

**ORIGINAL ARTICLE****RISKY SEXUAL BEHAVIOR AND PREDISPOSING FACTORS AMONG STUDENTS OF JIMMA UNIVERSITY, ETHIOPIA****Gurmesa Tura<sup>1\*</sup>, Fessahaye Alemseged<sup>2</sup>, Sisay Dejene<sup>3</sup>****ABSTRACT**

**BACKGROUND:** Students of higher institutions are assumed to be exposed to many risky sexual behaviors. However, little has been explored about the magnitude of risky behavior and predisposing factors in the context of higher education institutions in Ethiopia. Thus, the objective of this study was to assess the pattern of risky sexual behaviors and predisposing factors among Jimma University students.

**METHODS:** This cross-sectional study was conducted in November 2009 involving quantitative and qualitative methods. The quantitative study was conducted on 1010 students selected by multistage cluster sampling technique. The data were collected using self-administered questionnaire and analyzed using SPSS V.16.0. Multi-variate logistic regression was used to see association between variables. The qualitative part involved 10 focus group discussions and 17 key-informant interviews selected purposively. The qualitative data were analyzed by thematic areas.

**RESULTS:** Among the respondents, 267(26.9%) ever had sexual intercourse. The mean age at first sexual intercourse was 17.7±2.7 years. Most, 75.6%, started sexual intercourse during secondary school. Among whoever had sex, 51.0% had sex in the last 12 months and 28.3% had multiple sexual partners. Consistent condom use with non-regular partner in the last 12 months was 69.1%. Lack of parental control, substance use, peer pressure, campus and outside environment were identified as predisposing factors.

**CONCLUSION:** Risky sexual behaviour such as having multiple sexual partner and sexual practice without condom with non-regular partner exists. The university and local health bodies should work together to address the identified risky behaviours with particular focus on Behaviour change communication.

**KEYWORDS:** risky behaviour, Jimma University, University students, predisposing factors, HIV/AIDS

**INTRODUCTION**

Students of higher learning institutions are assets of the society and change agents in filling the gap in the past and on whom the future generation is based. It is also clear that this group is on the way of transforming to adulthood; filled with ambition; and building their future academic and social career. Neglecting their sexual and reproductive health can lead to high social and economic costs, both immediately and in the years ahead. One of the most important commitments a country can make for future economic, social, and political

progress and stability, therefore, is to address the sexual and reproductive health needs of this population group (1)

According to The Joint United Nations Program on HIV/AIDS (UNAIDS), in 2008 young people aged 15-24 years accounted for 42% of new HIV infections in people aged 15 and older and nearly 80% of this live in sub-Saharan Africa (2). Unless appropriate age and institution targeted intervention exist, certain behaviors can place the university students at greater risk of HIV infection. As they are in the youth age category,

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they are exposed to many risky behaviors including sexual coercion, STI including HIV/AIDS, unwanted pregnancy and abortion like other youths. Groups of people who engage in these high-risk behaviors are considered vulnerable to HIV infection and need to be watched cautiously in order to control its epidemic (2).

These risky behaviours may further be worsened by the fact that university students are too many in number, lack facilities for sexual and reproductive health services and live away from their parents and free from parental control. In addition, some are subjected to wide spread substance use and peer-pressure that aggravate the risky behaviours (3).

Despite this, little has been explored about the pattern of risky sexual behavior in the context of higher education institutions in Ethiopia in general and in Jimma University in particular. Thus, this study was conducted with the aim of filling this gap by identifying risky sexual behaviors and predisposing factors for possible interventions.

## METHODS AND MATERIALS

This cross-sectional study was conducted among students of Jimma University in November 2009 by using both quantitative and qualitative methods. Jimma University is a public higher educational institution established in December 1999. The University is located in Jimma town 350 kms southwest of Addis Ababa. It offers a wide range of higher education programs both at undergraduate and graduate levels (4)

In its three campuses, in April 2009, the university has a total community of about 29,520. Among these, 1,111 were academic staff, 1,431 were administrative staff and 26,978 were students. From these, 14,515 were regular generic undergraduate students and considered as the source population for this study (5, 6).

