Prevalence and Associated Factors of Sexually Transmitted Infections among Students of Wolaita Sodo University, Southern Ethiopia

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Abstract:-

Background: sexually transmitted Infections represent a large burden of disease worldwide with an annual incidence of about 333 million cases. In Ethiopia, studies on Sexually Transmitted Infections (STIs) among youth are very few; therefore, conducting research on STIs in general and among youth in particular is an important input to design policy and strategy aimed at preventing and controlling the infections.

Objectives: The objectives of the study were determining self reported prevalence of sexually transmitted Infections, and identifying factors associated with STIs among students of Wolaita Sodo University.

Methodology: A cross sectional study design was employed among a total sample size of 447 students of Wolaita Sodo University from June to September 2011. Study subjects were selected using Stratified cluster sampling method. Data were collected using semi-structured pre-tested questionnaire. Self-reported Syndromic approach was used to measure sexually transmitted Infections status. Logistic regression was used to model Odds Ratio, OR (95%CI).

Result: This study was conducted among 309 (69.1%) male and 138 (30.9%) female students with response rate of more than 100%. Most of the students, 294 (65.8%), were first year, 178 (39.8%) were orthodox Christian, 241 (53.9%) were from rural place of previous residence and 421 (95.7%) were currently accommodated in the university. Self reported STIs prevalence in the past 12 months prior to the survey was 19.5% among students. Out of the 158(35.3%) students who were sexually active: 46.0% used condom infrequently, 24.8% had sex with causal sexual partners and 13.9% had sexual intercourse with commercial sex workers. Among 103 who reported the most recent STI syndrome, 43 (41.7%) study subjects had not got treatments for the syndrome they had. Students who had sexual contact with commercial sex workers in the last 12 months were at increased odds of developing sexually transmitted infections (Adjusted OR=4.7,95%CI: 1.2, 8.6).

Conclusion: High prevalence of Sexually Transmitted Infections (STIs) was obtained among university students who had risky sexual behaviors. Students had unreasonably poor treatment seeking behavior. The following specific recommendations are forwarded: Launching of recreational facilities and sexual and reproductive health service, abstinence and condom promotion interventions. The university should design retention facilities for students to limit them from sexual contact with commercial sex workers. Moreover, further studies to explore the predictor variables are highly recommended.

Keywords: - Incidence, Health seeking behaviors, Prevalence, self reported Prevalence, Sexually Transmitted Infections, Syndrome, Sexual behavior, Wolaita Sodo University

INTRODUCTION

The term sexually transmitted infections (STIs) refers to a variety of clinical syndromes caused by pathogens that can be acquired and transmitted through sexual activity (1). STIs are caused by more than 30 different pathogens including bacteria, viruses, protozoa, fungus, and ectoparasites (2). Sexually transmitted infections (STI) are a significant cause of morbidity among adolescents with multiple consequences. Sexually transmitted infections are major global public health problems.

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They cause serious health, economic and social consequences (2, 4, 5). The impact of these infections is magnified by their potential to facilitate the spread of HIV infection (2, 5). Syndromic case definitions are important in situations where clinical examination and laboratory are not options. Syndromes of STIs include abnormal genital discharge, genital ulcer/sore (5, 7), urethral discharge, and lower abdominal pain in women (5). Their magnitude, potential complications and their interaction with HIV/AIDS make STIs important public health problems of the world (2). They are a major global cause of acute illness, infertility, long-term disability and death, with severe medical and psychological consequences for millions of men, women and infants (5). They are among the world's most common diseases with annual incidence next to diarrheal diseases, malaria and respiratory diseases (8). Worldwide, about one million people acquire a new curable STI every day (8); and more than 340 million new cases occur each year (9). Adolescents and young adults have the highest rates of curable STIs, 1 in 20 adolescents acquire a new STI each year. Developing countries are particularly affected because the majority of the population is under the age of 40 years (8). Eighty six percent of the world's burden of STIs occurs in the developing world (9), the biggest burden being in the poorest countries, many of which are in sub-Saharan Africa (10), where identification and management of STIs is limited (2). disproportionately affect women (2, 11) and newborn child (2). The morbidity from STIs (excluding HIV) in women

