

Needs and Behavior of Mizan-Tepi University Students on HIV/AIDS and Reproductive Health Related Services, South West Ethiopia

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Abstract

Introduction: Adolescent reproductive health is the physical and emotional well-being of adolescents including their ability to remain free from unwanted pregnancy, unsafe abortion, STDs including HIV/AIDS and all forms of sexual violence and coercion. The reproductive and sexual health decisions that young people make today will affect the health and wellbeing of their countries. Thus, a deeper and wider understanding of adolescents' sexual and reproductive health-related issues is one of the key pre-requisite information required in designing relevant, effective and comprehensive adolescent health programs.

Objective: The objective of this survey was to assess knowledge, attitude, practice, behavior and current needs of HIV/AIDS and reproductive health-related services among Mizan Tepi university students, southwest Ethiopia, 2012.

Methods: Institutional based descriptive cross-sectional study design triangulated with the qualitative design was conducted among 845 Mizan Tepi university students from November 15, 2011- December 15, 2011. Standardized, pre-tested and self-administered English version questionnaire, in-depth interview and focus group discussions were used to collect the data. The quantitative data entry was done using EPI INFO version 3.5.1 statistical packages and exported to SPSS version 16 for analysis. The result of focus group discussions and in-depth interview were first read, reviewed and categorized into themes. Finally, the concepts were developed into major themes under each discussion guides.

Result: The result indicated that the majority of respondents agreed that educational material related to sexual and reproductive health should be available in the university. Around 1/3rd have started sexual intercourse out of which more than half have started after they joined the university. It was also found that most students (80.2%) had knowledge of different contraceptive methods.

Conclusion: Nearly half of the respondents have a positive attitude towards the availability of contraceptives on the campus while the services were almost nonexistent in the university. Therefore, services like the provision of a consistent supply of contraceptives including condom should be available in the student clinic considering its convenience for the students.

Keywords: HIV/AIDS; Sexual and reproductive health needs; Mizan-Tepi University

Abbreviations: AAI: African AIDS Initiative International; AIDS: Acquired Immunodeficiency Syndrome; HIV: Human Immuno-Virus; IUCD: Intrauterine Contraceptive Device; MTU: Mizan-Tepi University; RH: Reproductive Health; SRH: Sexual and Reproductive Health; STI: Sexually Transmitted Infections; VCT: Voluntary Counseling and Testing

Introduction

Adolescent reproductive health is about the well-being of adolescents including their ability to remain free from unwanted pregnancy, unsafe abortion, STDs including HIV/AIDS and all forms of sexual violence and coercion. The reproductive and sexual health decisions that young people make today will affect the health and well-being of their countries and of the world for decades to come. Adolescent and youth have not traditionally been considered a health priority since they have lower morbidity and mortality than older age groups [1-8].

Moreover, teenage women are twice as likely to die from pregnancy-related health complications as are women in their twenties. Young people are particularly vulnerable and are the key to the future course of HIV/AIDS. As a group, they are an essential focus for prevention and control programs. Since most new infections are in young

people, modest changes in behavior will have a significant impact on the pandemic [9-11]. The feature of higher learning institutions response to HIV/AIDS is what can be described as an awe-inspiring silence that surrounds the disease at the institutional and personal levels. Notwithstanding a few isolated initiatives individuals and their groupings carried on; there was amusing silence as if the disease does not exist. Until recently, the characteristics of universities response to the pandemic could be mentioned as of considerable uncertainty and failure to respond to systemic impacts, lack of coordination, and absence of well-developed action plans, minimal policy framework, and heavy reliance on the initiative of a few interested and committed staff members. There was no one who could provide quality data about the situation and vulnerability of the university community to HIV/AIDS.

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A cloak of indifference, if not ignorance, was surrounding the presence of disease at all institutions of higher learning. This cloak was amply lined with layers of secrecy, silence, denial, and fear of stigmatization and discrimination. Records that name the disease were not held in any of the administrative or academic offices, while those available in university clinics were inadequate and incomplete [1-3].

