

Assessment of pre-marital sex and its associated factors among rift valley university college students, jimma campus, south west Ethiopia, 2018

Abstract

Introduction: The World Health Organization (WHO) defines adolescent people as those between the ages of 10 to 19 years. By nature these age groups are the age of experimentation and exploration associated with a range of risky behaviors, including risky sexual behaviors. Pre-marital sex as risky sexual practices can lead student adolescents to acquisition of STIs and un-intended pregnancy. However there is paucity of information in prevalence of pre-marital sexual practices and its factors in private higher institutions particularly to the study site. Therefore this study is aimed to assess the prevalence of pre-marital sex practices and associated factors among Rift valley university students, south western Ethiopia 2018.

Methods: An institution based cross sectional study was conducted at Rift Valley University Jimma campus from March to April 2018. A pretested structured questionnaire was used to collect the data. Systematic random sampling technique was employed to select a total of 264 respondents in this study. The data were entered into EPI info version 3.5.3 and transferred to SPSS version 21 for analysis. Descriptive, bivariate and multivariate analyses were done. A P-value <0.05 was considered to determine the statistical significance of the association between factors and outcome (pre-sexual practice). The Odds ratio was also used to determine the presence and the degree of association between the outcome and independent variables.

Results: Out of 264 aimed samples, 260 involved in the study and yielded a response rate of 98.5%. The prevalence of pre-marital sexual practice was 43.8%. Living status, AOR=3.8CI (1.91, 7.52) and substance use, AOR=4.67(2.59, 8.46) were found to be independent predictors of pre-marital sex among students.

Conclusion and recommendations: Pre-marital sex practice among students was found to be high. Living status and substance use were independent predictors of premarital sex in students. Jimma zone health bureau should strengthen addressing in community and family involvement in adolescent health and substance use habit.

Keywords: premarital sex, adolescent students, Ethiopia

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Introduction

The World Health Organization defines the age group between 10 and 19 as adolescents and these age groups are critical as it is the time of attempt for various activities.¹ Each year, one in 20 adolescent worldwide contracts sexually transmitted infections and every day, over 7000 young individuals become infected with HIV.² More than half of worldwide HIV new infections are encountered in age group between 15 to 24 years old.³ Early sexual initiation before formal marriage may affect the future life of young people by contracting HIV and other sexually transmitted.⁴ Delaying sexual initiations in this age group up to formal marriage is one of the strategies in prevention and control of rapid epidemics of HIV.⁵ For example; in interventional study done in African country, Zambia; behavioral interventions among adolescents have yielded decreased HIV prevalence.⁶ The prevalence of the premarital sex around the world is high and most of the time the condition experienced by the age group between 15-19 years old. The problem is also high in developed countries and evidenced as a common problem.^{7,8} Several studies in Sub-Saharan Africa have also recognized for the problem^{9,10} and our country was a

victim for such practice. One study done in Ethiopia showed that the prevalence was 66.2%.¹¹

Different studies suggested that socio demographic factors, such as age, gender, educational status, alcohol consumption, substance use and living out of parental close supervision were associated with early initiation of premarital sexual activity.^{4,12} Even though the magnitude of the problem in the Ethiopia is expected to be high, there was the shortage of study regarding the premarital sexual practice particularly to the current study site where many young lived. Therefore this study was aimed to assess the prevalence of premarital sexual practice and its associated factors among rift valley university college students, jimma campus, 2018.

Methods

Study area

The study was conducted among Rift valley university students in jimma campus. It is one of private institution which has several campuses, of which one is located in jimma town. It was established

in 2002 EC. Currently there are four departments with 70 academic staff and 1212 students attending their education including from year I to IV. From these students, 491 are males and rest, 721 are females. This campus is situated at about 356 km from Addis Ababa, capital city of the country.

Study design and period

Institution based quantitative cross - sectional study was used to assess the prevalence of premarital sex and its associated factors among Rift valley university college students in jimma Town from March to April, 2018.

Source population

The source population for this study was all students attending their regular education in Rift valley University College, jimma campus at the time of data collection.

Study population

All regular students attending their degree education program at the time of data collection and fulfilling the inclusion criteria were included.

Inclusion criteria

All sampled regular, unmarried students attending their regular education at the time of data collection were included.

Exclusion criteria

None regular and students who are seriously ill at the time of data collection were excluded from the study.

Sample size determination and sampling procedures

The sample size was determined by considering proportion of premarital sexual activity of 25 %, ¹³ 95 %CI & margin of error of 5%. By considering these assumptions the sample size was 288. Since the total population (1002) was less than 10,000, a finite population correction formula was considered. With this consideration and addition of 10 % none response rate yielded 264 final sample. Systematic sampling method was used to determine the target sample size after proportional allocation to each class based on the year of the study. For all case K was 5 and through 1 to 5, 3 was selected randomly and 3rd student list from each class was taken as a first sample and then taking every fifth student until the required sample size is desired.