The sample size for the quantitative part was determined by using Epi-info version 3.2.2 based on the following assumptions. The expected proportion of condom use among sexually active students to be ( $p=0.53$ ) (7), 95% confidence level and 4% of marginal error. A design effect of 2 was used because of multistage clustered

sampling method. After adding 10% for non-responses, the final sample size became 1263. Based on the level of saturation, a total of 10 FGDs and 17 key informant interviews were conducted.

Multistage sampling technique was used to identify participants of the study. First, list of clusters was established by using Department and year of study. From the total clusters in the university, 40 clusters were selected based on cumulative frequencies. Based on the number of students, 65% of the sample was allocated for males and 35% for females to ensure representation. By preparing separate sampling frame for both sexes for the selected 40 clusters, the sample was proportionally distributed. Finally, a systematic sampling method was used to select the study participants.

Students who were thought to be informative were selected purposively for the FGDs. Participation in clubs, campus, sex and years of study were considered for segmenting students for the FGDs. Key informants for the interview were selected purposively by thinking them as rich source of information based on their closeness to the students' services and closeness in observing students while involving in risky sexual behaviour. These involved representatives from Students Director office, Gender Affairs Director, Students' clinic Head, academic staff representative, students' house keepers, University security officer, Students' Union President, Anti-AIDS Movements' representative, Marie-stopes International Ethiopia Jimma branch representative, Khat (*Catha edulis*) house owner, Night club owner, Taxi driver and Video house owner.

A pretested and structured self-administered questionnaire, which was partly adopted from Ethiopia Demographic and Health Survey (DHS), Behavioral Surveillance Survey (BSS) and other relevant sources were used to collect the quantitative data (7, 8). The qualitative data were collected by experienced lecturers (MPH holders) from the Department of Health Education and Behavioral Sciences, Jimma University by using FGD guide and interview guides developed by the principal investigators.

The collected data were checked for errors manually, entered into Epidata V2.2, cleaned, edited and then exported to SPSS version 16.0 for

analysis. Data exploration was again done in SPSS to check for completeness and consistency. Descriptive statistics including frequencies, percentages, mean, median and standard deviations were used to describe findings. The presence of association was assessed using chi-square test and associations with p-value <0.05 were considered statistically significant. Multi-variate logistic regression was used to control confounding effects and the strength of association was expressed in odds ratio and its 95% confidence interval. The Tape recorded FGDs and key informant interviews were thoroughly listened and transcribed. Then major findings were narrated and summarized based on thematic areas. As means of quality control, pre-test of the questionnaire, training of data collectors, FGD facilitators and key informant interviewers were made. In addition, close supervision of the data collection process was made. Ethical clearance was obtained from Institutional Ethical Review Board (IRB) of Hawassa University College of Health Sciences. A formal approval was secured from Jimma University and written consent was obtained from the respondents of quantitative study and informed oral consent was obtained from the key informants and FGD participants before proceeding to the data collection.

#### Operational definitions

- **Consistent condom use:** using condom during each and every sexual intercourse
- **Non-café:** receiving money allocated for students' food service and using elsewhere other than student cafeteria.
- **Non-regular partner:** sexual partner out-off marital union
- **Out-off campus living:** receiving money allocated for dormitory service and living outside of the university compound.
- **Predisposing factor:** any condition related to biology, cultural, economic, demographic or personal that can increase the risk of involving in risky sexual behavior
- **Risky sexual behavior:** having more than one sexual partner or performing sexual intercourse with non-regular partner without condom
- **Saturation:** point at which no new information is appearing.
- **Substance use:** Use of at least any one of the following substances: alcohol, Khat cigarette,

Shisha, Hashish or drug that are assumed to affect level of thinking and increase risk of involving in risky sexual behavior.

## RESULTS

**Socio-demographic and economic characteristics:** It was planned to include a sample of 1263 (821 and 442 females) students. But, complete data for analysis were obtained from 1010 students making a response rate to be 80%. The majority, 717 (71.3%) were male respondents. The mean age of the respondents was 20.5±1.6 years (20.8±1.7 for males and 19.9±1.3 for females). Most, 525(52.9%) were orthodox Christians. The predominant ethnic group was Oromo 504(52.0%) followed by Amhara 259(26.7%) (Table ).

