



AWARENESS AND PRACTICING OF PREVENTIVE MEASURES OF SEXUALLY TRANSMITTED DISEASES AMONG SENIOR SECONDARY SCHOOL STUDENTS IN LAPAI LOCAL GOVERNMENT AREA OF NIGER STATE, NIGERIA

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Abstract

This study examined awareness and practicing of preventive measures of sexually transmitted diseases among senior secondary school students in Lapai Local Government Area of Niger State, Nigeria. Four objectives and four research questions guided the study. Four null hypotheses were formulated and tested at 0.05 levels of significance. Hypothesis one (1) and two (2) measured difference in the awareness and practicing of preventive measures of sexually transmitted diseases on the basis of gender. While hypotheses three (3) and four (4) measured difference in the awareness and practicing of preventive measures of sexually transmitted diseases on the basis of age. Survey design was adopted in this study. The population of this study comprised of four thousand, seven hundred and twelve (4,712) senior secondary school students. A total number of three hundred and sixty two (362) were selected as sample for the study. Students' Awareness and Preventive Measures of Sexually Transmitted Diseases Questionnaire (SAPMSTDQ) was use for the collection of data for the study. The data collected were analyzed using independent sample t-test and analysis of variance (ANOVA). The finding of hypothesis one revealed that there is no significant difference between male and female senior secondary school students in the awareness level of sexually transmitted diseases in Lapai Local Government Area of Niger State. The finding of hypothesis two indicated that there is no significant difference between male and female senior secondary school students in the practicing of preventive measures of sexually transmitted diseases in Lapai Local Government Area of Niger State. The finding of hypothesis three showed that there is no significant difference on the awareness level of sexually transmitted diseases among senior secondary school students in Lapai Local Government Area of Niger State on the basis of age. The finding of hypothesis four revealed that there is no significant difference in the practicing of preventive measures of sexually transmitted diseases among senior secondary school students in Lapai Local Government Area of Niger State on the basis of age. Based on these findings, it was recommended among others that school counsellors and psychologists should organize group guidance programme for secondary school adolescents with the aim of educating young people about STDs. The content of the programme should be creating awareness of STDs and ways to reduce the risk of STDs; and school guidance counsellors should intensify efforts and encourage secondary school adolescents to practice preventive measures of sexually transmitted diseases. This will help to reduce risk of sexually transmitted diseases.

Keywords: *Awareness, Practicing, Preventive, Sexually, Transmitted, Diseases.*

Introduction

Sexually Transmitted Infections (STIs) formerly referred to as Sexually Transmitted Diseases (STDs) because an individual may be infected without necessarily developing the disease. STDs are transmitted from one person to another through intimate contact (Center for Disease Control (CDC), 2010). Studies have shown that, STDs are among the most common infectious diseases in the world with an estimated 333 million new cases of curable sexually transmitted diseases occur each year among adults (Lazarus, 2018). Approximately one million people contract sexually transmitted infections every day and 50% of them are adolescents aged 15-24 years (Olasode, 2017). STDs include many different sexually transmittable infectious diseases such as Chlamydia, gonorrhea, genital herpes, Human Papilloma Virus (HPV), Human Immuno-deficiency Virus (HIV), and syphilis (Center for Disease Control (CDC), 2016). An STD is transmitted through vaginal, oral and anal sexual contact as well as through blood products.

The incidence of STIs is fast increasing worldwide with the young, youth and adolescent placed at high risk. In the United State, there are estimated 15.3 million new cases of sexually transmitted infections each year and 3 million of which occur in people between the ages of 13-19 and one out of four sexually active teenagers reported a sexually transmitted infections every year (WHO, 2012). Nearly two third (2/3) of all sexually transmitted infections occur in people younger than 25 years of age. In Nigeria, Adolescents otherwise known as young people are important segment of Nigerian society where it makes up over one third (31.6 percent) of Nigeria's large and growing population (WHO, 2016). Francis (2018) defines adolescence as persons between 10-24 years of age. It is a period of life from puberty to attainment of full maturity (adulthood) or growth, a time of being young when one's appearance is full of freshness, vigor and young spirit. Adolescents also share certain characteristics that distinguish them from other generation (Mercy & Peter, 2014). Such characteristic include, desire for independence, zealousness, radicalism, rebellions, curiosity, sexual risk behaviours, and so on.