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aged 15-45 years, ranks second next to maternal causes (4). Complications in women include pelvic inflammatory disease resulting infertility, ectopic pregnancy and related mortality, cervical cancer and chronic abdominal pain (2). Untreated bacterial STIs in women result in pelvic inflammatory disease in up to 40% of infections; and 1 in every 3 of these will result in infertility. Tubal damage from STIs can lead to ectopic (tubal) pregnancy; the cause of up to 10% of maternal mortality in settings where prevalence of STIs is high. Chronic pelvic pain from untreated bacterial STIs is an important cause of health care visits among women (8). They are also among the leading causes of disability-adjusted life years (DALYs) lost for women of reproductive age in developing countries (8). STIs are reported to be one of the contributing factors for the transmission of HIV through heterosexual activity (2, 5, 12). In recent years, epidemiological studies have shown that persons with ulcerative and non-ulcerative STIs are more susceptible to HIV. Sexually transmitted infections that cause genital inflammation have been shown to increase the efficiency of HIV transmission as much as fivefold (4). According to Ethiopian Demographic and Health Survey 2005, 12 months period prevalence of reported STIs was shown to be 2% among sexually active men and women (7). Studies on STIs among youth are very few in Ethiopia. Behavioral surveillance survey 2005 reported 4.6% genital discharge and 2.1% genital ulcers within 12 months amongst in-school-youth aged 15-19 years (12). A study conducted among Gondar Medical colleges students revealed 12 months period prevalence of reported STIs to be 7.8% (14). Another study conducted in Bale, Ethiopia, showed high one year period prevalence of STIs among sexually active high school students: 57% for genital discharge and 39.2% for genital ulcer (15). A study conducted in India among sex workers showed that there were higher incidences of STIs among the younger women (22). Another study conducted among drug abusers showed that being female and being older (greater than 30 years of age) were risks for herpes simplex virus type 2 (HSV-2) (23). A study conducted among young Ghanaian women indicated not knowing where to get male condoms, having multiple sexual partner and not discussing family planning with partner were found to be risk factors for STI (24). Similarly a study conducted among pregnant women in Zimbabwe revealed that STI were associated with taking alcohol (Adjusted OR=1.16; 95%CI: 1.01-1.33). In this study, having more than one lifetime sexual partner in the past year, age sexual debut less than 20 years were significant predictors of STIs (25). Another study on Adolescent Self Reported Reproductive Morbidity and HealthCare Seeking Behavior in Bangladesh revealed that the sexually transmitted infections were found to be significantly associated with marital status, age, place of residence, family income and family size (6). A Report of Student Sexually Transmitted Infection and risk Awareness & Behavior Patterns in NUI Galway indicated age as sole significant determinant for sexually transmitted infections where the 20-29 year old age group was at a significantly higher risk (20). The study among Gondar Medical College students indicated that history of sexually transmitted infection was reported by 7.8 % of students (14).People who seek treatment for STIs go to hospitals, health centers, health posts, clinics, pharmacies and faith healers (22). For example in NUI Galway, when asked where they would seek treatment the majority of respondents gave a range of options. These options include Student Health Clinic, STI clinic in Galway, and STI clinic out of Galway (20). University students may be exposed to behaviors that are risky to STIs including HIV due to many facts. In order to design interventions on STIs and related issues, there is a need know: the magnitude of STIs and its factors, the risky sexual behaviors being exercised, and the extent to which students seek health practice. This study was intended to determine prevalence of self-reported STIs, describe risky sexual behaviors, and assess health seeking behaviors of students of Wolaita Sodo University with respect to STIs.