Data collection tools and procedures

Data were collected by self-administered using a semi-structured questionnaire with the English version. Data collection tools were adapted from different literatures which consist of two parts including socio demographic characteristics and behavior related questionnaires. Before actual data collection, pretest was made on 5 % of total sample in Dandiboru University College and necessary correction was made based on the result.

Data quality assurance

On each days of data collection, both principal investigator and supervisors were checked the data for its completeness. The principal investigator was checked the data during entry into computer and again before analysis for missing values.

Operational definitions

Premarital sex: A penetrative vaginal sexual intercourse performed before formal marriage.

Age of sexual debut: The age at which the first sexual intercourse occurred.

Substance abuse: pattern abuse of drug in which user consume the substance in amount or with methods which are harmful to themselves or others.

Data analysis and processing

SPSS windows version 21 program was used for analysis. Bothe descriptive and inferential statistics were used for analysis. Bivariate logistic regression analysis was used to identify candidate variables for multivariate logistic regression analysis at $P < 0.25$. Statistical significance was accepted at $P < 0.05$ in multiple logistic regression analysis.

Results

Participants' characteristics

A total of 260 respondents out of 264 participated in the study with a response rate of 98.5%. The mean age of the participants was 22 with minimum and maximum of 18 and 26 years old respectively. Majority of the respondents were (39.4%) orthodox religion followers. About 89(33.7%) participants' parents had educational status of can read and write. Widely held (37.9%) ethnic group were Oromo and 169 (64.0%) participants were living alone (Table 1).

Table 1 Socio Demographic characteristics of rift valley university students, Jimma Zone, South West Ethiopia, 2018. (N=260)

Characteristics	Responses	Frequency	Percent
Sex	Male	118	45.4
	Female	142	54.6
Age	<19	1	0.4
	19-23	153	58.8
	>24	106	40.8
Ethnicity	Oromo	100	37.9
	Yem	26	10.2
	Dawuro	55	21.6

Table continue

Characteristics	Responses	Frequency	Percent
Religion	Kaffa	64	24.2
	Others	15	6.1
	Orthodox	104	40
	Protestant	78	30
	Muslim	68	26.2
	Others	10	3.8
Educational status of family	Can't read and write	32	12.3
	Only read and write	89	34.2
	8-Jan	58	22.3
	12-Sep	35	13.5
Living status	College & university	46	17.7
	With family	80	30.8
	Alone	167	64.2
	Other	13	5
Year of the study	First	39	15
	Second	37	14.2
	Third	121	46.5
	Fourth	63	24.2
Family income in ETB	<500	19	7.3
	500-1000	36	13.8
	1000-1500	35	13.5
	1500-2000	41	15.8
	>2000	129	49.6

Other (ethnicity*amhara, tigre living status* with relative religion*adventist, jiova and catholic)

Table 2 Showing sexual characteristics among Rift valley university students, jimma zone, south western Ethiopia, 2018. (n=260)

Characteristics	Response	Frequency	Percent
Sex partner	Yes	102	89.5
	No	12	10.5
Relationship with sex partner	An acquaintance	13	12.7
	A friend	10	9.8
	Finance	34	33.3
	Boy/Girl friend	45	44.2
Reason for sexual initiation	Fall in love	87	76.3
	Raped	3	2.6
	Peer pressure	24	21.4

Substance use history

Majority of participants 144(55.4%) has no history for any substance usage while 116(44.6%) has used at least one substance in their life time. Eighty three (71.6%) of respondents have history for using chat (figure 2&3).

Sexual history

The overall prevalence of pre-marital sex among study participants was 43.8% while, 56.2% has no sexual history (Figure 4).

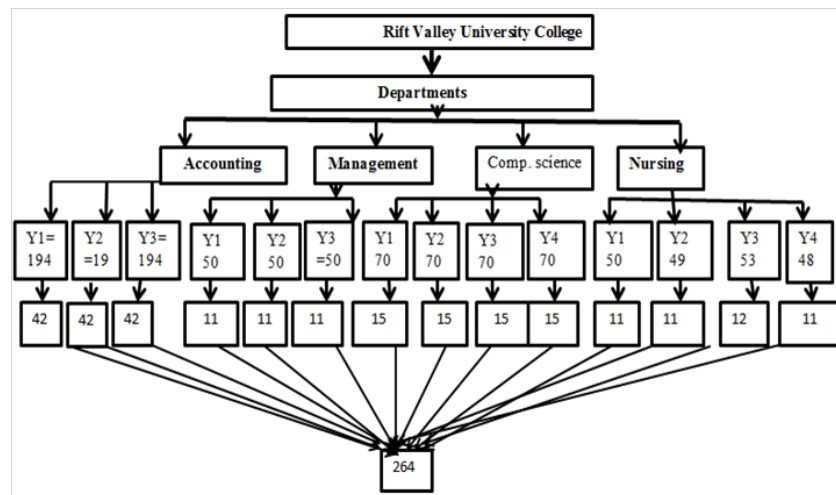


Figure 1 Schematic presentation of sampling procedure in Rift valley university, jimma campus, south west Ethiopia, 2018.