Sexually Transmitted Diseases (STDs) are caused by microorganisms such as viruses, fungi and bacteria and their main form of transmission is sexual. There is a high incidence of STDs, being considered one of the most common public health problems worldwide. In the social and health context, they represent an important cause of morbidity and mortality, although their visibility has only increased since the 1980s with the emergence of AIDS. The STD terminology replacing the expression Sexually Transmitted Disease (STD) has been used more frequently in order to warn about the possibility of being a carrier of any of these infections. Sexually Transmitted Diseases (STDs) are major public health problems among young people globally (Francis, 2018). Providing relevant information about STIs and availing the necessary health services is a highly desirable and effective intervention in the prevention and control of STDs (Centers for Disease and Prevention, 2014).

Adolescents are important segment of Nigerian society which makes up over a third (31.6 percent) of Nigeria's population (WHO, 2020). Adolescents are generally defined as persons under various laws, conventions and culture, who are within the ages of 10-19 and 10-24 years old according to World Health Organization (WHO, 2020). It is a period of life from puberty to attainment of full maturity (adult hood) or growth, a time of being young when one's appearance is full of freshness, vigor and young from other generation. Such characteristic includes desire for independence, jealousy, radicalism, rebellions, curiosity, sexual risk behaviors, etc. It is both a period of opportunity as well as a time of vulnerability-a time of experimentation with new ideas and options and marked with vulnerability to health risk and those related to unsafe reproductive health outcomes.

Adolescent sexual and reproductive healthcare is a global public health concern (Rai, Pradeep & Kandpal, 2021). This is because the adolescent sexual activity has been on the increase in many countries around the world (Rai, Pradeep & Kandpal, 2021). The World Health Organization (WHO) defines adolescents as young people between the age of 10 and 19 years, and they constitute about one fifth (20%) of the world's population. Worldwide, the highest rates of sexually transmitted diseases (STD) occur among 20-24 years old, followed by 15-19 years old (Shannon & Klausner, 2018).

Approximately one million people contracted sexually transmitted infections every day and 50% of them are adolescents aged 15-24 years (Lazarus, 2018). The increase in the incidence of sexually transmitted infections among adolescents due to their sexually behaviours among other factors is now considered to be very important health challenges for adolescents (Krishnamurti, Davis, & Fischhoff, 2020). Most importantly, these health problems often lead to psycho-social and economic problems, which include school dropout, stigmatization, isolation and probably depressive psychosis. Young people need sexual and reproductive health services to stay safe from sexually transmitted diseases (STDs). Sexual activity among young people is not always consented and this exposes them to greater risks. Thus, adolescents are more vulnerable to rape, harassment and sexual exploitation, and physical and verbal abuse because they are less able to prevent or stop such manifestations of power (Amu & Adegun, 2015). Many young people below the age of 20 are already sexually active, but many face difficulties in obtaining reproductive health care. In addition, Young people most especially adolescents are typically poorly informed about how to protect themselves from STDs (Basim, 2014). In Nigeria, a considerable population of young people most especially adolescents are sexually active and they involved in unprotected sexual activities with multiple partners which exposes them to a host of reproductive health problems.

Awareness of sexually transmitted diseases and their complications is important for adequate prevention and treatment, as people who do not know the symptoms of sexually transmitted diseases may fail to recognize their need and so may not seek help. According to Alubo, Oyediran and Odiachi (2016), awareness and knowledge of other STIs apart from HIV/AIDS is low in the developing countries, including Nigeria. Haruna, Emmanuel, Inuwa and Dathini (2018) conducted a study assessing the awareness and practice of preventive measures of sexually transmitted infections among students of Demonstration secondary school Maduguri, Borno state. The study employed survey method and used both primary and secondary data using questionnaire. One hundred and twenty one (121) respondents were selected using multi-stage sampling technique. Data were analyzed using descriptive statistics. The results of the study revealed that majority of the respondents (71%) could identify HIV/AIDS as common examples of Sexually Transmitted Infections followed by Gonorrhea with 55.5%. However, respondents

could not reasonably identify other forms of Sexually Transmitted Infections evidenced by Syphilis (9.9%), Herpes simplex (5.8%) and Chlamydia (5%). On the awareness of the mode of transmission of STIs (65%) of respondents agreed that STIs can be transmitted through sexual intercourse, sharing of underwear (35%).