Methods and Materials Study area, design and period:

This cross sectional study was undertaken in Wolaita Sodo University from June 1, 2011 to September 1, 2011. The University is located at Wolaita Sodo town, 330 from Addis Ababa. The Wolaita Sodo town with an estimated population of 100,000 is one of the economically importance areas of the region. Wolaita Sodo University is one of the government Universities in Ethiopia. It was established in 2007 when it started its operation by receiving 801 regular students. Currently (2010/11), the University has about 5817 (male=4198, female 1619) regular students in five Faculties and three Schools (26). There is one student clinic that gives health care services to students. In the town, there are both government and private hospitals students are referred to.

Population and sample:

All regular students of Wolaita Sodo University were source population for this study. Study population was all students in the sections/classes which were selected randomly. All regular students currently enrolled were included in the study, where students who were critically ill during data collection were excluded. Sample size was determined to be 404 using the following single population proportion formula, with assumptions of: expected prevalence of STI among students 7.8% (14), margin of error of 5%, total number of target population 5817, confidence level of 95%. design effect of 2, non response rate of 20%. The actual number of subjects enrolled in the sample was 447, a bit higher than expected, which is because of cluster sampling. None response rate was thought to be high since data collection period was just days before final examination starts and the method of data collection was self administered in which no room for call-backs, repeated visit. Stratified cluster sampling method was used to draw study subjects. Total students (5817) were grouped into three strata: 1st year, 2nd year, and 3rd year and above, then sample was taken based on probability proportional to size.

Data collection and analysis

Ethical clearance was obtained from Wolaita Sodo University Research and Publication Office. Informed consent was obtained from study subjects. Confidentiality of the information given by study subjects was kept. The questionnaire didn't contain any thing that can identify study subjects personality. Data were collected from July 10, 2011 to July 25, 2011 with self-administered questionnaire

using pre-tested structured questionnaire. Data collection was assisted by eight nurses. After obtaining consent, they had distributed questionnaires and given explanations about how to fill responses. Investigators had daily supervised the data collection process. The data were collected on variables such as: age, sex, year of study, educational level, ethnicity, religion, marital status, source of information about STIs, place of treatment, complications of STIs, number of sexual partners, use of condom, sexual intercourse with commercial sex worker and Health seeking behaviors on STIs. A male student was considered STIs positive if he reported a history of genital ulcer or sores, or urethral discharge, or scrotal swelling. A female student is considered STIs positive if she reports a history of vaginal discharge, or genital ulcer or sores, or lower abdominal pain. A student was said to be at risky sexual behaviors if she/he reports to have sexual contact with causal partner or multiple sexual partners or commercial sex worker, or to experience unprotected sex (not using condom or occasional use of it). Before the actual data collection starts, pre-test was conducted among 41 students of Arbaminch University. Data were entered into Epi Info for windows version 3.2.2 and analyzed using SPSS version Univariate analysis, to describe subjects by demographic characteristics; bivariate analysis, including simple logistic regression and chi-squared test, to see crude associations: and multivariate analysis, multiple logistic regression, to see independent effects of explanatory variables on outcome variable were used. ORs(95%CI) were measured in logistic regression analysis. A significance level of 0.05 was taken to decide existence of significant association.

RESULT

Socio-demographic characteristic of study subjects Among 447 study subjects, 309 (69.1%) were male; 158 (35.3%) were from Faculty of Social &Humanities; 294 (65.8%), were first year by their year of study; 178 (39.8%) were orthodox Christian by religion; and 421(95.7%) were currently accommodated in the university. The mean age (±SD) of participants was 20.7±(1.9). (See Table 1).

