.

Addressing these limitations through careful study design, appropriate statistical analyses, and contextual interpretation of findings can strengthen the validity and relevance of the research on knowledge of sex education in preventing unwanted pregnancy among senior secondary school students at Lutheran High School, Obot Idim.

SUMMARY

The research was carried out to investigate the knowledge of sex education in preventing unwanted pregnancy among Senior Secondary Schools in Lutheran High School, Obot Idim. Three research question and three research hypothesis were raised to guide the study. Review of literature was done according to the variables of the study. The target population for the study were 400 senior secondary school students in Lutheran High School, Obot Idim. A sample size of 200 students was used which was determined by Yaro Yamane's formula and a simple random sampling technique was used to select the respondents for the study. A 15 item researcher's constructed questionnaire was used to obtain data for the study. The data collected were analyzed using descriptive statistics of percentages, mean scores, charts and PPMC was used to test the null hypothesis which was rejected because the calculated value was greater than the critical value.

CONCLUSION

The study found a significant relationship between the knowledge of sex education in preventing unwanted pregnancy among Senior Secondary School Students in Lutheran High School, Obot Idim.

RECOMMENDATIONS

Based on the findings from this study, the following are recommended

- Students should be equipped with comprehensive sex education programs that provide information on a range of topics including human development, relationships, decision making, abstinence, contraception and disease prevention.
- Schools and community centers should collaborate with healthcare providers to facilitate access to contraceptives.
- Teaching skills such as decision-making, communication and negotiation will help students make informed choices about sexual health. This includes understanding consent and how to refused unwanted sexual advances.

- Role playing scenarios and interactive activities will help students practice these skills in a safe environment
- Regular evaluation of sex education programs, assess their effectiveness and make necessary adjustment. Feedback from students, teachers and parents can provide valuable insights.
- The curriculum should be updated with the latest research and best practices to ensure that the information remains relevant and accurate

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