A study carried out by Amu and Adegun (2015) on awareness and knowledge of STIs among secondary school students in Ado Ekiti, South Western, Nigeria, the study was a descriptive Cross-Sectional design. 550 secondary school students were selected from public and private secondary school schools in Ado Ekiti Local Government Area of Ekiti state through multi-stage sampling method. The results revealed that 499 (92.4%) respondents had heard about sexually transmitted infections before, the three most important sources of information being electronic media (68.1%) and printed media (44.9%). The results further indicated that 80% of the respondents knew only one STIs and the two most commonly mentioned ones were HIV/AIDS (78.0%) and Gonorrhea (23.0%). Also, another empirical study carried out by Anwar, Sulaiman and Khan (2016) on the awareness of Sexually Transmitted Infections and their sexual behaviour among High school students in Pulau Pinang, Malaysia, and the results revealed that out of 1139 high school students aged 15-20 years, 10.6% of which claimed that they never heard about STIs. Approximately 12.6% claimed to have sexual experience of which 75.7% had their sexual debut at 15-19 years and 38.2% were having more than 3 partners.

According to the WHO (2015) STIs preventive measures includes counselling, behavioural interventions, comprehensive sexuality education, sexually transmitted infections and HIV pre-test and post-test counselling, condom promotion and interventions targeted at key populations. The prevention of STIs especially in the regions where they are endemic, propelled mainly by heterosexual transmission, includes vaccination (for vaccine-preventable diseases) and practice of the 'ABC' approach (abstinence, be faithful to one partner and use of condom). As a result of this, an adequate awareness and knowledge is crucial to clearing misconceptions about sexually transmitted diseases (STD), and in promoting healthy sexual behaviours among adolescents. Haruna, Emmanuel, Inuwa and Dathini (2018) conducted a study assessing the awareness and practice of preventive measures of sexually transmitted infections among

students of Demonstration secondary school Maduguri, Borno state and reported that majority of the respondents (72.7%) agreed that STIs are preventable. Majority of the respondents (72%) also identified Health Education lesson as their main sources of information on STIs closely followed by Radio/Television (44%) and friends (40%). Baker and Rosenthal (2019) disclosed that awareness and accurate knowledge alone is insufficient to produce changes in attitude and behaviour, but it is a necessary component towards a person's developing the motivation to change his or her behaviour. Also, Kraft (2016) asserted that awareness and knowledge is an important prevention factors for sexually transmitted diseases.

More so, a study conducted by Oluwole, Oyekanmi, Ogunyemi and Osanyin (2020) on knowledge, attitude and preventive measures of STIs among secondary school students in Surulere Local Government Area of Lagos state and the results showed that about a quarter (24.9%) of the respondents were sexually active and had their sexual debut at 15-19 years, the use of condoms (94.3%), abstinence (86.8%), being faithful to one partner (73.6%) and regular screening (67.9%) were identified as protective measures against STIs. However, less than half (34.9%) of the respondents knew that some STIs can also be prevented by vaccination, some others (35.9%) were of the opinion that contraceptive use to prevent STIs include having sexual intercourse while standing (18%), taking drugs before sex (25.5%) and taking alcohol before sex (17.9%).

Traditional sources of information, such as parents and schools, play an important role in sexual health education. Sexual communication between adolescents and their parents has been shown to lead to safer sex behaviour (Widman, 2016). Evidence also shows that adolescents' exposure to school-based sexual education can be linked to sexual and reproductive health knowledge levels and to sexual behaviours and related health outcomes (Li, Cheng, Wu, Liang, Gaoshan, Hong, & Tang, 2017). In order to properly tackle the high STI rates, it is of paramount importance to understand adolescent infections and then prevent them.

Secondary school adolescents in Niger State are also faced with cultural and social contexts which likely affect their access to use of condoms and pills. Sexuality matters are looked upon as taboo for

adolescents because sex is regarded as sacred and seen as a topic for only the married people. To address this problem among students, it is important to start assessing their understanding of their existing knowledge and education on the sexually transmitted infections. In addition to that, considering the social changes involved, factors related to entering the university environment can increase the occurrence of risky sexual behaviours. Therefore, this study examined the level of awareness and practicing of preventive measures of sexually transmitted diseases among senior secondary school adolescent students in Lapai Local Government Area of Niger state.