Regarding parents' average monthly income 287(36.7%) and 214(27.4%) estimated as ≤500Birr and 501-1000 Birr respectively. More than half, 515(51.7%) of the respondents assessed their parents economic status as middle class. More than 2/3, 663(72.3%) of the respondents get ≤200 Birr per month from their parents or relatives, 140(13.9%) has other source of income other than parents or relatives and the University and 97(69.3%) has ≤100 Birr per month from the other sources. Majority, 941(95.1%) of the respondents live in the campus dormitory and 940 (94.3%) use campus cafeteria service (Table 1).

**Sexual Practice:** Above a quarter, 267(26.9%) of respondents ever had sexual intercourse (32.5% of males and 12.7% of Females). Male respondents were about three times more likely to ever had sexual intercourse as compared to females (OR=3.31; 95%CI: 2.26, 4.86). The mean age at first sexual intercourse was 17.7±2.7 years (17.8±2.5 for males and 17.4±3.7 for females) similar among males and females (p=0.29). The median age at first sex was 18 years. Among those who ever had sexual intercourse, more than three-quarter, 121(75.6%) (79.0% males and 54.5% females) had their first sexual intercourse during their secondary school. Majority, 170(68.0%) of them had first sexual intercourse with boyfriend or girlfriend. Nearly half, 127 (48.1%) had their first sexual intercourse with individuals of the same age (50.9% for males and 30.6% for females) females were more likely to have first sex with individuals who were about five years or older than them (P-value =0.001) (Table 2, Figure 1).

Table 1: Socio-demographic characteristics of Jimma University students who participated in the study, November 2009.

Variables	Sex		Total (n=1005) No. (%)
	Male (n=717) No. (%)	Female(n=288) No. (%)	
<b>Religion:</b>			
Orthodox	351(49.7)	174(60.6)	525(52.9)
Muslim	170(24.1)	54(18.8)	224(22.6)
Protestant	163(23.1)	54(18.8)	217(21.9)
Catholic	3(0.4)	3(1.0)	6 (0.6)
Others*	19(2.7)	2(0.6)	21(2.1)
Total	706(100.0)	287(100.0)	993(100.0)
<b>Ethnicity:</b>			
Oromo	392(56.7)	112(40.3)	504(52.0)
Amhara	168(24.3)	91(32.7)	259(26.7)
Gurage	39(5.6)	34(12.2)	73(7.5)
Tigre	26(3.8)	13(4.7)	39(4.0)
Wolaita	17(2.5)	9(3.2)	26(2.7)
Hhadia	19(2.7)	5(1.8)	24(2.5)
Others	30(4.4)	14(5.1)	44(4.5)
Total	691(100.0)	278(100.0)	969(100.0)
<b>Parents' average monthly income ETB (USD)</b>			
≤ 500 (39.19)	238(41.3)	49(23.9)	287(36.7)
501-1000(39.20-78.40)	171(29.7)	43(21.0)	214(27.4)
1001-1500(78.41-117.60)	47(8.2)	15(7.3)	62(7.9)
1501-2000(117.61-156.80)	46(8.0)	36(17.6)	82(10.5)
> 2000 ( 156.80)	74(12.8)	62(30.2)	136(17.4)
Total	576(100.0)	205(100.0)	781(100.0)
<b>Current place of accommodation:</b>			
Dormitory	678 (95.9)	263(92.9)	941(95.1)
Outside campus (with parents, guardian or relatives)	18(2.5)	16(5.7)	34(3.4)
Outside campus (rented)	11(1.6)	4(1.4)	15(1.5)
Total	707 (100.0)	283 (100.0)	990 (100.0)
<b>Food service Use</b>			
University Cafeteria	676(95.1)	264(92.3)	940(94.3)
Out-side university (non-Café)	35(4.9)	22(7.7)	57(5.7)
Total	711(100.0)	286(100.0)	997(100.0)

\* Unspecified traditional, No religion † Somali, Afar, Sidama,

The findings of the qualitative study also supported the quantitative one. Majority of the key informants and FGD participants have similar opinion that sexual practice among the students seems somewhat prevalent. However, concerning sexual initiation, there were contrasting ideas.

