

Evaluation of the Approach, Awareness and Practices on Sexually Transmitted Diseases among Medical Students at KIU Western Campus, Ishaka Town Bushenyi District, Uganda.

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ABSTRACT

Sexually transmitted diseases (STDs) still remain a great public health problem of major significance in most parts of the world. The incidence of acute STD is believed to be high among sexually active adolescents worldwide due to changes and development in their lives. The study aims at establishing the attitude, knowledge and practices on STDS among students studying at Kampala International University Western Campus in Ishaka town. The study aims at establishing the attitude, knowledge and practices on STDS among students studying at Kampala International University Western Campus in Ishaka town. A great percentage of anticipated respondents participated in this study making the response rate 96%. Among these respondents (65%) were males and (35%) were females. The age distribution of the respondents showed that most of the respondents (50%) were between 20-25 years old. Respondents (50%) were followers of the Catholic faith and followed other religions. The majority (76%) of the respondents were living near campus and (24%) of them are from rural areas. The majority of (60%) of respondents were single, and others were in a relationship. During the study period (70.9%) of the respondents were living in a hostel, (15.6%) were living in a rented house, and (13.5%) were living in another relative house. Most of the respondents have knowledge about STIs, but there are still misconceptions and their practice remained quite low.

Keywords: STDs, Sexually active adolescents, Females, Sexual transmission infection, Health institutes.

INTRODUCTION

Sexually transmitted infections/diseases are conditions that are transmitted between humans by means of sexual contact such as vaginal intercourse, or oral or anal sex when an individual gets involved in an unprotected sexual practice with someone who has that disease or is infected [1-3]. STDS have been known to mankind for several hundred centuries. Before the advent of modern medicine, people's lack of awareness and understanding of STDS contributed to the widespread transmission of the infections while few or no treatments were available to treat the conditions [4, 5]. In medieval times syphilis and gonorrhoea were the most prevalent [6, 7]. STDS in Europe one theory suggests that syphilis was spread by crew members who picked the disease

on the voyages led by Christopher Columbus from America where they were thought to have contracted it from and spread them on their return when docking at ports in Europe [8]. Also, sailors are said to be responsible for the spread of gonorrhoea from Tahiti to New Zealand during cook voyages [9]. Treatment in the 18th and 19th century were based on mercury, arsenic, and sulphur which often resulted in very serious effects out of which many people died of mercury poisoning. The first known effective treatment of syphilis was salvarsan or arsphenamine introduced in 1910. However, in the 20th century, discovery of penicillin and other antibiotics led to an effective cure of bacterial STDS [10]. Several people are living with these

infections. The causative agents which can be bacteria, viruses and parasites of these diseases cannot be seen with our naked eyes which are then presumed to be the basic reasons leading to the spread of these diseases/infections [11, 12]. The agents include *Neisseria gonorrhoea*, *treponema pallidum*, human papilloma virus, HIV, *chlamydia trachomatis*, and *trichomonas* among others [13]. This concept of STD/STI's has existed within the local community in a country like Uganda for over a century. In Buganda for example myths like a man that contracted an STD especially gonorrhoea which was most prevalent at that time, he was considered to be brave in regards to courting women however with evolvement of science it was disapproved [14, 15]. STD does still remain a great public health problem of major significance in most part of the world. Incidence of acute STD is believed to be high among sexually active adolescents worldwide due to changes and development in their lives [16]. Failure to diagnose and treat STD's at an early stage may result in serious complications and sequence, such as ectopic pregnancy, infertility, neonatal infection, anogenital cancer, infant infections and death [17-20]. STDs also accounts for massive expenditure in terms of treatment of the infected individuals [21]. STDs are

common also in adults, but they are always hidden for the fear of opinion of others thus, self-medication is common and when sought, treatment is often obtained from; private practitioners, pharmacists, nurses and traditional healers [22]. The emergence and spread of HIV/AIDS have had the majority of impact on the management and control of other STDs, examples included, antimicrobial resistance of several sexually transmitted pathogens is increasingly rendering some low-cost regimens ineffective [23, 24] The treatment of chancroid for example may have become increasingly difficult because of immunosuppression caused by co-infection with HIV. This leaves management of STDs with very expensive drugs like; third-generation cephalosporin [25 -28]. However, one should weigh the initial high cost of inadequate therapy, which may lead to complications, relapse, further spread and a selection for antimicrobial resistance [29]. The world health organisation now has also classified cervical cancer as a sexually transmitted disease. In the past, all genital sores were considered on clinical grounds as syphilis and all cases of genital discharge as gonorrhoea, which lead to an inappropriate treatment and increased complications [30].

Statement of the Problem

Globally, sexually transmitted diseases/infections cause nearly half of the deaths among youth under 33 years of age, and it continues to be among the leading causes of morbidity and mortality among all the other preventive diseases [31]. The commonly known STDs/STIs are: syphilis, gonorrhoea and HIV by the community yet there are several others such as candidiasis, genital warts, and trichomoniasis to mention but a few [32]. These others are commonly confused by the local population and yet they too cause severe damage to the body especially the reproductive system. The majority of the students as regards earlier researchers can be easily lured into sexual favours by already infected older age groups of men and women commonly known as 'sugar daddies' and 'sugar mummies'

respectively. They get involved in sexual acts in order to get things from these people without considering that they can get infected by these diseases [33-37]. In these research, basing on the individuals under study, the prior knowledge and understanding of STDs is present, however certain situations like whereby the student is having no money and there is an opportunity of acquiring money other than that from the parents, they get tempted to indulge in such an activity risking their lives one way or the other for good reasons only known to them. Though most know about these diseases, there is still 'I don't care' attitude among them. Many are involved in drinking alcohol and drug abuse and these tend to lure them into unprotected sex. Through, organisation of guidance and counselling initiatives,

group therapies (for those students who could have been raped and acquired the infections), regular routine checkups and treatments. With these few strategies, I would be able to resolve the problem. Adolescent period is one of the worst periods in life, as many youths tend to explore and believe that they are adults.

Aim of the Study

The study aims at establishing the attitude, knowledge and practices on STDs among students studying at Kampala

This is a period whereby parents and teachers should get close to the youth to educate them so as to know the risks in which they may go through. On the general sample population, the impact of the problem causes demoralisation if the institute and loss of integrity to other competing institutes one way or the other.

International University Western Campus in Ishaka town.