Knowledge of Study Subjects about STIs

Amongst the study subjects, 231(96.4%) reported to hear of STIs. Three hundred fifty three (82.5%) said that people can get STIs from asymptomatic patients of STIs, 75 (17.6%) students said that uncircumcised males are more exposed to STIs than circumcised ones,365 (87.1%) study subjects claimed that early treatment for STIs is beneficial for people infected with any of the STIs. With regard to modes of transmission, unprotected sex was reported by 411(96.7%), as mode of transmission for STIs; 8(1.8%) study participants reported that they didn't know how STIs are transmitted and 408 (96.2%) reported as people can get protected from STIs. Consistent condom use, 246(60.7%); being faithful, 269 (66.4%); and abstaining, 253 (62.5%) were reported as preventive measures by study participants. Fifteen study subjects (3.7%) answered none of the three methods. Misconceptions regarding protection from STIs were mentioned. These were on contraceptive pills, withdrawals and injectables which were respectively reported by 27 (6.7%), 17 (4.2%), and 10 (2.5%) study subjects. Concerning the overall knowledge on STIs, 161 (36.0%) had good knowledge and the rest had poor knowledge on STI. Majority of Study participants (303) preferred Hospitals for their medical consultation where the rest preferred choices were health centers and student clinic (Fig 2).

Table 1. Socio-demographic characteristics of study subjects, Wolaita Sodo University, 2011

Variables			Percent
Sex(n= 447)	Male	309	69.1
	Female	138	30.9
Faculty(n= 447)	Health Sciences	26	5.8
	Natural & Computational Science	72	16.1
	Agriculture	55	12.3
	Social &Humanities	158	35.3
	Business and Economics	136	30.4
Year (n= 447)	Year I	294	65.8
	Year II	102	22.8
	Year III and above	51	11.4
Age in years (n= 447)	<20	81	18.1
	>20	366	81.9
Religion(n= 447)	Orthodox	178	39.8
	Protestant	166	37.1
	Islam	86	19.2
	Others	17	3.8
Home town residence (n= 447)	Rural	241	53.9
	Urban	206	46.1
Current	University dormitory	421	95.7
accommodation	Living with parents	12	2.7
(n=440)	Rent	7	1.6

Sexual behaviors

Out of 158(35.3%) (27.2 % of male and 8.1% of female) reported to have experience of sexual intercourse, 122 (77.7%) (59.2 % male and 18.5% female) students had history of sexual practice in the last 12 months .The mean age (±SD) at first sexual intercourse was 17.7±(4.9) years. Eighty three (52.9%) of study subjects reported ever use of condom. Consistent use of condom was reported by 34(54.0%). Thirty (24.8%) of study subjects reported to have sex with causal sexual partner and 17(13.9%) had history of sexual practice with commercial sex workers in the last 12 months. Eighty (52.6%) reported to have multiple sexual partners in their life, with mean number of sexual partners of 2.7 which is a bit higher in males (3.00) than females (1.71). Thirty one (22.3%) had multiple sexual partners in the previous year before survey.

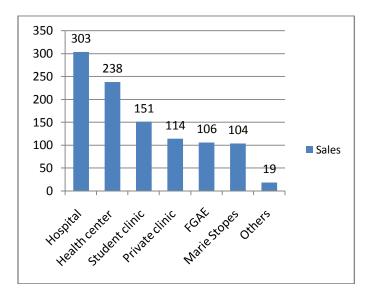


Figure 1 Distribution of preferred health institutions for treatments of STI by Wolaita Sodo University Students, 2011

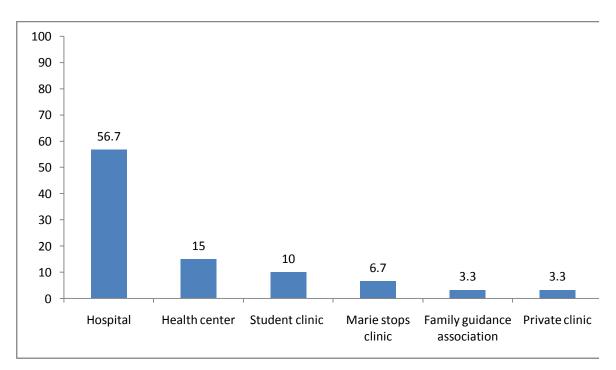
Table 2 Sexual behaviors of study subjects, Wolaita Sodo University, 2011