Some supported that students start sexual intercourse before coming to the university; whereas, most of them argued that most of the students start sexual practice after coming to the university because of lack of parental control.

Table 2: Sexual History among respondents of Jimma University students, November 2009.

Variables	Sex		Total No. (%)	P-value
	Male n(%)	Female n(%)		
<b>Ever had sexual intercourse</b>				
Yes	231(32.5)	36(12.7)	267(26.9)	<b>&lt;0.001</b>
No	479(67.5)	247(87.3)	726(73.1)	
Total	710(100.0)	283(100.0)	993(100.0)	
<b>With whom 1<sup>st</sup> sex was made</b>				
Boyfriend/girlfriend	147(68.4)	23(65.7)	170(68.0)	<b>0.28</b>
Outsider	35(16.3)	5(14.3)	40(16.0)	
Husband/wife	20(9.3)	6(17.1)	26(10.4)	
Teacher	4(1.9)	1(2.9)	5(2.0)	
Others ‡	9 (4.2)	0(0.0)	9(3.6)	
Total	215(100.0)	35(100.0)	250(100.0)	
<b>Age of individual with whom 1<sup>st</sup> sex was made</b>				<b>0.001</b>
Younger	38(16.7)	2(5.6)	40(15.2)	<b>0.24</b>
About the same age	116(50.9)	11(30.6)	127(48.1)	
5-10 years older	18(7.9)	10(27.8)	28(10.6)	
> 10 years older	36(15.8)	8(22.2)	44(16.7)	
Do not remember	20(8.8)	5(13.6)	25(9.5)	
Total	228(100.0)	36(100.0)	264(100.0)	
<b>No. of Life time sexual partner</b>				
One only	115(54.2)	24(68.6)	139(56.3)	<b>0.24</b>
Two only	43(20.3)	6(17.1)	49(19.8)	
Three or more	54(25.5)	5(14.2)	59(23.9)	
Total	212(100.0)	35(100.0)	247(100.0)	
<b>Reasons to start sexual intercourse (Multiple Responses)</b>				
Sexual desire	99(46.0)	7(21.9)	106(42.9)	
Boy/girlfriend's pressure	54(25.1)	12(37.5)	66(26.7)	
To maintain relationship	43(20.0)	5(15.6)	48(19.4)	
Peer pressure	26(12.1)	3(9.4)	29(11.7)	
Curiosity	11(5.1)	1(3.1)	12(4.9)	
Others§	15(6.1)	5(15.6)	20(8.0)	
Not remembered	18(8.4)	1(3.1)	19(7.7)	

‡ Business man, CSW § economic benefit, effects of alcohol, rape, teacher's pressure

Regarding the reasons for sexual initiation, the leading reason was sexual desire 106(42.9%) followed by boy or girl friends pressure 66(26.7%). True sexual desire is the leading reason among males while boyfriend's pressure is the leading reason among females (Table 2).

This was also supported by the qualitative finding that majority expressed that peer pressure in the campus is among the leading reason to start

sexual intercourse. A 21 years old student stated, "...one of my friends had no experience of sexual practices before he came here, after abstaining for a semester, he started sexual practice with a 3<sup>rd</sup> year student because of peer pressure." Among those who ever had sexual intercourse, 108(43.7%) ever had two or more life time sexual partners (45.8% for males and 31.3% for females).