Mizan Tepi University is among the newly established public higher teaching institutions in the country which is based at two towns, Mizan and Tepi from which the name of the University was coined. Majority of the university community is in a sexually active age group and surrounded by crowded urban neighborhoods. The deeper and wider understanding of adolescents' sexual and reproductive health-related issues is one of the key pre-requisite information required in designing relevant, effective and comprehensive adolescent health programs. HIV prevention programs must be differentiated and locally adapted to the relevant epidemiological, economic, social, and cultural contexts in which they are implemented [3-5]. So assessing youth sexual and reproductive health in the university is a crucial issue especially in newly opened universities like MTU where most of the activities are on the progress.

Furthermore, due to their level of maturity and desire for new experiences, the peer pressure they face, the absence of immediate parental control, the change of environment, and the need to 'fit in' students can be exposed to opportunities that present the possibility of committing unsafe behavioral patterns that give rise to HIV infection and related SRH problems [6-9].

Therefore, conducting surveys on HIV/AIDS risk behavior, level of risk perception, risk patterns, circumstances and coping mechanisms that guide university students' behaviors was one of the major tasks of this baseline study. It contributed valuable information towards a better understanding of sexual and reproductive health conditions of MTU students which helped program managers identify priority areas of focus [10,11].

Research Methodology

Study area

The study was conducted in Mizan Tepi University, which is located in Southern Nation Nationality regional state, southwest of Ethiopia around 565 km away from the capital city of Ethiopia, Addis Ababa. It is among the newly established universities in the year of 2007 which has two campuses namely Mizan and Tepi. There were six colleges and about 31 departments with total regular students of 7729.

Study period

The study was conducted from November 15, 2012- December 15, 2012.

Study population

The study population was all regular students enrolled at Mizan-Tepi University in the academic year of 2011/2012.

- **Inclusion criteria:** All regular students were included in the study
- **Exclusion criteria:** Students who were ill and unable to respond to the questionnaire were excluded.

Study design

Institutional based descriptive cross-sectional study design triangulated with the qualitative design was conducted.

Sample size determination

The sample was determined using a single population proportion formula by assuming the proportion of HIV/AIDS-related knowledge of 50% with the assumption of a 5% margin of error and a 95% confidence level. Multiplying by design effect of two and adding 10% allowance for non-response and refusal to participate in the study, a total sample of 845 students were interviewed.

Sampling technique/procedure

A multistage sampling method was used to select both groups. All colleges of Mizan-Tepi University were included in the study. First departments were selected through the lottery method from colleges available. Then, the list of students taken from the selected departments was used as the sampling frame. Based on this, individual students were selected using simple random sampling. Since colleges did not have a similar number of students, the number of samples was allocated to the size of the students.

Data collection procedures

Quantitative data: The two-day training was given for data collectors before the actual work about the aim of study and data collection techniques by going through the questionnaires question by question. Standardized, pre-tested and self-administered English version questionnaire which was adapted from similar previous studies, DHS, BSS and sample of questions that are modified to this study setting was used to collect relevant information to achieve the stated research objective.

Qualitative data: Eight sessions of focus group discussions were carried out among students who were not included in the quantitative study, with girl clubs, and with AIDS club members. Individuals of similar backgrounds: age group, batch, and those staying in the campus for more than one semester were selected purposively in the same group. After participants are identified, appropriate time and comfortable place of meeting were selected and organized. All the discussions were moderated by principal investigators with one trained recorder and one note taker for each discussion. The semi-structured, open-ended questionnaire was used to initiate discussion and all the discussions were undertaken in the Amharic language.

In-depth interview was done with student dean, anti-HIV/AIDS focal person, girls' club focal person, and charity club focal person particularly to address objectives related to anti-HIV/AIDS and reproductive health services in the university and stakeholder's commitment related to these services. The checklist was used for record review/observation.

Operational definitions

- **Adolescent:** Students between the age of 10 and 19 years of age.
- **Any sexual experience:** Defined as kissing, hugging, touching or being touched sex organs including any type of penetrative sexual intercourse.
- **Risk group:** These are people with a high risk of acquiring and spreading HIV and other STDs among the general populations.