Variables		Number (Percent)	
Sovial experience(n=447)	Yes	158(35.3)	
Sexual experience(n=447)	No	289(64.7)	
The last 12 months history of sexual practice (n=157)	Yes	122(77.7)	
The last 12 months history of sexual practice (n=137)	No	35(22.3)	
Ever used condom in their life (n_157)	Yes	83(52.9)	
Ever used condom in their life (n=157)	No	74(47.1)	
Condom upp in the last 12 months (n. 01)	Yes	64 (79.0)	
Condom use in the last 12 months (n=81)	No	17(21.0)	
	Sometimes	16(25.4)	
Frequency of condom use (n=63)	Most of the time	13(20.6)	
(11=03)	Always	34(54.0)	
Continued	-		
Life time number of sexual partners(n=152)	One	72(47.4)	
Life time number of sexual partners(n=132)	More than one	80(52.6)	
manch and a second and are in the least 40 months (or 440)	One	108 (73.0)	
number of sexual partners in the last 12 months (n=148)	More than one	40 (27.0)	
Had sex with causal sexual partner	Yes	30(24.8)	
in the last 12 months (n=121)	No	91(75.2)	
Llad accounts account and in the last 40 months (n. 404)	Yes	17(13.9)	
Had sex with sex workers in the last 12 months(n=121)	No	104(85.2)	
Coveration plantal was in the least 0 mounths (n. 400)	Yes	34(28.3)	
Sex after alcohol use in the last12 months(n=120)	No	86(71.7)	
Condens tree effect having already (n. 24)	Yes	23(67.6)	
Condom use after having alcohol (n=34)	No	11(32.4)	

Concerning health seeking behaviors from those who had history of STI, 60(58.3%) had got treatments for the most recent syndrome they had. The first site for treatment of STIs was Hospital 34(56.7%) followed by Health Center 9(15.0%). See Fig 2 below

Table 3 Syndromes of STIs reported from study subjects, Wolaita Sodo University, 2011

Variables	Number (Percent)	
Ever had Sexually Transmitted infections (n=447)	Yes	104 (23.3)
Ever riad Sexually Transmitted Infections (11–447)	No	343(76.7)
STIs during the past 12 months/n=106\	Yes	88(83.0)
STIs during the past 12 months(n=106)	No	18 (17.0)
CTIs during the past 6 months/n QE\	Yes	27(31.8)
STIs during the past 6 months(n=85)	No	58(68.2)
Self reported at least one STI syndromes in the last 12 months	Yes	87 (19.5)
(n=447)	No	360 (80.5)
0.16	Genital ulcer/sores	36 (52.9)
Self reported STI syndromes by male During the past 12 months (n=68)**	Urethral discharge	30 (43.5)
5 , ,	Scrotal swelling	14 (20.6)
	Vaginal discharge	6(28.6)
Self reported STIs Symptoms by females During the past 12 months(n=20)**	Genital ulcer/sores	13(65.0)
	Lower abdominal pain	5(25.0)



Forty three (41.7%) study subjects had not got treatments for the recent syndrome they had. The most important reasons for not receiving treatment by study subjects were feeling guilty of telling problem to a health worker, 11(25.6); thinking symptom as incurable, 10(23.3); thinking Symptom not serious 7(16.3), thinking symptom as curable without treatment, 5(11.6); lack of money, 2(4.7%); not knowing where to get treatment, 2(4.7%); and others including lack of time, 5(11.6).

Factors associated with prevalence of sexually transmitted infections

In the bivariate analysis it was found from Socio demographic variables that only gender had statistically significant associations with prevalence of STI; males had higher odds of experiencing STIS(Crude OR=1.7;95%CI:1.1, 2.8). From sexual behavior variables life time history of sexual intercourse, ever use of condom during intercourse, sexual practice with causal partner, sexual practice with commercial sex worker, having had sex

after taking alcohol, having multiple sexual partner in their life time and having multiple sexual partner in the last 12 months were significantly associated with STIs. Those students who never used condom during intercourse in their life time had increased odds of having STIs as compared to their counterparts (Crude OR=1.5; 95%CI: 1.1, 2.2). The odds of having STIs among students with history of lifetime sexual intercourse were 5.1 (95%CI: 3.3, 7.8) times greater. Students who had causal partners and had sex with commercial sex workers in the last 12 months were 2.1 (95%1.5, 2.9) times and 2.3 (95%CI: 1.7, 3.2) times more likely to have sexually transmitted infections than their counter parts respectively. Students who had sexual intercourse after alcoholic intake were 1.7 (95%CI: 1.2, 2.5) times more likely to have sexually transmitted infections than those didn't have intercourse after alcoholic intake.