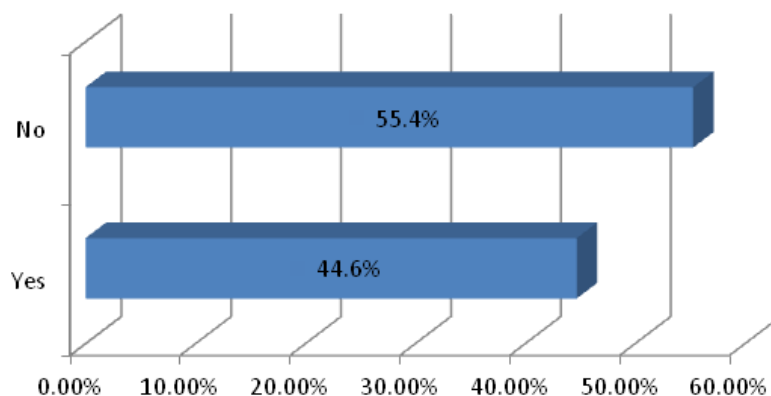


Figure 2 Substance use history among rift valley university students jimma campus, south western Ethiopia, 2018, N= 260.

Types of substance used by participants

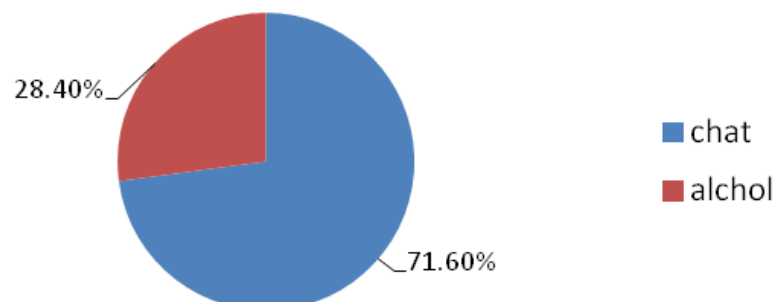


Figure 3 Types of substances used by the participants, jimma zone south western Ethiopia, 2018(n= 260).

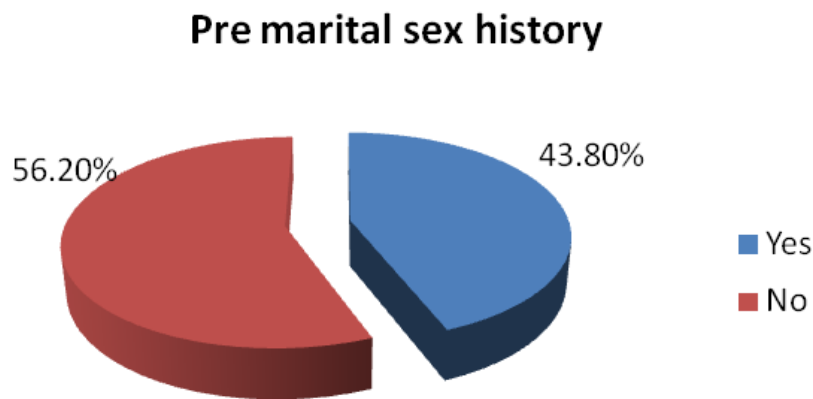


Figure 4 sexual history among rift valley university students, south western Ethiopia, 2018, n=260.

Among the participants, majority has (89.5%) sexual partners and 44.2% responded that the current relationship between them was Boy/Girlfriend relation. In this study the minimum age of the sexual debut was 16 years old and the most reason (63.4%) for initiation of premarital sex is fall in love (Table 2).

Factors associated with premarital sex among participants

All variables with P value less than 0.25 from bivariate logistic regression analysis were moved to multivariate logistic regression to control confounding variables and to identify independent factors of premarital sex (table 3).

Living status (other^o with relatives) *statistically significant at $P < 0.05$ in crude and **statistically significant at $P < 0.05$ in adjusted logistic regression analysis respectively.