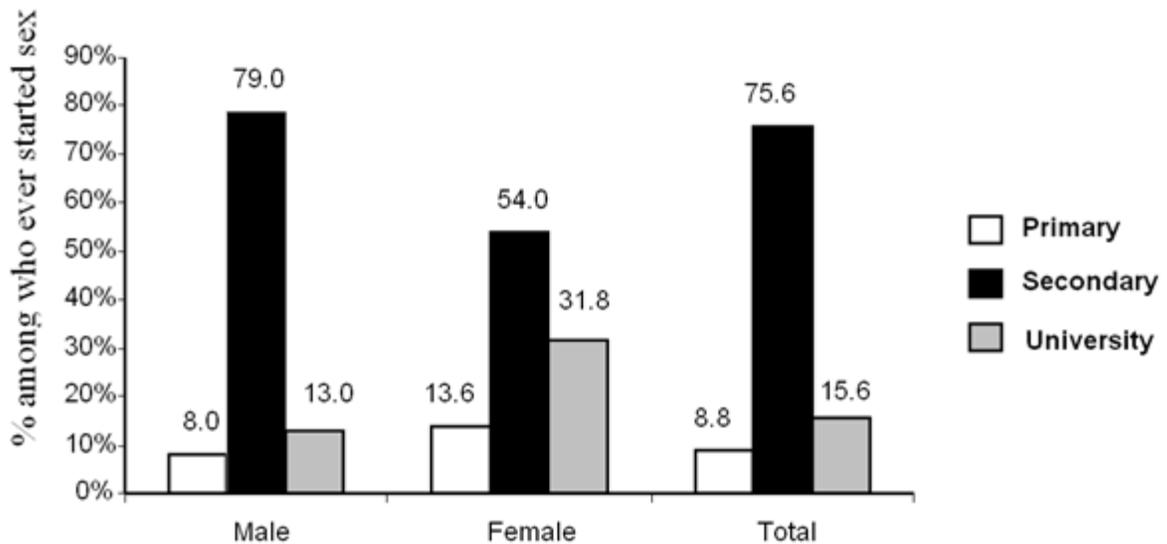


Figure 1: School at which first sexual intercourse was made among respondents of Jimma University students, November, 2009.

**Current sexual experience:** Among those who ever had sexual intercourse, 131(51.0%) (50.2% among males and 55.6% among females) had sex in the last 12 months. Of these, 37(28.3%) (29.7% among males and 20.0% among females) had multiple sexual partners (2 or more) in the last 12 months. Twenty three (29.1%) of them had two or more non regular sexual partners. Among the sexually active, 46 (18.9%) ever had sexual intercourse with non-regular partner for the sake of money. Of them, 16(26.8%) had more than two partners for the sake of money (Table 3).

The qualitative findings also supported that there is high prevalence of sexual practice currently in the university. Most of the FGD discussants and key informants responded that there is high sexual practice among Jimma University students. Most of the respondents also explained that having multiple sexual partners is very common among the students. As they explained the students need different benefits including academic as well as economic. One of a 20 years female student said,

“... There is what we call three to zero or three to three principle that students follow in the university life. This means changing sexual partners each year to end up with three partners before graduating.”

**Condom Use:** Among those who ever had sexual intercourse, 144(57.6%) (60.0% among males and 42.9% among females) have ever used condom. Of which, 95(62.9%) had used during first sexual intercourse. Among 94 students responded to the frequency of condom use, 65(69.1%) have used condom always. Males were more likely to use condom consistently as compared to female respondents, 73.5% and 46.4% respectively (p-value=0.004). About 116(80%) of them used condom during their last sexual encounter (Table 3). The leading reason for having sex without condom was trusting one's partner, 43(30.3%) followed by condom is not comfortable 30(21.1%) (Table 3).

Table 3: Current sexual practices and nature of sexual partner among respondents of Jimma University students, November 2009.