Statement of the Problem

Sexuality education does provide the basic knowledge of STD such as Human Immunodeficiency Virus (HIV), Gonorrhea, Syphilis, Hepatitis in school curriculum and the ways and means of transmission of disease from one body to another. The transmission process of the disease can be in various ways, such as, sex relationship, sharing injecting tools among drugs users, and blood transmission. Available data shows that sexually transmitted diseases constitute medical, social and economic problems in Nigeria and this is not only prevalent in the urban centres but also in the rural areas (Ogunbanjo, 2015). According to Mati (2017), STDs pose a major reproductive health burden on individuals; many of which include: sores and bumps on the body, recurrent private parts sores, generalized skin rash, pain during intercourse, scrotal pain, redness and swelling pelvic pain. Others include eye inflammation, arthritis, pelvic inflammation disease, Human Immunodeficiency Virus (HIV) and HumanPapilloma Virus (HPV).

Sexually transmitted disease is also associated with morbidity such as infertility, septic abortion, ectopic pregnancy, cervical cancer and increased risk of HIV/AIDS especially when a genital ulcer is present (Abudu & Odugbemi, 2016). Many adolescents below the age of 20 are already sexually active, but many face difficulties in obtaining reproductive health care. In addition, adolescents are typically poorly informed about how to protect themselves from STDs (Federal Ministry of Health of Nigeria, 2009). Globally adolescents access health services less frequently than expected. In Nigeria, a considerable population of adolescents is sexually active and is involved in unprotected sexual activities with multiple partners which expose them to a host of reproductive health problems. Nigerian adolescents are also faced

with cultural and social contexts which likely affect their access to and use of reproductive health services (RHS) (Ogundipe & Ojo, 2015). Sexuality matters are looked upon as taboo for adolescents because sex is regarded as sacred and seen as a topic for only the married STDs (Ogundipe & Ojo, 2015). Hence, this study aims at examining the level of awareness and practicing of preventive measures of sexual transmitted infections among senior secondary school adolescent students in Lapai Local Government Area of Niger State, Nigeria.

Objectives of the Study

This study was set out to achieve the following specific objectives:

1. To examine the difference of awareness level of sexually transmitted diseases among senior secondary school adolescent students in Lapai Local Government Area of Niger State based on gender.
2. To examine the difference of level of practicing of preventive measures of sexually transmitted diseases among senior secondary school adolescent students in Lapai Local Government Area of Niger State based on gender.
3. To determine the difference in the level of awareness of sexually transmitted diseases among senior secondary school adolescent students in Lapai Local Government Area of Niger State on the basis of age.
4. To examine the difference in the level of practicing of preventive measures of sexually transmitted diseases among senior secondary school adolescent students in Lapai Local Government Area of Niger State on the basis of age.

Hypotheses

The following hypotheses were formulated and tested;

1. There is no significant difference of awareness level of sexually transmitted diseases known to senior adolescent students in Lapai Local Government Area of Niger State based on gender.

- 2. There is no significant difference in practicing of preventive measures of sexually transmitted diseases known to senior adolescent students in Lapai Local Government Area of Niger State based on gender.
- 3. There is no significant difference in the level of awareness of sexually transmitted diseases known to senior adolescent students in Lapai Local Government Area of Niger State on the basis of age.
- 4. There is no significant difference in the level of practicing preventive measures of sexually transmitted diseases among senior adolescent students in Lapai Local Government Area of Niger State on the basis of age.

Methodology

This study adopted descriptive survey design. Osuala (2015) stated that a survey design studies both large and small population by selecting and studying samples drawn from the population. The population of this study comprised of 4,712 senior secondary school students in Lapai Local Government Area of Niger State. The sample size for this study comprised of three hundred and sixty two (362) students. Multi stage sampling technique was used to select the sample for the study. Purposive sampling method was used to select four (4) schools out of seventeen (17) senior secondary schools in Lapai Local Government Area. The researchers of this study used purposive sampling technique because male and female students were needed to participate in this study. Proportionate sampling method was used to select respondents from sample schools. In this regard, the higher the number of students, the higher the respondents to be selected from such school and the lower the number of students, the lower the respondents to be selected from such school to be used as sample for the study. The selection of sample in this study was based on the Tyro Yamane (2005) to determine the sample size for this study.

4,712

N = Population of the study

$$n = \frac{N}{1+N (0.05)^2}$$

N = Sample size

$$n = \frac{4712}{1+4712 (0.05)^2}$$

Margin error = 0.05

$$n = \frac{4712}{1+4712 (0.0025)}$$

The formula

$$n = \frac{4712}{1+4712}$$

$$N = \frac{N}{1+N (0.05)^2}$$

$$n = \frac{4712}{1+11.78}$$

$$n = \frac{4712}{12.78}$$

n = 362.4

n = 362.