Having multiple sexual partner in the life time and in the last 12 months were 2.3 (95%CI: 1.2, 4.4) and 3.0 (95%CI: 1.3, 6.8) times more likely to have sexually transmitted infections than students with parts respectively. From variables on the knowledge on STI overall knowledge of students was associated with prevalence of sexually transmitted infections. Students with poor knowledge on STI were 2.5 (CI) (1.4, 4.4) times more likely to have sexually transmitted infections than students with good knowledge. After adjustment in multiple logistic regression, only having sexual intercourse with commercial sex workers found to have associated with sexually transmitted infections. Students who had sexual contact with commercial sex workers in the last 12 months had higher odds of having STIs(Adjusted OR= 4.7;95%CI:1.2, 8.6). (See Table 4 below)

Table 4 Effects of selected characteristics on the likely hood of self reported STIs in 12 months

Predictor variables of STI		Self reported STI in the last 12 Months		Crude OR (95%CI)	Adjusted OR (95%CI)
		Yes	No		
Gender (N=447)	Male	69 (15.5)	240 (53.7)	1.7 (1.1,2.8)	1.1 (0.4, 3.0)
	Female	18 (4.0)	120 (26.8)	1.00	1.00
Ever had sexual intercourse	Yes	64 (14.4)	94 (21.0)	5.1 (3.3,7.8)	**
(N=447)**	No	23 (5.1)	266 (59.5)	1.00	1.00
Ever used Condom during	Yes	40(25.5)	43(27.4)	1.00	1.00
intercourse (N=157)	No	50 (31.8)	24 (15.3)	1.5(1.1,2.2)	1.7 (0.7, 3.5)
Had intercourse with causal	Yes	23 (14.8)	10 (6.5)	2.1(1.5,2.9)	2.9 (0.9,3.9)
partners (N=155)	No	41(26.5)	81 (52.3)	1.00	1.00
Had intercourse with	Yes	15 (9.7)	3 (1.9)	2.3 (1.7,3.2)	4.7 (1.2,8.6)*
commercial sex workers (N=155)	No	49 (31.6)	88 (56.8)	1.00	1.00
Had intercourse after having	Yes	23 (14.7)	15 (9.6)	1.7 (1.2,2.5)	2.1 (0.8,5.5)
alcohol	No	41 (26.3)	77 (49.4)	1.00	1.00
Life time Sexual partner	Single	22 (14.5)	50 (32.9)	1.00	1.00
(N=152)	Multiple	40 (26.3)	40 (26.3)	2.3 (1.2,4.4)	1.9 (0.7,5.1)
Sexual partner in last 12	Single	41 (29.5)	67 (48.2)	1.00	1.00
month (N=139)	Multiple	20 (14.4)	11 (7.9)	3.0 (1.3,6.8)	1.3(0.4,4.2)
Level of knowledge on STI	Good	18 (4.0)	143(32.0)	1.00	1.00
	Poor	69(15.4)	217(48.5)	2.5 (1.4,4.4)	4.8(1.8, 12.9)

^{*}Significant after adjusting, **Excluded in the multivariate analysis because of its interaction with other variables