Variables	Sex		Total No. (%)
	Male n(%)	Female n(%)	
<b>Sexual intercourse in the last 12 months</b>			
Yes	111(50.2)	20(55.6)	131(51.0)
No	105(47.5)	15(41.7)	120(46.7)
No response	5(2.3)	1(2.8)	6(2.3)
Total	221(100.0)	36(100.0)	257(100.0)
<b>No. of sexual partners in the last 12 months</b>			
One only	78(70.3)	16(80.0)	94(71.7)
Two only	18(16.2)	2(10.0)	20(15.3)
Three or more	15(13.5)	2(10.0)	17(13.0)
Total	111(100.0)	20(100.0)	131(100.0)
<b>Frequency of Condom use</b>			
Always	61(73.5)	4(36.4)	65(69.1)
Occasionally	8(9.6)	5(45.5)	13(13.8)
Rarely	14(16.9)	2(18.2)	16(17.0)
Total	83(100.0)	11(100.0)	94(100.0)
<b>Reason for not using condom (multiple response)</b>			
I trust my partner	40(33.6)	3(13.0)	43(30.3)
Not comfortable	28(23.5)	2(8.7)	30(21.1)
Don't like it	18(15.1)	4(17.4)	22(15.5)
Not accessible	17(14.3)	3(13.0)	20(14.1)
Reduces sexual pleasure	16(13.4)	1(4.3)	17(12.0)
Embarrassed to buy	15(12.6)	2(8.7)	17(12.0)
Partner objected	13(10.9)	3(13.0)	16(11.3)
We are HIV negative	14(11.8)	2(8.7)	16(11.3)
Because in a hurry	13(10.9)	2(8.7)	15(10.6)
Don't think it is necessary	10(8.4)	2(8.7)	12(8.5)
Don't trust condom	4(3.4)	1(4.3)	5(3.5)

**Predisposing factors for sexual initiation:** After adjusting by using stepwise binary logistic regression, sex, age, academic year, current substance use and attending night club had significant association with ever having sexual intercourse. Male respondents were more than two times to ever have sexual intercourse as compared to female respondents (OR= 2.65; 95%CI: 1.57, 4.45). Those who are 20 years old and above were more than four times to ever have sex as compared to those less than 20 years old (OR=4.77; 95%CI: 2.43, 9.35). Second year students were about two times to ever have sexual intercourse as compared to freshman students (OR=1.71; 95%CI: 1.07, 2.75).

Current substance users were about three times more likely to ever have sexual intercourse as compared to non users (OR=3.03; 95%CI: 2.00, 4.59). Respondents who used to attend night club in the last three months were about two times more likely to ever have sexual intercourse as compared to non attendants (OR=2.27; 95%CI: 1.30, 3.98) (Table 4). The qualitative findings were also in line with the quantitative one. Most of key informants and FGD discussants agreed that the age itself, substance use and availability of video houses and night clubs are initiators of sexual practice among university students.

Table 4: Factors associated with sexual initiation among Jimma University students, November 2009.

Variables	Ever had sex			Crude OR(95% CI)	Adjusted OR(95% CI)
	NO	Yes	Total n(%)		
Sex					
Female	247(87.3)	36(12.7)	283(100.0)	1.00	1.00
Male	479(67.5)	231(32.5)	710(100.0)	<b>3.31(2.26, 4.85)</b>	<b>2.65(1.57, 4.45)</b>
Age (years)					
<20	208(92.0)	18(8.0)	226(100.0)	1.00	1.00
≥20	488(68.0)	230(32.0)	718(200.0)	<b>5.45(3.28, 9.04)</b>	<b>4.77(2.43, 9.35)</b>
Academic year					
Year-I	249(80.1)	62(19.9)	311(100.0)	1.00	1.00
Year-II	276(69.2)	123(30.8)	399(100.0)	<b>1.79(1.26, 2.54)</b>	<b>1.71(1.07,</b>
Year-III and above	204(71.3)	82(28.7)	286(100.0)	<b>1.61(1.12, 2.36)</b>	1.13(0.67, 1.90)
Accommodation					
Campus	688(73.7)	246(26.3)	934(100.0)	1.00	1.00
Out-off campus	29(59.2)	20(40.8)	49(100.0)	<b>1.93(1.07, 3.47)</b>	1.39(0.59, 3.26)
Monthly income (ETB)					
≤200Birr	468(73.7)	468(26.3)	468(100.0)	1.00	1.00
>200Birr	211(74.0)	74(26)	285(100.0)	0.983(0.72, 1.35)	0.89(0.58, 1.35)
Place of grow-up					
Addis Ababa, Regional or Zonal capital	257(77.4)	75(22.6)	332(100.0)	1.00	1.00
Woreda and other towns	190(69.6)	83(30.4)	273(100.0)	<b>1.50(1.04, 2.16)</b>	1.27(0.78, 2.06)
Rural area	282(72.1)	109(27.9)	391(100.0)	1.32(0.94, 1.86)	0.68(0.40, 1.15)
Maternal education					
No formal education	479(71.4)	192(28.6)	671(100.0)	1.00	1.00
Grade 1-8	93(72.9)	35(27.3)	128(100.0)	0.94(0.62, 1.43)	0.79(0.44, 1.45)
High school or College	153(80.1)	38(19.9)	191(100.0)	<b>0.62(0.42, 0.92)</b>	0.71(0.40, 1.27)
Use of substance					
Non Users	626(80.2)	155(19.8)	781(100.0)	1.00	1.00
Users	105(48.4)	112(51.6)	217(100.0)	<b>4.31(3.13, 5.93)</b>	<b>3.03(2.00, 4.59)</b>
Watch Pornography					
No	420(78.8)	113(21.2)	533(100.0)	1.00	
Yes	259(65.1)	139(34.9)	398(100.0)	<b>2.00(1.49, 2.68)</b>	1.30(0.88, 1.91)
Attending Night club					
No	630(76.5)	194(23.5)	824(100.0)	1.00	1.00
Yes	49(45.8)	58(5)	107(100.0)	<b>3.85(2.54, 5.81)</b>	<b>2.27(1.30, 3.98)</b>