Variables

Independent variable

- Socio-demographic characteristics of students, the economic status of parents, peer influence, previous sexual experience, knowing the presence of HIV/AIDS and RH related services.

Dependent variable

- KAP of HIV/AIDS and reproductive health
- The current need for reproductive health and HIV/AIDS-related services

Data quality management

The quality of data was assured by providing training for data collectors and supervisors. Data collection tools were pre-tested among 5% of the study sample. The filled questionnaire was reviewed every day and checked for completeness by the principal investigators and necessary feedback was offered to data collectors in the next morning before data collection. In the case of FGDs, it was carried out by principal investigators and the discussion was tape recorded in addition to notetaking.

Data processing and analysis

After data collection, the quantitative data entry was done using EPI INFO version 3.5.1 statistical packages. Descriptive statistics and summary measures were used to check missing values and outliers and data cleaning was done using the original code number. For further analysis, SPSS version 16 statistical package was used. In the case of qualitative data, the result of focus group discussions and in-depth interview were first to read and reviewed and categorized into primary themes. Then it was pooled into broader concepts. Besides, quotes of participants that exemplify key concepts were taken directly during analysis. Finally, the concepts were developed into major themes under each discussion guides.

Ethical clearance

Written consent was taken from each selected student. Study participants were informed that the study would not have any risks. In addition, the objective and benefits of the study were explained to them. Personal information (like name, phone number, etc.) was excluded from the questionnaire to ensure privacy and confidentiality. The right of individual not to participate in the study was also respected.

Results

Quantitative results

Socio-demographic characteristics of the respondents: More than half of the respondents (53%) were male. The mean and median ages of the respondents were 20.5 and 20 years respectively with a standard deviation of 1.5years. About 464 (59.4%) of the students came from a rural area (Table 1). In addition, more than half, 434 (55.6%) were Orthodox followers in their religion.

Knowledge and attitudes towards sexual and reproductive health: Among the respondents, majority, 85.5% had ever heard of any one of sexual and reproductive health issues including sexually transmitted infections, contraception and HIV/AIDS. Most students (80.2%) had knowledge about contraceptive methods and (77%) heard of STIs. Those who had heard about STI were asked which STI symptoms they knew and most of them mentioned burning sensation during urination which accounts 65.3% followed by genital discharge (43.5%) (Table 2).

Nearly all, 95% and 93.4% of the students have mentioned at least one mode of transmission and method of prevention respectively. Most students, (73%) and (60%) knew that the chance of getting HIV can be reduced by abstaining from sexual intercourse and limiting sex to one uninfected partner who has no other partners respectively. About

Variables	Frequency	Percentage
Sex		
Male	414	53
Female	367	47
Age (Years)		
18-20	468	59.9
21-24	297	38
25-28	16	2.1
Previous residence		
Urban	317	40.6
Rural	464	59.4
Religion		
Orthodox	434	55.6
Protestant	207	26.5
Muslim	119	15.2
Others (Catholic, traditional)	21	2.7
Campus		
Mizan	406	51.9
Tepi	375	48.1
Financial source		
Parents	452	57.9
Boy/girl friend	135	17.3
Non regular sexual partner	40	5.1
part time job	147	18.8
Gambling	7	0.9
Perceived parents' economic status		
High	122	15.6
Middle	443	56.7
Low	216	27.7

Table 1: Socio demographic characteristics of respondents, Dec 2011 MTU (n=781).

Variable	Frequency	Percentage
Heard of SRH		
Yes	668	85.5
No	113	14.5
Heard of STI		
Yes	601	77
No	180	23
Type of STI (n=601)		
Gonorrhea	583	97
Syphilis	268	44.5
Chancroid	70	11.6
Hepatitis B	24	4
Others		
Heard of any contraception method		
Yes	553	70.8
No	228	29.2
Know any symptoms of STI (n=501 taken for each symptoms)		
Burning sensation during urination	327	65.3
Genital discharge	218	43.5
Genital ulcer	115	23
Swelling in groin	38	7.6
Itching	29	5.8
Type of contraception mentioned to be known by students		
Pills	405	73.2
Injectables	238	43
Implants	59	18.3
IUCD	59	10.7
Post pill	54	9.8

calendar method	59	10.7
Vasectomy	14	2.5
Tubal ligation	26	4.7
Others	54	9.8

Table 2: Knowledge about reproductive health (contraception and STI).