Specific Objectives of the Study

- To establish the attitude of youths towards the most prevalent STDs/STIs among their communities today.
- To access the knowledge on STD/STI's and their control among the students.
- To explore the valuable information sources on STDs/STIs available to students.
- To investigate why some students are so reluctant to use the available measures or alternatives to eradicate the problem.

Research Question

- How much knowledge do students know about sexually transmitted infections?
- What are the attitudes of the students towards the sexually transmitted diseases?
- What lifestyle practices or behaviours do the students have that predisposes them to sexually transmitted infections?

Justification of the Study

This study will add to the existing practice, knowledge and attitude in regards to STD/STI control among the KIU-WC student population. The study will enable the researcher to come up with the main and specific factors contributing to the high prevalence rate of STD/STI and be able to make recommendations to the university medical officer of KIU-WC who will in turn forward the information to the district medical officer of Bushenyi district in planning and practical invention to address the problems in the university and

the district as a whole. From this study, the researcher will find out how to help bring about new behaviour change for STD/STI prevention and control. The study will also give important information to policy makers and other stakeholders in the field of STI's prevention and control programs in Uganda. Furthermore, the research study is a fundamental pre-requisite in the partial fulfilment of the award of a Bachelor's Degree in Medicine & Surgery at Kampala International University's western campus.

METHODOLOGY

Area of Study

The study was conducted at Kampala international university's western campus in Ishaka town in western Uganda. It's approximately 4km from Bushenyi town. The area is hilly with relief rains almost throughout the year with fertile land. The town has a population of roughly 25,367 individuals based on the 2002 Uganda national census. The students' residential areas were my point of interaction with them because they were assumingly free at

that time probably after class and they had the time to talk and be open about their own views on my topic of concern. The university consists of students with different ethnic backgrounds and people from different walks of life brought together to accomplish a common goal of studies and acquiring degrees, diplomas, certificates in the various courses to which they have been admitted. The common language is Runyankole. The health

facilities present include Kampala international university teaching hospital, Ishaka STA hospital among others. The town is bordered by Kasese in the north,

Kamwenge in the North West, Bushenyi in the south east, Ntungamo in the south and Lake Edward in the North West.

Study Design

The study aims at establishing the attitude, knowledge and practices on STDS among students studying at Kampala

International University Western Campus in Ishaka town.

Study Population

The case study targeted only medical students that are registered at the department of clinical medicine and

dentistry. A sample size of respondents will be considered and the sample will be got randomly without partiality.

Inclusion Criteria

Only students registered in the department of clinical medicine and

dentistry will be included in the research.

Exclusion Criteria

- Those were not available during data collection period.
- Those who were not physically and mentally not capable to be interviewed.

- Lecturers, administrators, were also excluded.
- Students in other faculties like biomedical science, arts in education were exclude

Sample Size

Sample size was determined using the formula for a single population proportion for cross sectional study with the following assumptions. By assuming that 50% of medical students in the faculty has the knowledge, attitude and practice about STIs to obtain maximum sample size at 95% certainty and a maximum discrepancy of $\pm 5\%$ between the sample and the population, the size

of the sample will be determined by the formula:

$$N = z^2 p(1-p) / E^2$$

Where n=estimated minimum sample size required

P=proportion of a characteristic in a sample (84.9% [36])

E=margin of error set at 5%

Z=1.96 (for 95% confidence interval)

The population which will be studied, will be both male and female medical students.

Sampling Technique

This will involve convenience sampling, because it aims at choosing purely on the basis of how convenient the elements or

variables in the sample are. This method involves accessibility. A total of 110 were sampled.

Data Collection Methods

Data was collected using a preceeded questionnaire written in English and in cases where the respondent didn't understand the questions I elaborated more and explained the question so that the respondent understood. In the questionnaire, both open and closed-ended questions were used which did not require the respondent's information. This

was intended to avoid fear and instil confidence. The questionnaire was prepared in English language, during preparation and I tried to follow the logical order from simple to complex and put sensitive questions at the end. A structured, pre-tested and self-administrated questionnaire was used for data collection.

Data Collection Tools

Pens, pencils, papers and rulers were used for recording necessary information. A clip board for holding papers and an electronic

calculator will be used for computing to give accurate results.

Data Collection Technique

Data was collected by the use of questionnaire and writing materials like

pens, papers. I administered the questionnaire to the various respondents

at their own respective convenient times as by then we would have agreed on how to handle the research program, and I was with them as they asked questions were necessary that they do not understand. For

Quality Control

These ensured and prevent missing of information and erroneous data. Training was given for data collectors on the objectives of the study, the contents of the questionnaire, issues related to the confidentiality of the responses and the rights of respondents. A structured questionnaire developed was pre-tested on 5% of the study population in the university that was not included in the

Pre-Testing of the Questionnaire

Questionnaires were given to the few chosen individuals to assess the acceptability of the data collection tool before administering the questionnaire to

Data Processing

After data collection, each questionnaire was checked for completeness and consistency. The Statistical Packages for Social Sciences (SPSS) version 16 was used for the statistical description and ANOVA analysis and results will be presented in numbers, percentages, means and

Data Analysis

The data was analysed both qualitatively and quantitatively using tables, graphs.

Ethical Considerations

The researcher got an introductory letter from the principle tutor of KIU WC the researchers team will introduce themselves to the area of LCs to seek permission and cooperation to go ahead with the study. The purpose of study will be clearly explained to the LCs and the concerns so as to enable unlimited cooperation. Before enrolment in the study,

the sampled students the purpose of the study and importance of participation was informed and verbal consent was also clearly ensured.

main survey, to ensure that clarity of questions and the required amendment was done. Follow-up and supervision were conducted by the investigator during the data collection period and support was given to students in the research at the time of difficulty. The collected data was checked by the principal investigator (supervisor) and data collectors every day at the end of each data collection day.

the participants. Necessary adjustments will be done to ensure adequate data collection.

standard deviations. The cut-off 5% level of significance will be taken to see the difference between groups, Data was also processed and analysed manually, sorted and tabulated myself and my assistant with the help of the supervisor.

all the researchers will be requested to consent without any material benefits or allowances. A careful and clear explanation of the study will be done. The researcher will assure the respondents of maximum confidentiality about the information given by them, and their full right to participate or not to participate at all if they deemed well.