Students' Awareness and Preventive Measures of Sexually Transmitted Diseases Questionnaire (SAPMSTDQ) was used to collect relevant data for this study. This instrument was adapted from Amu and Adegun (2015) with little modification to suit the present study. This instrument has three sections (section A, B & C). The section 'A' contained the demographic information of the respondent; section 'B' contained questions on awareness of sexually transmitted diseases and it consist of 10 items; section 'C' contained questions on preventive measures of sexually transmitted diseases and it consist of 10 items. The Students' Awareness and Preventive Measures of Sexually Transmitted Diseases Questionnaire (SAPMSTDQ) is measured in 4 Likert scales which the response options include: Strongly Agree (SA); Agree (A); Disagree (A); Strongly Disagree (SD). To determine the face and content validity of the research instrument, a copy of Students' Awareness and Preventive Measures of Sexually Transmitted Diseases Questionnaire (SAPMSTDQ) was given to three (3) experts from the Department of Counselling Psychology, Faculty of Education and Arts, Ibrahim Badamasi Babangida University, Lapai for vetting. Their observations, corrections, opinions and suggestions were considered and harmonized. To ascertain the reliability of the SAPMSTDQ, pilot testing was carried out in Day Secondary School, Evuti. Test re-test method of reliability was used. 35 copies of Students' Awareness and Preventive Measures of Sexually Transmitted Diseases Questionnaire (SAPMSTDQ) were administered to 35 students and after 3 weeks the same instruments were re-administered to the same 35 students. The first and the second tests were scored separately and the two sets of the data were correlated through the use of Pearson product moment correlation co-efficient, and the reliability co-efficient value for SAPMSTDQ was 0.79. That indicated the reliability co-efficient of this instrument is high, and was reliable for use in this study.

The researchers personally administered the Students' Awareness and Preventive Measures of Sexually Transmitted Diseases Questionnaire (SAPMSTDQ) to the respondents and retrieved the questionnaires immediately after the completion from the respondents with the help of four (4) research assistants, one from each sample school. The data collected through the Students' Awareness and Preventive Measures of Sexually Transmitted Diseases Questionnaire (SAPMSTDQ) was subjected to

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statistical analysis. t-test statistics was used to test hypothesis 1 and 2, while analysis of variance (ANOVA) was used to test hypothesis 3 and 4 at 0.05 levels of significance.

Results

Test of Hypotheses

Hypothesis One: There is no significant difference of awareness level of sexually transmitted diseases known to senior adolescent students in Lapai Local Government Area of Niger State based on gender.

Table 4: t-test Comparison of the Mean Scores of Male and Female Senior Secondary Students on Awareness Level of Sexually Transmitted Diseases

Variable	N	Mean	Std. Dev.	df	t-cal	t-critical
Male	192	31.68	3.92	360	18.45	0.072
Female	170	30.76	3.76			

The result in Table 4 showed the t-test comparison of the means of male and female senior secondary students on awareness level of sexually transmitted diseases in Lapai Local Government Area of Niger State. The mean of the male respondents is 31.68 and standard deviation of 3.92, while the mean of the female respondents is 30.76 and standard deviation of 3.76. The t-test result is t-calculated = 18.45, t-critical value = 0.072 and df = 360. Since the t-critical value is less than t-calculated value, it showed that there is significance difference between male and female secondary school students in the awareness level of sexually transmitted diseases in Lapai Local Government Area of Niger State. Therefore, the null hypothesis which states that there is no significant difference of awareness level of sexually transmitted diseases known to senior adolescent students in Lapai Local Government Area of Niger State based on gender was rejected.

Hypothesis Two: There is no significant difference in practicing of preventive measures of sexually transmitted diseases known to senior adolescent students in Lapai Local Government Area of Niger State based on gender.