80% of the respondents knew that correct and consistent condom use during sexual encounters can reduce HIV/AIDS transmission. From the provided prevention methods as an option, 515(72.3%), 133(18.7%) and 64 (9%) students preferred abstinence, faithfulness, and condom use respectively. More than half (53.1%) of the respondents perceived that students themselves are the sources of HIV/AIDS followed by commercial sex workers and University instructors with 40.1% & 6.6% respectively.

About three fourth, 591(75.7%) of the respondents reported that a frequent checkup for HIV after having the test once is necessary for protecting oneself and others from HIV. Voluntary counseling and testing (VCT) for HIV was mentioned by 343(43.9%) students that it can help to practice safe sex.

Practice and current needs of RH and related services: Almost half of the students mentioned that they spent their leisure time playing with their friends followed by watching films and reading books. The result also indicates that out of the total respondents, 229 (29.3%) have started sexual intercourse out of which more than half (51.5%) have started after they joined the university. Around 16% of these students have used alcohol/other substances during their first sexual intercourse.

Regarding safe sex practice, the result indicated that among those who have ever started sex, only 55.9% mentioned that they did it willingly, 30% have had sex with commercial sex workers and 80.72% did sex with two or more sexual partners. Around 14% of them also reported as they had not used a condom during their last sexual contact. The result also showed that about one fifth, 21 (19.81%) of female students have ever been pregnant from which 9 reported that they had an abortion in the last 12 months.

Concerning testing for HIV, it was found that 495(63.4%) students were tested of which 215(43.4%) were within the last three months of the study period.

Regarding the availability of services, more than half, 453(58%) of respondents agreed that contraceptives should be available in the university. Similarly, 64% of respondents agreed that educational materials related to sexual and reproductive health should be available in the university. The majority, 570(72.98%) of students rated HIV/AIDS prevention and control activities of the university as weak.

About 41.5% of students prefer that sexual and reproductive health services should be given in the clinic with other services and about 24.7% mentioned that it should be given in separate room in the clinic; while 28.7% of respondents mentioned that the service should be given in a separate room outside of the clinic (Figure 1). Majority of students also replied that the services should be given at special hours when other services are not being provided (Tables 3-6).

Qualitative results

The result from FGDs on sexual practice and predisposing factors showed that sexual practice is common majorities of which are initiated after joined the campus. Female students, students who need help academically, who have been over controlled by their family before they joined the university and fresh students were considered to

be at higher risk of involving in sexual practices. A 23 years old female student explained this as, “Students use the term ‘Beredo Enesera’ to mean ‘let us make an ice’ for a stay in any shadow area where they stay together and perform romantic activities followed by sexual practice.”

The result of an in-depth interview revealed this. A male student council member student mentioned that females are more practicing sex than males for the reason that they need economic support in addition to sexual desire they might have with their mates (boyfriends). Graduating class students were also mentioned as risky groups; because they consider as if they could not get this life again and practice multiple risky behaviors. It was also mentioned that khat and ‘Tela’ to mean local beer was highly utilized since it was very cheap in this locality which may predispose students to involve in risky behaviors. There was also a case report by discussants where the students were captured by student councils and university police having sexual intercourse in the class.