RESULTS

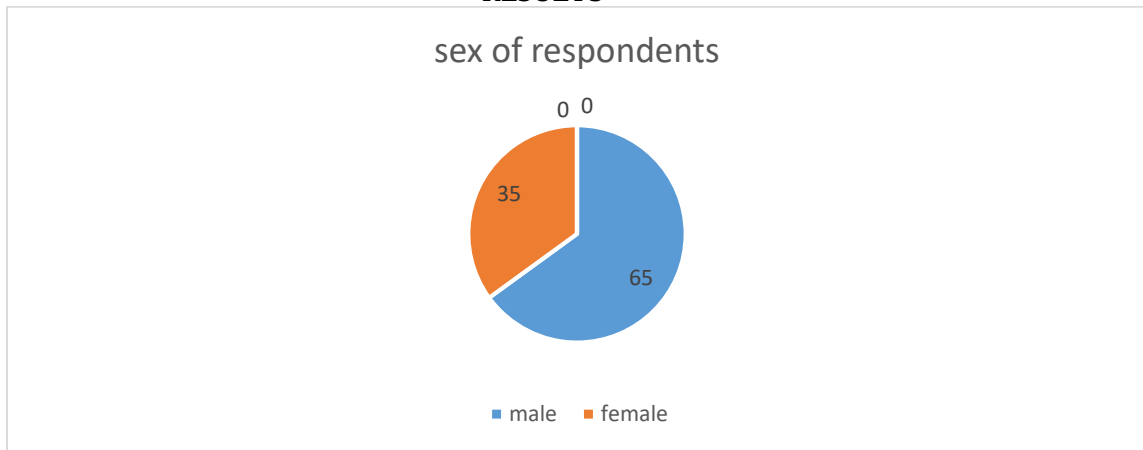


Figure 1: Demographic characteristics of respondents

The majority of respondents were males at 65%.

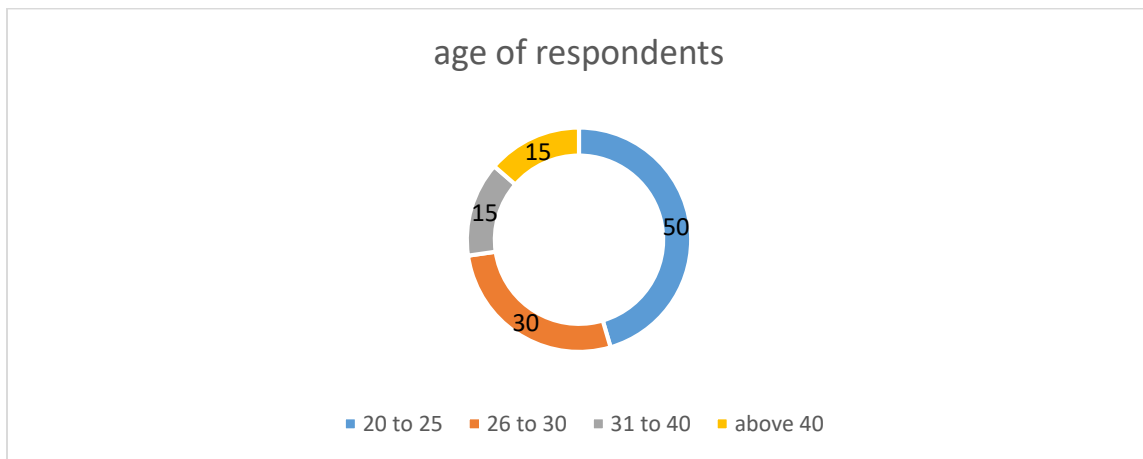


Figure 2: Age of respondents

Majority of respondents were between ages of 20 to 25, 15% of respondents were between 26 to 30 and 31 to 40.

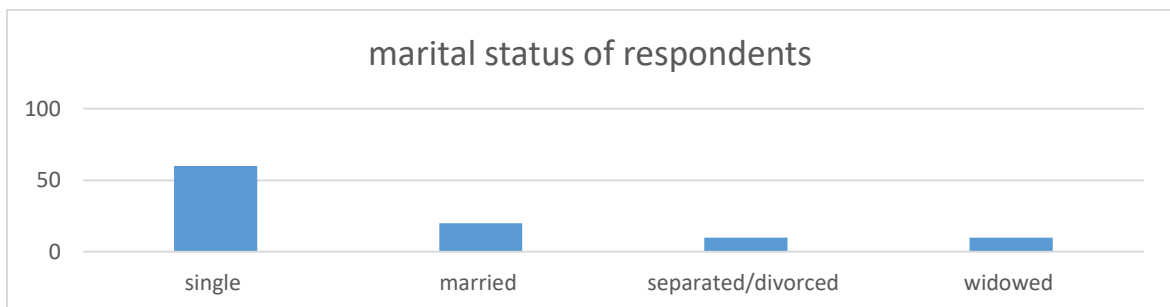


Figure 3: Marital status of respondents

60% of respondents were single 20% were married, 10%

were divorced, 10% were widowed

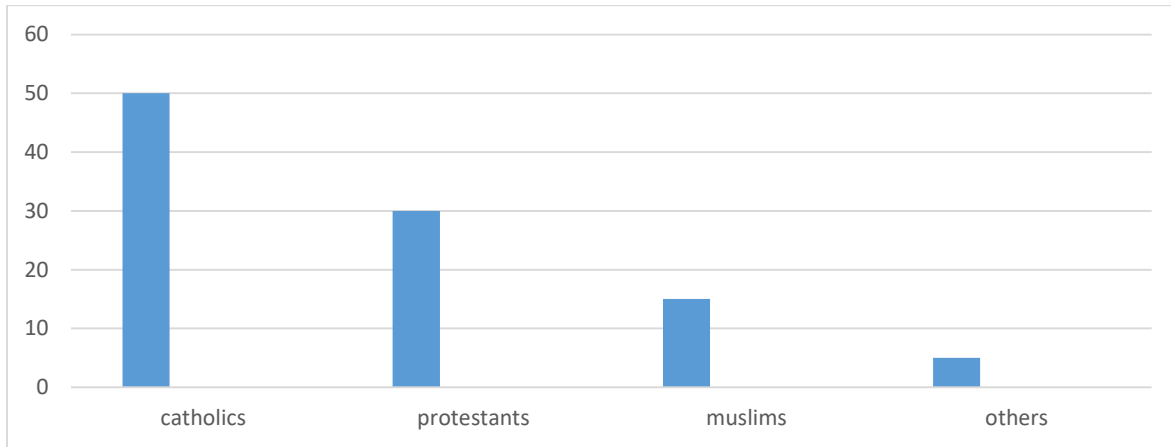


Figure 4: Religion of respondents
50% of respondents were Catholics, 30% Protestants.
Knowledge of Respondents