Discussion

This study finding shown that relatively high prevalence of self reported STIs was observed among Students. Consistent use of condom with their sexual partner was not high from the control and prevention of STI including HIV/AIDS measures. A range of possible predictors such as socio demographic (gender) and behavioral (sexual behaviors) and awareness (level of knowledge on STI) were associated with sexually transmitted infections among Wolaita Sodo University students. Sixty seven percent of students had poor knowledge on STI. This is consistent with a study among students in NUI Galway where there is a significant knowledge gap among students regarding STIs and shown that their overall level of knowledge was very poor (18). This might be unreasonable disparity when compared to current interventions on HIV and reproductive health in young people. The study revealed evidence like 66.4%, 62.5% and 60.7%, as being faithful, abstinence and consistent condom use as effective methods of STI prevention respectively, however, small proportion of students had misconception where 6.7 %,4.2% and 2.5% reported pills, withdrawal and using injectable as STI preventive method which is consistent to NUI Galway study(18). The major source of information for students on STIs was media (52.6%)followed by health institution (48.2%) which is consistent with a study undertaken in Gondar where the most common source of information were reported to be teachers (76.9%), mass media (67.4 %), and health workers (63.6 % (19). But it contradicts with a study In NUI Galway where University magazines, University websites and health centers were reported to be the main sources of information (20). The possible explanation for this variation could be that Universities in Ethiopia focus mainly on academic issues than the soft concern information education communication and behavioral change communication regarding STI including HIV/AIDS in the University

Community.

Thirty five percent (27.2 % male and 8.1% female) of the students were sexually active, of whom 77.7% (59.2 % male and 18.5% female) were sexually active 12 months prior to the survey. A study conducted on Sexual behavior and awareness among university students in china revealed similar evidence where 17.6% of males and 8.6% of females were sexually active (21). Another study conducted among students in Bale Ethiopia is consistent on risky sexual behaviors with these findings(15). In this study 52.6% of study subjects reported to have multiple sexual partners in their life and of the sexually active study subjects in the previous year before the survey, twenty five percent had reported to have sex with causal sexual partners, 13.9% had reported to have sex with commercial sex workers. The fact is that risky sexual behaviors like having multiple sexual partners, having had sex with commercial sex worker and causal partners among the students especially females is not uncommon because of their age, culture, peer and adult pressure, socioeconomic dependency and environment. In this study only having sexual intercourse with commercial sex workers found to have associated with sexually transmitted infections. Students who have sexual contact with commercial sex workers in the last 12 months were 4.7 (1.2, 8.6) times

more likely to have sexually transmitted infections than those who didn't have sexual contact with commercial sex workers in the last 12 months which is a bit differs from many other studies (6, 14, 20, 23-25). This inconsistency might be due to the difference in study subjects where in this study the study subjects were only students who were youths who are impressionable, may not have adequate or consistent income, and are living without consistent adult supervision. Together with peer pressure these may make them highly vulnerable to STI than other populations so that they were considered as most at risk populations because of the differences in their exposure status to STI than other populations. Concerning health seeking behaviors, 43(41.7%) study subjects had not got treatments for the recent syndrome they had. The most important reasons for not receiving treatment were feeling guilty of telling problem to a health worker, thinking symptom as incurable, thinking Symptom not serious, thinking symptom as curable without treatment, lack of money, not knowing where to get treatment, and others including lack of time. Significant number of study subjects did not get treatment; this indicates great majority of students had poor awareness about the problem and its treatment. This once again can be taken as informative disparity provided the service is available and that they are thought to have access but interventions demand to fill the gap of service utilization in a manner that they really can utilize it. Given its limitation, especially for STIs to have been measured based on selfreported Syndromic approach, where some females may not develop symptoms, this study gives directions of intervention areas, and can it so it can be concluded that relatively high prevalence of self reported STI was found among study subjects. High percentage of risky sexual behaviors like having multiple sexual partners including, infrequent condom use and having had sex with commercial sex worker was obtained among the students, and treatment seeking behavior was very low among student. Therefore: Launching of recreational facilities and sexual and reproductive health service, abstinence and condom promotion interventions are recommended. There should be specific information centers, which students can be exposed to, including possible modalities of treatment that can reinforce their treatment seeking behavior. The university should also design retention facilities for students to limit them from sexual contact with commercial sex workers. Moreover, further studies to explore the predictor variables are highly recommended.

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