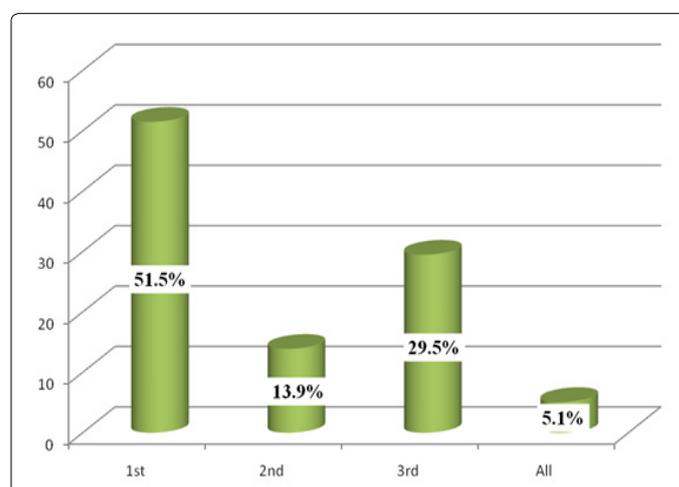


Figure 1: Bar chart showing the perception of study participants regarding the level of risk of HIV among each year of students, Mizan-Tepi University, January 2012.

Response	Number (n)	Percentage (%)
Discuss with friends	66	8.4
Talk to family	63	8.1
Go to student clinic	126	16.2
Go to government hospital	215	27.5
Go to private clinic/pharmacy	143	18.3
I do nothing	123	15.7
others	45	5.8
Total	781	100

Table 3: Preferred source to get information about sexual and Reproductive Health issues among Mizan Tepi University students, December 2011.

Response	Number (n)	Percentage (%)
Talk to friends	30	14.9
Talk to family	18	8.9
Go to student clinic	54	26.7
Go to government hospital	23	11.5
Go to private clinic/pharmacy	47	23.2
Withdrawn from education	14	6.9
I do nothing	16	7.9
Total	202	100

Table 4: Action to be taken for unintentional pregnancy, Mizan Teferi, December 2011.

Response	Frequency	Percentage
Knowledge of contraceptive encourage sexual practice among young students		
Agree	286	36.6
Disagree	455	63.4
Contraceptives including condom should be available at university		
Agree	453	58
Disagree	328	42
University students at risk of HIV/AIDS		
Agree	441	56.4
Disagree	340	43.6
Buy food from HIV positive shopkeeper		
Agree	646	82.7
Disagree	135	17.3

Table 5: Attitudes towards SRH and HIV/AIDS, Mizan Tepi University, Dec 2011.

Barriers	Frequency	Percentage
Service is not given at all	135	17.3
Language barrier	31	4
Integrated services	106	
Inadequacy of services	218	27.9
Inconvenient working hours	64	8.2
Inconvenient setup	40	5
Gender of service provider	64	8.2
Age of service provider	20	2.6
Approach of service providers	49	6.3
Long and repeated appointment	28	3.6
Others	26	3.3

Table 6: Barriers to RH and related services utilization among Mizan-Tepi University students, December 2011.

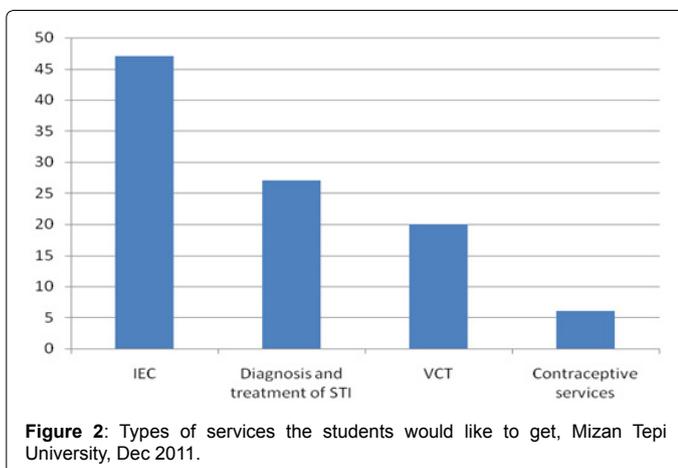


Figure 2: Types of services the students would like to get, Mizan Tepi University, Dec 2011.

In addition, female students' group discussion indicated that many female students were not comfortable with life in the university so that they need somebody who will support and make them cope up with the environment.

Regarding the safety of sexual practice, it was reported that students using Depoprovera and post pills which indicates the presence of unsafe sexual practice. In addition, students practice sex under the pressure of other students and under difficult conditions in order not to be caught by university guardians. As well, they select shadow/dark area where it is difficult to use a condom properly at least. As a result, the procedures will be unsafe.