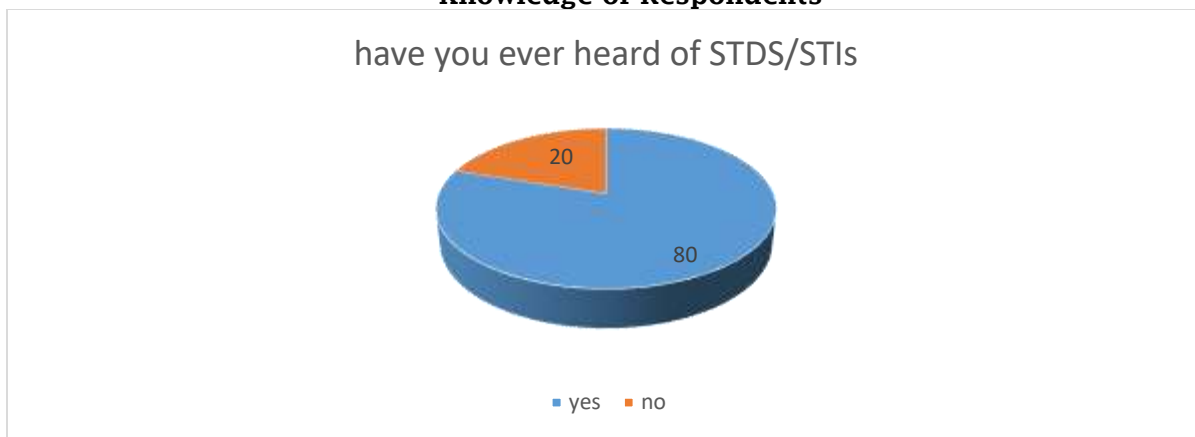


Figure 5: Knowledge on STD/STI's
80% had ever had STIs compared to 20% who had not heard.

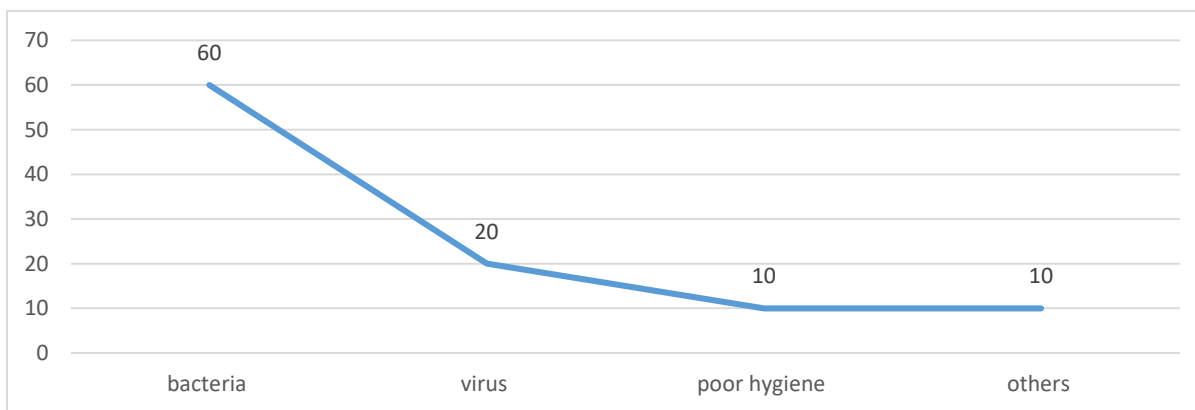


Figure 6: Possible "causes" of sexually transmitted infections
60% thought bacteria caused STIs, 20% thought viruses caused it

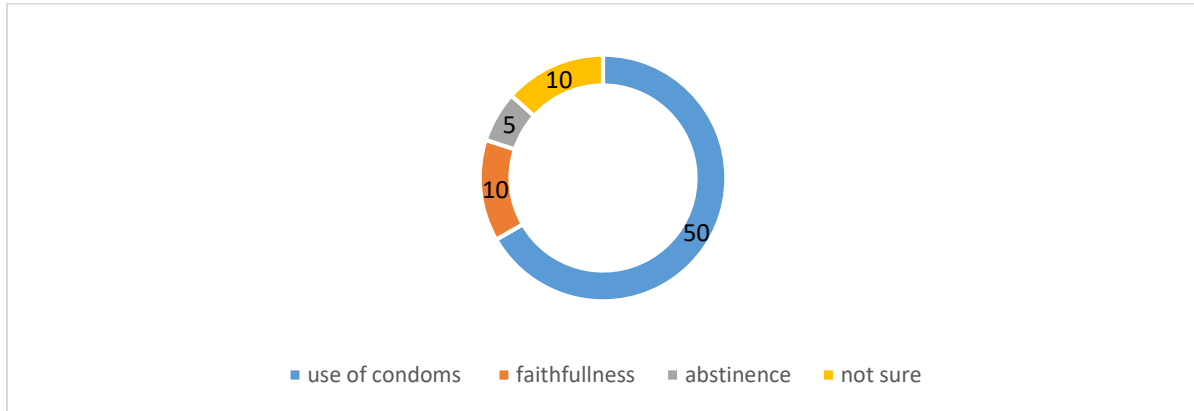


Figure 7: What can you do to avoid sexual transmitted diseases. 50% thought condoms prevented STIs, 10% thought of faithfulness, 5% thought of abstinence