To identify reasons for risky sexual behavior (having multiple sexual partners and sex without condom), the analytic part failed to show the differentials because of limited participants with such behaviors. However, most of the key informants and FGD discussants mentioned the major predisposing factors as being free from family control, being in the youth age group, substance use, peer pressure, campus and outside environments like campus security, existence of night club and video houses. Among the protective reasons for not initiating sexual practice, personal life plan or goal was the leading, 433(55.9%), followed by religiosity, 423(54.6%).

## DISCUSSION

This study revealed that 26.9% of the respondents ever had sexual intercourse. This finding is much higher than the finding of BSS-II conducted in 2005 among in-school youth in which 9.9% had sexual experience (7). This finding is also higher than the finding of Ethiopian DHS 2005, in which 4.3% of never-married 15-24 year age group females and 12.4% of males ever had sex (8). This might be explained by the difference in the study subjects. This study included both married and unmarried students.

However, the finding of this study is lower than the study conducted in Jimma University in 2002 (33.2%) (9). This might be because of the behavioral interventions that have been given at different levels. This finding is also very much lower than the findings in other countries. The study conducted among university students in Madagascar in 2000 found that 80% of students had sexual experience (12) and the study conducted in Nigerian University students (76.8%) (10), This could be because of cultural difference in relation to sexual activity between the two countries and Ethiopia. But higher than the study conducted in Indian university students in 2005, in which 5% of female students and 15% of male students had sexual experience(11). There might be cultural and background difference in Indian students and Jimma University students.

In this study, males were about three times more likely to have sexual experience as compared to female students. This is in line with the findings of all the above mentioned studies (7-9, 11-13).

The mean age at first sexual intercourse in this study was  $17.7 \pm 2.7$  years and the median age was 18.0 years. This is almost similar with the findings of the Ethiopian DHS 2005 in which the mean age at first sexual intercourse among 20-24 years were 18.2 years. It was also similar with the finding of the study conducted among university students in Madagascar in which the mean age at first sexual intercourse was 18.4 years (7, 12). In this study, three-quarter (75.6%) of the students had their first sexual intercourse during their secondary school. This might indicate that not only at university level, but also at high school level, the issue of early sexual imitation is a problem.

Among those who ever had sexual intercourse, 51.0% had sex in the last 12 months. Among those who had sexual intercourse in the last 12 months, 28.3% had multiple sexual partners. This is similar with the study conducted in Jimma University in 2002 (28.9%)(9) and the study conducted in urban and rural communities of Jimma Zone in 2002 (27.7%) (14). This indicates that despite seven years of interventions, the behavior of students about having multiple sexual partners remains high.