It was also reported from student clinic that there was a significant

number of students coming with different STI cases. Discussants reported that there was an occasion in which aborted embryo was observed in the shower room. Similarly, it was discussed that there is a risk of contracting HIV/AIDS as there is fear of using condom considering. There was also a report that there were many post pills empty packs dropped around the dorm.

Regarding risk group, it is mentioned that fresh students, those who desperate due to their mark (low grade) and graduating class students are at higher risk for acquiring HIV/AIDS. On the other way, there are always parties prepared outside of the campus at which fresh students are invited which can greatly affect student's behavior.

Predisposing factors to risky sexual practice

Discussants agreed that the use of different substances and being out of family control can expose students to risky sexual behaviors by making them careless and letting them free. Another factor mentioned by these discussants was the absence of fence in the case of Tepi campus which enables them to enter and exit whenever they want in the

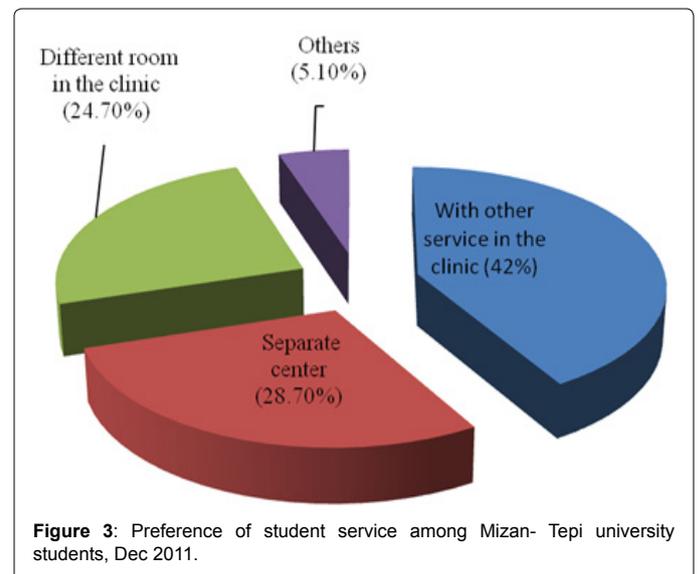


Figure 3: Preference of student service among Mizan- Tepi university students, Dec 2011.

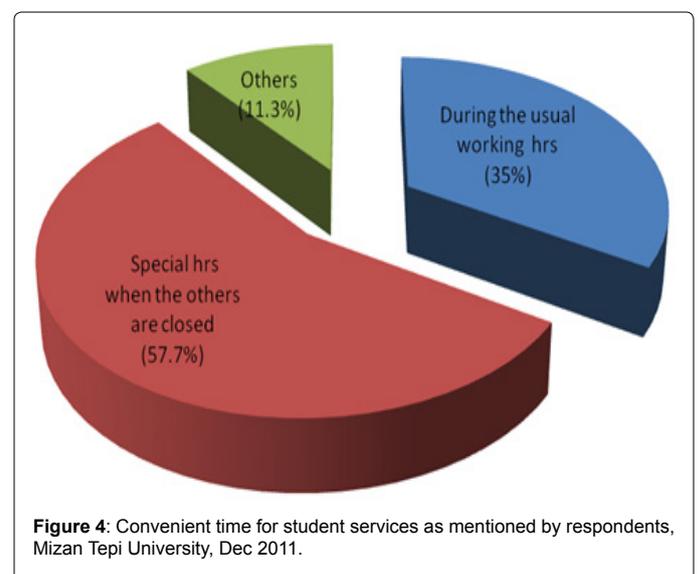


Figure 4: Convenient time for student services as mentioned by respondents, Mizan Tepi University, Dec 2011.

direction they want and stay at night outside the campus. Moreover, the use of technologies like the internet and mobile applications were mentioned as one of the predisposing factors. A 22 years third-year student male explained this as:

“One day, one of my friends asked me to send me a nice game and told me to open the Bluetooth. When I opened the Bluetooth, he sent me the game. Surprisingly what I got was not the game, rather it was pornographic film saved in the form of the game.” Furthermore, students who have a relation with sugar daddies were mentioned as they always encourage other students to engage in the same practice and it was reported that some students act as a mediator between local businessmen and female students for the purpose of getting money.