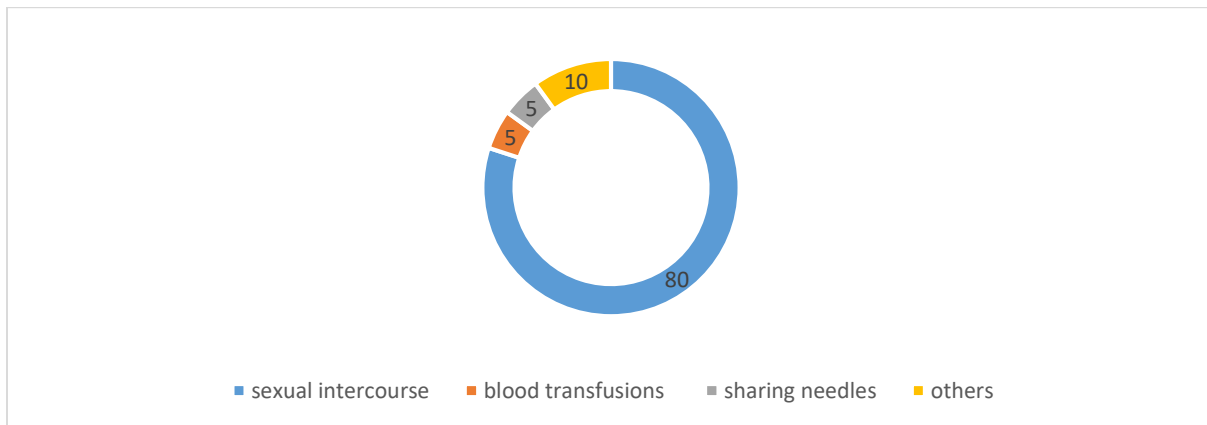


Figure 8: Routes of STDs 80% thought STIs are spread through sexual intercourse, 5% sharing needles, 5% blood transfusions.

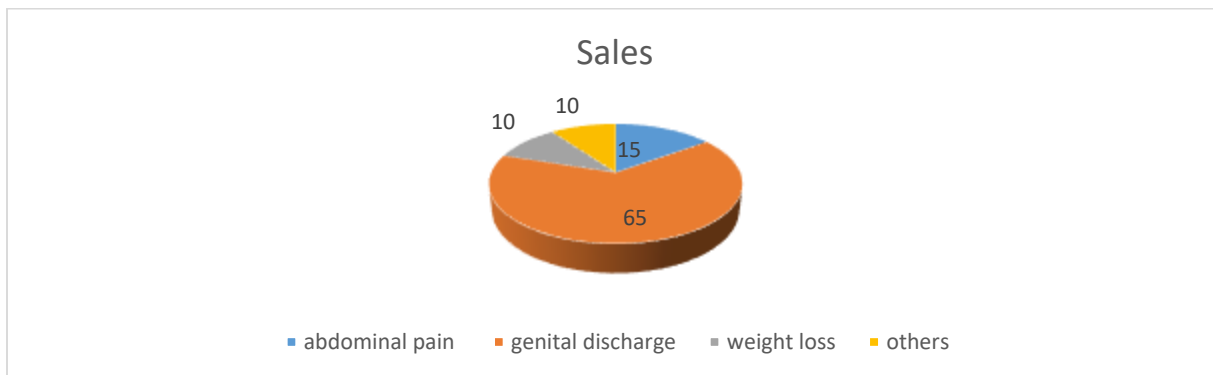


Figure 9: Signs and symptoms of sexually transmitted infections
 65% thought STIs presented with genital discharge, 15% abdominal pain, 10% weight loss.

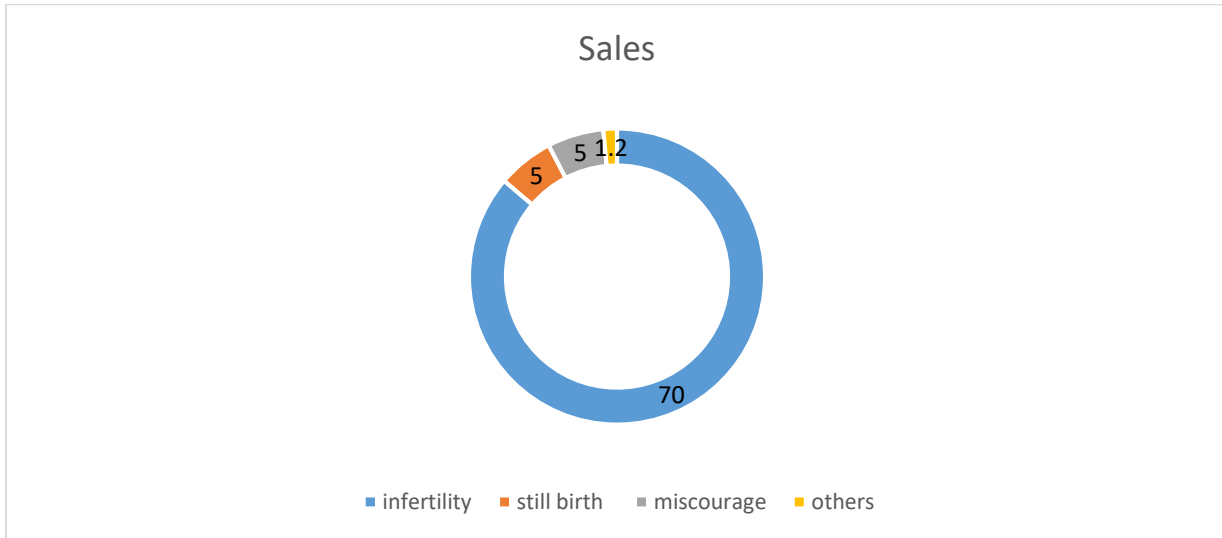


Figure 10: What are complications of STDs if untreated
 70% thought STDs caused infertility, 5% caused still birth

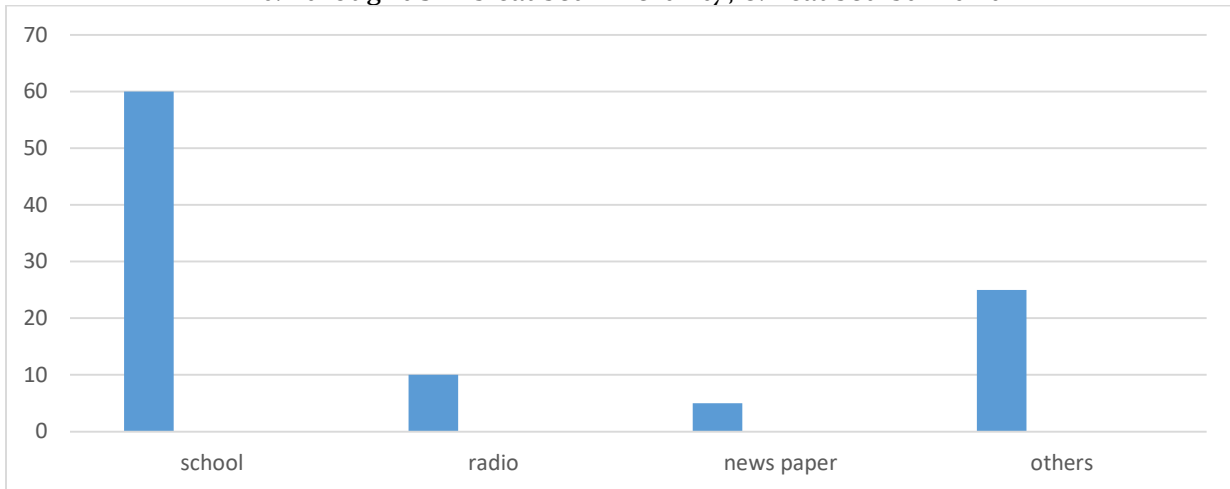


Figure 11: Where did you get information on sexually transmitted diseases.
 60% of respondents got information on STDS from school, 10% from radios.