The above multivariate analysis showed that; Living status and substance use were independent predictors of pre- marital sex practice among the participants. The likely hood of practice of pre- marital sex among students who lived alone were almost four times higher compared to those students who lived with their family, AOR = 3.7 CI (1.91, 7.52). The odds of practice of premarital sex among students who lived with relatives were six times more likely compared to students lived with family, AOR = 6.4 CI(1.85,27.45).The above table also showed that; the odds of pre- marital sex practice among substance user were five times more compared to none users, AOR = 4.6 CI(2.59,8.46).

Table 3 Crude and adjusted odds ratio from logistic regression analysis of factors of premarital sex among Rift valley university students, Jimma zone, south western Ethiopia, 2018. (N=260)

Variables		Pre-marital sex practice					
		No	(%)	yes	(%)	COR(95%CI)	AOR(95%CI)
Year of the study	First year	19	13	20	17.5	1.1(.521,2.75)	1.7(.634, 4.785)
	Second year	24	16.4	13	11.4	.5(.28, 1.36)	.743(.272, 2.05)
	Third year	70	47.9	51	44.8	.20(.435, 1.47)	.698(.344, 1.42)
	Fourth year	33	22.6	30	26.3	1	1
Educational status of the family	Can't read and write	21	14.4	11	9.6	.52(.20, 1.329)	.700(.240, 2.04)
	Only read and write	57	39	32	28.1	.56(.273, 1.15)	.599(.235, 1.52)
	Grade 1-8	30	20.5	28	24.6	.93(.430, 2.02)	.849(.355, 2.30)
	Grade 9-12	15	10.3	20	17.5	1.3(.551, 3.22)	.925(.351, 2.43)
	College and university	23	15.8	23	20.2	1	1
Living status	With family	62	54.4	18	15.8	1	1
	Alone	80	54.8	87	76.3	3.7(2.0,6.86)*	3.8(1.9, 7.52)**

Table continue

Variables		Pre-marital sex practice					
Substance use	Other “	4	2.7	9	7.9	7.8(2.2,28.2)*	6.4(1.8,3.45)**
	Yes	42	28.8	74	64.9	4.5(2.7,7.74)*	4.67(2.5,8.4)**
	No	104	71.2	40	35.1	1	1

Discussion

This study depicted that 114(43.8%) of participants were practiced pre-marital sex. This finding was much more compared to other studies conducted in other countries like Canada (26%), Kathmandu (16%) and Tanzania (1.75%).^{14,15,16} The possible explanation for this variation may be due to awareness for premarital sexual consequences in developed countries like Canada. The variance of prevalence in comparison with African country ,Tanzania is in fact that the population included in the study were in age group between,⁹⁻¹⁸ while in current study the minimum age included was 18. This finding was found to be lower than studies conducted in other parts of Ethiopia like in Robe TVET College (51.9%) and Madawalabu University (59.9%).^{17,18} The possible suggestion for this variation could be due to sample size variation in which 387 and 368 participants were involved in theses study site, while 260 in present study.

In present study living status of the students and substance use history were found to be independent predictors of premarital sexual practice. The odds of practicing premarital sex in students who lived alone and with relatives were four, AOR=3.7 CI (1.91, 7.52) and six, AOR = 6.4 CI (1.85, 27.45) times more than students lived with family respectively. This finding was consistent with study from Uganda where absence of near supervision of family was strongly associated with pre-marital sex practice. This is in fact that the involvement of family during adolescent hood in different sexual related activities can restrict adolescents from bad habits and may have positive outcomes.¹⁹⁻²¹

This study revealed that substance use history was strongly associated with premarital sexual practice. The likelihood of having pre-marital sex among substance users were five times more than none users, AOR=4.6 CI (2.59, 8.46). This was consistent with many studies where substance use was significantly associated with premarital sexual practice.²²⁻²⁴ This is due to the fact that the use of substances likes alcohol and chat can motivate and force them in engagement of sexual practice.

Conclusion and recommendations

1. In this study pre- marital sex practice among students were found to be high. Living status and substance use were independent predictors of premarital sex in students.
2. Based on the findings the following recommendations were drawn.
3. Jimma zone health bureau should strengthen addressing in community and family involvement in adolescent health and substance use habit.
4. Rift Valley University, Jimma campus should establish integrated effort to address adolescent sexual health by coordinating anti HIV and reproductive club.

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Availability of data and materials

The raw data may be available for reasonable request unless it is not attached in this paper for the sake of the participants' privacy.

Authors' contributions

All authors were participated equally.

Ethics approval and consent to participate

The study was approved by institutional review board of Jimma University. Permission letter was given to Rift valley university jimma campus dean before data collection. The purpose and procedure of data collection was clearly stated, confidentiality and privacy were ensured. The right to refuse or to withdraw from the study was also informed for the participants.

Conflicts of interest

The authors declare that they have no conflicts interests.

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