From the in-depth interview, absence of recreational places, absence of control in dormitories during the night, considering sexual relation as a sign of modernization, and availability of renting houses for risky behaviors surrounding the campus was mentioned as predisposing factors for risky sexual practice. It was reported that sometimes students chew khat and drink alcohol with their friends who rented a house outside of the campus and practice sex. Even there was a reported case where students live together outside of the campus like husband and wife.

Having enough money to attend parties, lower academic rank, watching sex films, absence of light in some parts of the campus and absence of beauty salon in the compound were also mentioned as a predisposing factor for risky sexual practice. There was also a case report where local businessmen adulterate female students with the term “Eka Metolishal Neyena Wuseji” to mean “I have a message for you, come and take” for the purpose of having sexual relation with them.

Peer pressure was reported as a common factor that predisposes particularly female students to engage in risky behavior. One female key informant elaborated this as,

“... A female student who saw her friend well-dressed after having some sexual relation with sugar daddy may be inspired to behave in the same way.”

Though not common, instructors' behavior was mentioned as problem freshman students were encountering. One female discussant explained this as,

“For example, there was an instructor who started sexual relation with his female student. One day, he knew that she has also another mate from her classmates. Then, he became angry and gave her ‘F’ score revenge.”

During the observation, unfinished buildings were noticed in the campus which is conducive for students to practice risky behaviors.

HIV related services in the university

The discussants mentioned that services related to HIV/AIDS and reproductive health in both campuses is almost negligible and there is unorganized anti-HIV/AIDS club. There was no mini media and no regular VCT services except that there was irregular condom distribution by anti-HIV/AIDS club members in both campuses. There was no organizational structure/ separate office for HIV/AIDS prevention and control activities. Common health problems presented in the student clinic indicates that students are practicing unsafe sex. Health workers in the student clinic have the interest to start HIV counseling and testing. However, none of the staffs have been trained in counseling and testing.

Conclusion

Majority of students were aware of sexual and reproductive health issues including HIV/AIDS and other STIs. However, sexual and reproductive health-related services were almost nonexistent in the university and students' need for SRH services were unmet. Nearly half of the respondents had a positive attitude towards the availability of contraceptives in the campus. Only a few among students practicing sex were using contraceptives. Supplies for provision of SRH services were not available in the student clinic. The result, particularly qualitative indicated that risky sexual practices were common both in and out of the campus.

Recommendations

- There has to be targeted and consistent interventions to sustain the relatively high awareness about SRH and related issues.
- SRH services like consistent supply of contraceptives including condoms and training of the staffs should be made available at the student clinic.
- Correct and consistent condom use should be promoted among students who are sexually active
- Life skill training should be provided particularly for females in order to develop self-reliance among them.
- Targeted and well-designed peer education sessions should be conducted so as to improve risky sexual behavior among the students.
- Enabling environments like darkness in campuses across roads, classrooms and dormitory corridors should be reduced.
- The university should arrange discussions with concerned bodies surrounding the campus to solve the arising problems.
- Basic services have to be available particularly for females with the reasonable cost in the campus to avoid the economical predisposing factors which include beauty centers, different entertainment services, and others.

Ethics Approval and Consent to Participate

Written consent was taken from each selected student. Study participants were informed that the study would not have any risks. In addition, the objective and benefits of the study were explained to them. Personal information (like name, phone number, etc.) was excluded from the questionnaire to ensure privacy and confidentiality. The right of individual not to participate in the study was also respected.

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Authors' Contributions

All the authors have equally participated in proposal writing, data collection process, data analysis, and interpretation, and report writing. In addition, TT has drafted and prepared the manuscript. All authors have read, reviewed, and approved the final version of the manuscript.

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