Attitude

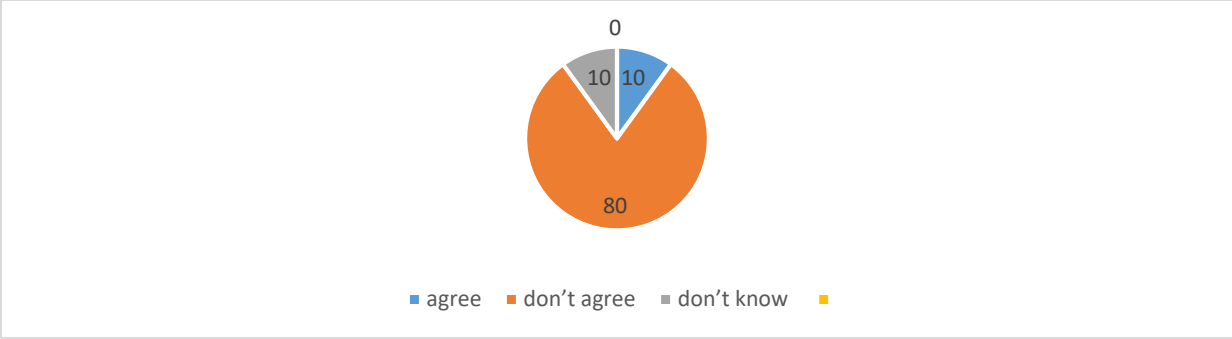


Figure 12: Sexually transmitted diseases are not dangerous because they can be cured. 80% thought STDs are dangerous, 10% didn't know.

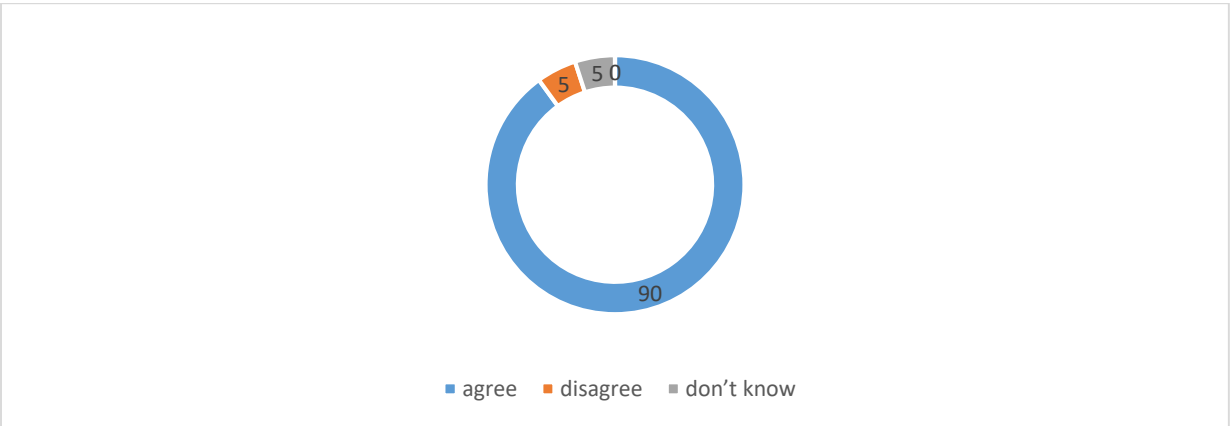


Figure 13: People who are infected with an STD must get treatment. 90% thought people who infected with STDs should get treatment.

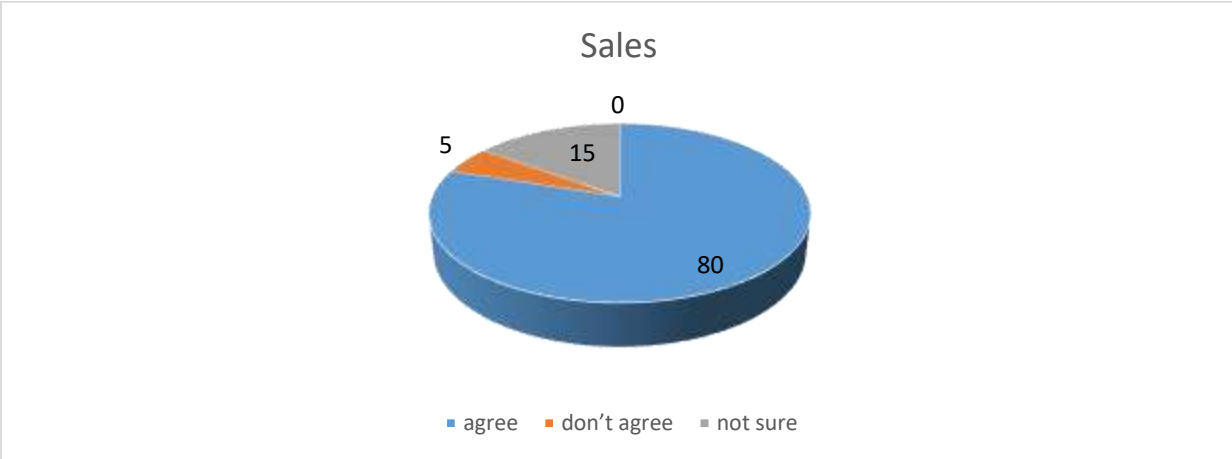


Figure 14: Getting knowledge about STDs in order to prevent these diseases. 80% thought getting knowledge on STDs is important in prevention.