Table 5: t-test Comparison of the Mean Scores of Male and Female Senior Secondary Students on Practicing of Preventive Measures of Sexually Transmitted Diseases

Variable	N	Mean	Std. Dev.	df	t-cal.	t-critical
Male	192	30.02	3.29	360	15.82	0.214
Female	170	28.86	3.18			

The result in Table 5 showed the t-test comparison of the means of male and female senior secondary students on practicing of Preventive Measures of sexually transmitted diseases in Lapai Local Government Area of Niger State. The mean of the male respondents is 30.02 and standard deviation of 3.29, while the mean of the female respondents is 28.86 and standard deviation of 3.18. The t-test result is t-calculated = 15.82, t-critical = 0.214 and df = 360. Since the t-critical value is greater than t-calculated value, it showed that there is significance difference between male and female senior secondary school students in the practicing of preventive measures of sexually transmitted diseases in Lapai Local Government Area of Niger State. Therefore, the null hypothesis which states that there is no significant difference in practicing of preventive measures of sexually transmitted diseases known to senior adolescent students in Lapai Local Government Area of Niger State based on gender was rejected.

Hypothesis Three: There is no significant difference in the level of awareness of sexually transmitted diseases known to senior adolescent students in Lapai Local Government Area of Niger State on the basis of age.

Table 6: Results of ANOVA on Awareness Level of Sexually Transmitted Diseases among Senior Secondary School Students

Variables	Sum of Squares	df	Mean Squares	Calculated F-value	Critical F-value
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Between Groups	9.725	2	0.336		
Within Groups	7206.804	360	20.572	0.286	0.417
Total	7216.529	362			

The result in Table 6 showed that $F_{\text{calculated}} = 0.286$, $F_{\text{critical}} = 0.417$ and $df = 360$. Since the F_{critical} value is greater than $F_{\text{calculated}}$ value, the finding indicated that there is no significant difference on the awareness level of sexually transmitted diseases among senior secondary school students in Lapai Local Government Area of Niger State on the basis of age. Therefore, the null hypothesis which stated that there is no significant difference in the level of awareness of sexually transmitted diseases known to senior adolescent students in Lapai Local Government Area of Niger State on the basis of age was retained.

Hypothesis Four: There is no significant difference in the practicing preventive measures of sexually transmitted diseases among senior adolescent students in Lapai Local Government Area of Niger State on the basis of age.

Table 7: Results of ANOVA on Practicing of Preventive Measures of Sexually Transmitted Diseases Sexually Transmitted Diseases among Senior Secondary School Students

Variables	Sum of Squares	df	Mean Squares	Calculated F-value	Critical F-value
Between Groups	7.797	2	0.213		
Within Groups	8620.680	23	22.985	0.148	0.752
Total	8628.477	25			

The results in Table 7 revealed that $F_{\text{calculated}} = 0.148$, $F_{\text{critical}} = 0.752$ and $df = 360$. Since the F_{critical} value is greater than $F_{\text{calculated}}$ value, it indicated that there is no significant difference in the practicing of preventive measures of sexually transmitted diseases among senior secondary school students in Lapai Local Government Area of Niger State. Therefore, the null hypothesis which stated that there is

no significant difference in the practicing preventive measures of sexually transmitted diseases among senior adolescent students in Lapai Local Government Area of Niger State on the basis of age was retained.

Discussion of Findings

The finding of hypothesis one revealed that there is significance difference between male and female senior secondary school students in the awareness level of sexually transmitted diseases in Lapai Local Government Area of Niger State. This finding is in line with the finding of Amu and Adegun (2015) who examined awareness and knowledge of sexually transmitted infections among secondary school adolescents in Ado Ekiti, South Western Nigeria and reported that four hundred and ninety-nine (92.4%) respondents had heard about sexually transmitted infections before, the three most important sources of information being electronic media (68.7%); teachers (68.1%); and print media (44.9%). Eighty percent of the respondents knew only one STI and the two most commonly mentioned ones were HIV/AIDS (78.0%) and gonorrhea (23.0%). This finding also agreed with the Joseph, Muhammed, Raji and Akoh (2022) who investigated knowledge of sexually transmitted diseases among secondary school adolescents in Asa Local Government Area of Kwara State, Nigeria and found that sex show significant relationship with knowledge of STDs as $P > 0.05$. This finding also supported the finding of Mudassir, Azhar, Keivan and Tahir (2010) who studied awareness of school students on sexually transmitted infections (STIs) and their sexual behavior and reported that sexual experience was found to be significantly associated with gender. Center for Disease Control (2022) also found that awareness was generally high for HIV/AIDS (above 90%) and low for HPV (range 5.4%-66%).