In this study, 80% of those who had sexual intercourse in the last 12 months had used condom during the last sexual contact. This is higher than the findings of EDHS 2011 (47% for male youth and 62% for female youth) (15) but almost similar with the finding of the BSS-II (82.1%) (7). However, consistent condom use with non regular partner in the last 12 months in this study was 69.1%. This is slightly higher than the study among the same university in 2002 in which 64.5% of those having multiple sexual partners have used condom persistently and significantly higher than the BSS-II in which 41.8% of in-school youth who had sex with non-commercial partners reported consistent use of condoms. Males were more likely to use condom consistently as compared to female respondents in this study. This is also observed in other studies (7, 8). This could be explained by the fact that decision about condom use in our community is made by the male partners and the females do not have negotiation skills about condom use (15, 16).

Among those who had sex in the last 12 months, 38(25.9%) had sex without condom in the 12 months thus considered as having risky sexual

behavior. The leading reason for having sexual intercourse without condom were trusting one's partner and non-comfortability of condom which are among the reasons identified by most literatures.

Socio-demographic characteristics, substance use and students behavior in relation to watching pornographic films and attending night clubs were identified as determinants of ever having sexual intercourse in this study. Male respondents were more than two times to ever have sexual intercourse as compared to female respondents. This is in line with other studies (7, 8). The reason could be the cultural background in Ethiopia that males can ask females for sexual practice easily and get access of it as compared to females. Those who were 20 years old and above were more than four times to ever have sex as compared to those less than 20 years old. This is also in line with many literatures. The explanation is the fact that as age increases involving in sexual practice increases. Second year students were about two times to ever have sexual intercourse as compared to freshman students. As explained in the qualitative study most students focus on their academic performance during freshman and tend to engage in love and sexual practice after assuring their academic survival.

Current substance users were about three times more likely to ever have sexual intercourse as compared to non users. This is also revealed by many studies that students are initiated to have sexual intercourse after having substances particularly alcohol. Respondents who used to attend night club in the last three months were about two times more likely to ever have sexual intercourse as compared to non attendants in this study.

In the qualitative study, lack of parental control, prior expectation about the university, being in the youth age group, living out-off campus, substance use, peer pressures, campus and outside environment and low income level were identified as predisposing factors for risky sexual behaviour among Jimma University students. This is in line with other literatures. The case control study conducted in SNNPR found that substance use such as khat chewing habits and alcohol use were found to increase the risky sexual behaviours (17). The same findings were observed

in the case control study conducted in Addis Ababa (18).

This finding is also in line with findings of studies conducted in other countries. In the study conducted in India, maternal education, the age of the students, peer pressure and experience of watching pornographic films were identified as factors associated with risky sexual behaviour. (10-12).

As programmatic implication, information on sexual behaviour is important for designing and monitoring intervention programs to control the spread of HIV/AIDS. For a long times, HIV/AIDS interventions in universities have focused on abstinence promotion by restricting sexual practice by university policy. As seen in this study, 75% have already started before coming to the university. This indicates that abstinence alone doesn't work. In addition 51% are still sexually active, performed sex in the last 12 months. Again 28.3% have current practice of multiple sexual partners and 35.5% didn't use condom persistently with non regular partners. This tells as that restricting sexual practices and not availing condom and other services do not restrict the students from performing sexual intercourse as they can do it anywhere else. So, ensuring the safety by availing necessary services together with behavior modification is more important.

This study has limitation in that it is cross-sectional in nature and may not explain the temporal relationship between the outcome variable and some explanatory variables. The study topic by itself assesses personal and sensitive issues related to sexuality which might have caused underreporting of some behaviors. Thus, the finding of this study should be interpreted with these limitations.

In conclusion, with the above limitations, this study revealed that there is risky sexual behaviour among Jimma University students that is evidenced by the existence of multiple sexual partners and sexual practice without condom with non-regular partner. Socio-demographic and economic characteristics, lack of parental control, substance use, living out-off campus, peer pressure and other personal behaviours were revealed as predisposing factors for the existence of risky sexual behaviour. Therefore, strengthening BCC on risk perception, life skill training, peer-education, availing services

including condom and working together with all stallholders and the surrounding community is recommended.

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