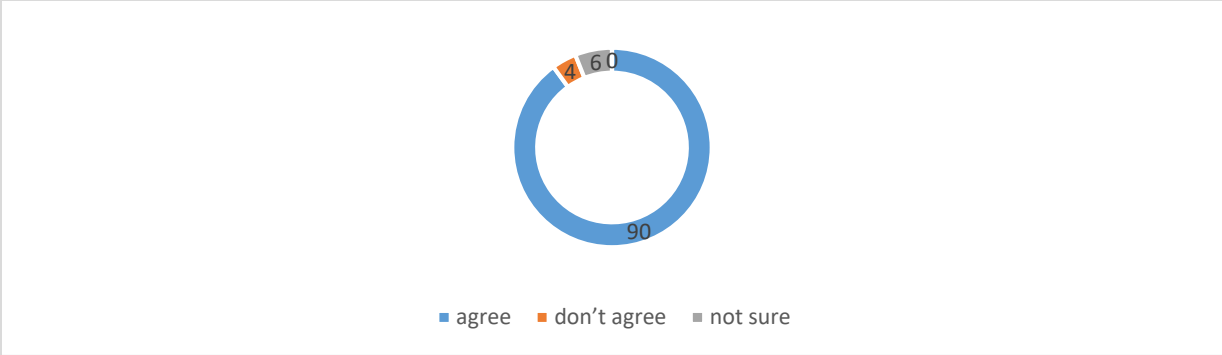


Figure 15: Education on knowledge of STDs at school to prevent them
 90% agreed that getting education on knowledge of STDs at school will help in preventing it.

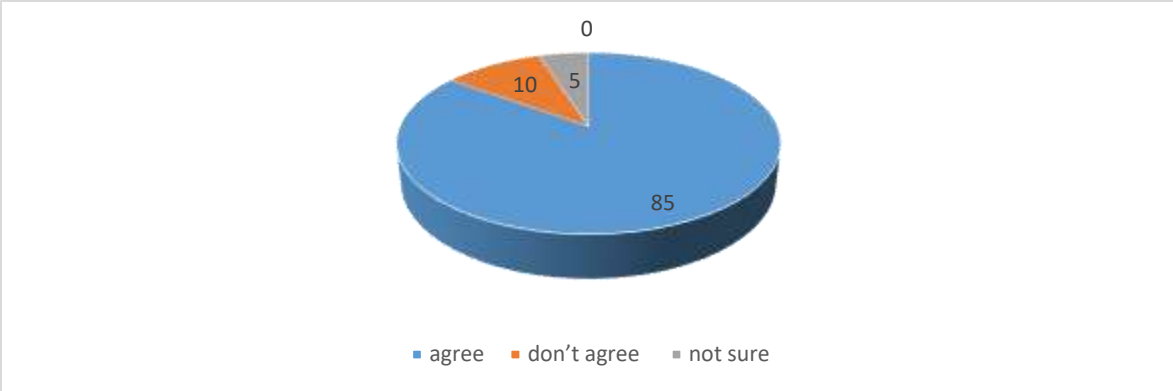


Figure 16: Condom use is important in prevention of STDs.
 85% agreed that the use of Condom is important in prevention of STDs while 10% disagreed on it.

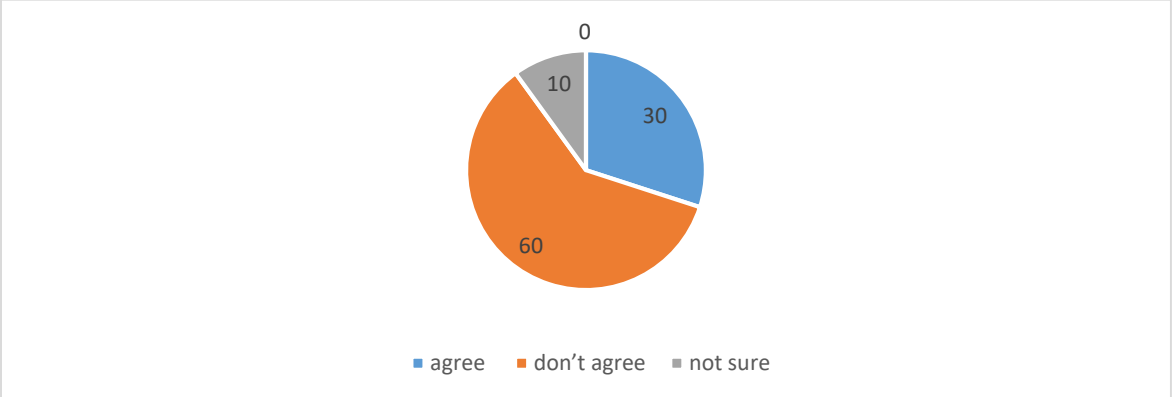


Figure 17: Emergency contraception pills prevents STDs.
 60% disagreed on emergency contraception prevented STDs, 30% agreed

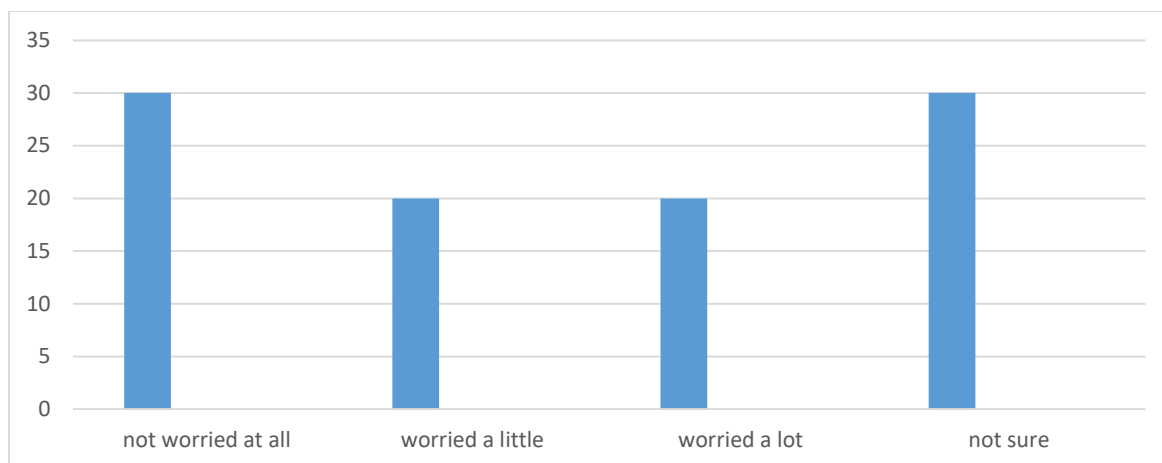


Figure 18: How worried are you that you might catch STDs
30% of respondents were not worried about catching STDs, 20% were worried a little.