On the other hand, this finding disagreed with the finding of Nwachukwu (2016) who assessed the knowledge and attitude of secondary school students towards sexually transmitted disease in Anambra State and found that significant difference was no found between boys and girls in their knowledge and attitude towards STDs. This finding also contradicted the finding of El-Duah, Harris and Appiah-Brempong (2020) who carried out study on the knowledge of sexually transmitted infections of school going adolescents in

the Sunyani West District of Ghana and found that both male than female adolescents knew about all four areas of knowledge as regards sexually transmitted infections.

The finding of hypothesis two revealed that there is significance difference between male and female senior secondary school students in the practicing of preventive measures of sexually transmitted diseases in Lapai Local Government Area of Niger State.. This finding agreed with the finding of Oyewusi, Sabo and Uchena (2022) carried out a study on assessment of the awareness levels on sexual transmitted diseases among secondary school students in Northern Nigeria and found that significance difference was not found in the practices of preventive measures of sexually transmitted diseases among male and female respondents. This finding also supported the finding of Kahinde (2020) who studied knowledge and sources of information of STDs among adolescents in Asa local government area of Kwara State, north central region of Nigeria and reported that significant relationship was found in the knowledge and practices of preventive measures of STDs among male and female adolescents.

The finding of hypothesis three revealed that there is no significant difference on the awareness level of sexually transmitted diseases among senior secondary school students in Lapai Local Government Area of Niger State on the basis of age. This means that senior secondary school students of different ages had similar awareness level of sexually transmitted diseases. This finding correlated with the finding of Florence (2013) who assessed knowledge and awareness of sexually transmitted infections among school-going adolescents and reported that significant difference was found in knowledge and awareness of sexually transmitted diseases on the basis of age with better knowledge and awareness scores for older pupils. This finding agreed with the finding of Kahinde (2020) who studied knowledge and sources of information of STDs among adolescents in Asa local government area of Kwara State, north central region of Nigeria and reported that significant relationship was found in the knowledge and awareness of STDs among adolescents on the basis of age. Nwachukwu (2013) who carried out study on the knowledge and attitude of secondary school students towards sexually transmitted disease in Anambra State and found that significant difference in the knowledge and attitude towards STDs based on age.

The finding of hypothesis four revealed that there is no significant difference in the practicing of preventive measures of sexually transmitted diseases among senior secondary school students in Lapai Local Government Area of Niger State on the basis of age. This means that senior secondary school students of different ages had similar level of practicing preventive measures of sexually transmitted diseases. This finding supported the finding of Nwachukwu (2013) who carried out study on the knowledge and attitude of secondary school students towards sexually transmitted disease in Anambra State and found that significant difference was found in the practicing of preventive measures of STDs based on age. This finding also agreed with the finding of Kahinde (2020) who reported that significant relationship was found in the practicing of STDs preventive measures among adolescents on the basis of age. Similarly, Mudassir, Azhar, Keivan and Tahir (2010) reported that sexual experience and practicing of preventive measures of sexually transmitted diseases was found to be significantly associated with age.

Conclusions

Based on the findings of this study, the researchers concluded that:

1. Significant difference does not exist between male and female senior secondary school students in the awareness level of sexually transmitted diseases in Lapai Local Government Area of Niger State.
2. Significant difference does not exist between male and female senior secondary school students in the practicing of preventive measures of sexually transmitted diseases in Lapai Local Government Area of Niger State.
3. Significant difference does not exist in the awareness level of sexually transmitted diseases among senior secondary school students in Lapai Local Government Area of Niger State on the basis of age.
4. Significant difference does not exist in the practicing of preventive measures of sexually transmitted diseases among senior secondary school students in Lapai Local Government Area of Niger State on the basis of age.

Recommendations

Based on the findings of this study, the following recommendations were made;

1. School Counsellors and Psychologists should organize group guidance programme for secondary school adolescents with the aim of educating young people about STDs. The content of the programme should be creating awareness of STDs and ways to reduce the risk of STDs.
2. School Guidance Counsellors should intensify efforts and encourage secondary school adolescents to practice preventive measures of sexually transmitted diseases. This will help to reduce risk of sexually transmitted diseases.
3. Government and relevant organizations should reach out many schools and engage in mass enlightenment programmes for students at all ages in both urban and rural areas in order for them to have adequate awareness and knowledge of the sexually transmitted diseases.
4. Parents and teachers should also intensify efforts in educating adolescent students of all ages on the importance of practicing preventive measures of sexually transmitted diseases.

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