DISCUSSION

Socio Demographic Characteristics

A great percentage of anticipated respondents participated in this study making the response rate of 96 %. Among these respondents (65%) were males and (35%) were females. The age distribution of the respondents showed that most of the respondents (50%) were between 20-25 years old. From respondents (50%) were followers of the Catholic faith and

followed other religions. Majority (76%) of the respondents were living near campus and (24%) of them are from rural area. Majority of (60%) of respondents were single, and others were in a relationship. During the study period (70.9%) of the respondents were living in hostel, (15.6%) were living with rental house, and (13.5%) were living with other relative house.

Knowledge, Attitude and Practice of STIs

Fourteen (17.5%) rural and 246 (82.5%) urban respondents ever heard about STI. Radio/TV was the most frequently Information source for STI and others got information from other sources. Regarding knowledge of respondents on sign & symptoms of STI (74.7%) of respondents knew at least one sign & symptoms of STIs but the rest (25.3%) didn't know any sign & symptom of STI. Concerning transmission of STI: (91.2%) of the respondents select individual transmission methods like sex (80.1%), blood contact (29.2%), contaminated needle (18.6%), genetics, breast feeding (10.6%) and the rest mentioned other transmission methods in which more than one answer was possible. Regarding prevention method of STIs, majority of respondents (86.1%) know prevention method of STI but (13.5%) of the respondents didn't know any prevention method of STI. From study participants who asked regarding

curability of STI: (27.9%) names as curable, (58.3%) say there are curable & none curable, (9.93%) say all are none curable and the remaining told that they didn't know anything about the curability of STIs. Among those respondents who consider STIs as curable and non-curable (25.8 %) names the non-curable STIs as curable. On perception of transmission (75.6) of the respondents believe that homo sexual intercourse can transmit STIs and (24.4%) didn't accept with this. From the participants (95.5%) of them consider STI as preventable but (4.5%) consider as non-preventable diseases. The respondents also asked concerned with the impact of STIs; from these participants (58%) of them believes as it causes social isolation and stigma, but (42%) didn't accept this idea. Among respondents who participate in the study (10.9%) have history of STIs. From those individuals who had history of STIs 9 of them treated at home, 61.8% treated at

health institution and the remaining 4 treated by other religious based practice. Among those individual who treated at home 3% of them use animal product and the rest (66.7%) use herbal medication like leaves. From those individuals who perform sex (55.3%) didn't use condom, but (44.7%) of them use condom. Among those who perform sex, (94.7%) perform sex at the age between 15-19, 3 perform sex at the age greater than 19, and 1 perform sex at the age less than 13. Those students were also asked about factors that initiated them to perform sex, from those (38.2%) of them perform sex because of peer pressure, (38.2%) perform sex because of age related increments of urge for sex, 12 perform sex for money and 6 of them perform sex because.

This study assessed knowledge, attitude and practice of sexual transmitted infections among university students. 99% of the students have had heard about STIs (17) this result close with study conducted at age between 15 to 20 years in Palau Pinang, Malaysia, at which from respondents 10.6% claimed that they never heard about STIs. In this study the most frequently information source for STI were radio/TV (76%) followed by school (43.9%), parent (17.95%) and others (2.2%) in which multiple information source was common. The result is little bit different from survey done in Tanzania which revealed that majority of students 99% were capable of mentioning multiple sources of information about knowledge of STIs, and none of them mentioned parents or teachers as source of information. Also Radio and Television were cited by 93% of students as the source of information on STIs while the rest (7%) students had sought information on their own from internet and books (17). This may be due to development of the country civilization, they change the information delivery system to computerized one like internet, digital library. In this study 74.7% of respondents' aware sign & symptoms of STIs but the rest 25.3% didn't know any sign & symptom of STI. This is lower than a result that is conducted in Uganda Kampala, at which 90% of respondents mention two and above sign and symptoms of STIs. A greater study

conducted in Tanzania that most students had poor knowledge on the symptoms associated with STIs. 11.5% female and 14.5% male students accurately described some symptoms associated with STIs. 39% were completely unable to describe the symptoms compared with (26%) who were able to describe the STI-associated symptoms correctly. This investigation revealed that from those individuals who were interviewed with respect to the knowledge on other means through which STIs could be transmitted other than sexual intercourse, 55.7% students responded positively while (44.6%) were unable to respond. (91.7%) students said they were able to protect themselves from contracting STIs, (6.4%) said cannot protect themselves and (1.9%) were response as they didn't know. This result is different from study which conducted in Tanzania in which, from 635 students who were interviewed with respect to the knowledge on other means through which STIs could be transmitted other than sexual intercourse, 77% students responded positively while 23% were unable to respond. Six hundred and thirteen (96%) students said they were able to protect themselves from contracting STIs, 2.5% said cannot protect themselves and 1% were not sure (17). This may be in that area better education may be given about transmission of STIs. Concerned with their attitude towards risk of acquiring STIs most of the students 92% said they were at risk of contracting STIs, while 8% said as they are not at risk. This result is inconsistent with that of research conducted in Tanzania, 46% of the students said they were not at risk of contracting STIs, while 38% said they were at risk (17) This variation may be due to knowledge difference of respondents among the two study areas. From study Participants majority of respondents 86.1% calls prevention method of STI but 13.5% of the respondents didn't call any prevention method of STI. from prevention methods abstinence was listed by 62.8 % of respondents, followed by condom 37.8%, faithfulness 40%, avoid sex with commercial sex workers 14.1% & avoid blood donate 8.7% in which more than one answer was common. This result is

different from previous study which was Conducted in Durban, South Africa majority of the students mentioned

condom 80.1% followed by zero gazing (46.4%) and abstinence (19.9%)

CONCLUSION

Even if most of the respondents heard about STIs and know about STIs, there are still misconceptions and their practice remained quite low. Behavioral change communication and demonstration be done regularly as part of the routine service and through school Visit) program about optional prevention and control of sexual transmission infection practice to all students who came to health institute and outreach services especially preparatory school. The main source of

knowledge for respondents was radio/TV. Most of the respondents know the transmission and prevention method of STIs. There is association between further level of education, job of father & job of mother with knowledge of sign and symptom of STIs. Priority should be given for reproductive health of youths, Anti STIs clubs in school should be strengthened and Programs concerning with STIs should focus on practice, since most of the respondents aware about STIs.

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