

Original Research Article

Assessment of magnitude of risk sexual behavior among Mizan high school and preparatory school students, South West, Ethiopia, 2016: descriptive cross-sectional study

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ABSTRACT

Background: Risky sexual behavior increases the likelihood of adverse sexual and reproductive health consequences such as unwanted pregnancies, unsafe abortion and sexually transmitted infections including HIV/AIDS. Adolescent in Sub Saharan Africa, including Ethiopia are highly risky to various risky sexual behaviors. The aim of this study is to assess the magnitude of risky sexual behavior Among High School and Preparatory School Students in Mizan town, Ethiopia.

Methods: Schools based cross sectional study design were conducted from April 23 – 27, 2016 in high school and preparatory school students in Mizan town and the data will be collected through self-administered questionnaire. Total of 308 study subject were included in the study. Individuals were selected through simple random sampling techniques. Data was entered and analyzed by using SPSS version 20.

Results: A total of 308 study subjects were participated. About 204 (66%) of them were between the age of 16-18 years. The overall risk sexual behaviors of the respondents were about 158 (51.3%). Regarding to their sexual partner, about 20(18.87%) of them were had sex with commercial sex workers.

Conclusions: A considerable number of students have practiced risky sexual behavior that might predispose them to different sexual and reproductive health problems. Risky sexual behaviors were proven by having sex under the influence of alcohol and khat, having multiple sexual partners, having sexual intercourse with commercial sex workers and low practice of utilization of condoms.

Keywords: Risk sexual behavior, Mizan high school and preparatory school, Ethiopia

INTRODUCTION

Sexually transmitted diseases are among the most common illnesses in the world and have far reaching health social and economic consequences. STDs are important because of their magnitude, potential complications and their interaction with HIV/AIDS. According to WHO report on global incidence and prevalence of selected curable sexually transmitted infections, the total number of new cases in the world of the four STIs in 2008 in adults between the ages of 15

and 49 was estimated to be 498.9 million. The total number of new cases in Africa of the four STIs in 2008 was estimated to be 92.6 million: 8.3 million cases of *C. trachomatis*, 21.1 million cases of *N. gonorrhoeae*, 3.4 million cases of syphilis and 59.7 million cases of *T. vaginalis*.¹

Adolescents and young adults have an increased interest in the opposite sex, highly concerned with physical and sexual attractiveness, and are frequently changing relationships.² As evidenced by different literatures early

sexual debut among youths is influenced by a wide range of factors including age, sex, residence, peer influence, parent youth communication concerning reproductive health, exposure to sexual explicit media, alcohol drinking, khat chewing, and ever having a boy or a girl friend were associated with increased sexual debut, while living with parents was associated with decreased premarital sexual debut.³

University students are in the youth age category and are exposed to risky sexual behaviours such as unprotected sexual intercourse leading to HIV, other STIs and unwanted pregnancies.⁴ The 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.⁵

Majority of HIV infections are transmitted through unprotected sexual contact.⁶ A study in Wolayta Sodo University in Ethiopia indicated the prevalence of at least one STD associated syndromes in 12 months which was 19%.⁷

Students are in the age range with the highest rates of new HIV infections.⁸ The university environment with its attendant relative lack of parental supervision, exposure to wide spread substance use and peer-pressure offers great opportunity or young people, who are bridging from adolescence to adulthood, to test the limits of their new found freedom through sexual experimentation.^{9,10} Such experimentation frequently involves engagement in risky sexual activities such as multiple partnerships, inconsistent use of condoms, and having sex under the influence of alcohol or drugs.¹¹

METHODS

Study area and period

This study was conducted in Mizan high school and preparatory students from April 23-27, 2016. G. C. Mizan is located in Southern nation and nationality of Ethiopia. It is known coffee growing country in Ethiopia. The town is located approximately 561 Km South-west of Addis Ababa and encompasses 5 kebeles in the center and 10 woreda around and estimated population in 2010 is over 48,934. They have public services like telephone, 24 hours electricity, radio station, teaching hospital, higher clinics, health centers, Health colleges, Technical and Vocational schools, University and other public institutions which are giving services. There are 2 private and 2 governmental secondary schools (Mizan high school and preparatory school and Aman high school and preparatory school). The study conducted in governmental high school and preparatory at Mizan high school and preparatory.

Study design

A descriptive cross-sectional study was conducted to assess the magnitude of risk sexual behavior among students of Mizan high school and preparatory.

Source population

All Mizan high school and preparatory regular students

Study population

All Mizan high school and preparatory school regular students who were randomly selected from each class.

Inclusion criteria

All students who were attending at the time of data collection in Mizan High School and preparatory school

Exclusion criteria

Those were seriously ill to the extent of unable to respond during the data collection period.

Sample size determination and sampling procedures

A single population proportion formula, $[n = \frac{Z_{\alpha}^2 \times p(1-p)}{d^2}]$, was used to estimate the sample size. The following assumptions were made while calculating the sample size. The degree of precision or margin of error chosen to be 0.05 with the reliability coefficient of 1.96% certainty ($Z=1.96$). Prevalence rate of risk sexual behavior among students of Pawi high school and preparatory 24%.¹²

The final sample size for this study with 10% the non-response rate is a total of 308 students and simple random sampling technique was used. The students for each section under each grade level (9th, 10th, 11th and 12th) was proportionally allocated and then randomly selected to be a participant.

Data collection technique and tools

Data was collected using structured self-administered questionnaires which is adopted and modified from different literatures.^{12,13} The questionnaires were prepared in English and were pretested among 5% of the total students at Aman high school and preparatory school, before the actual data collection was conducted. After checking of questionnaires completeness with a pretest, the actual data collection with self-administered questionnaires was conducted by using structure questionnaire. Fourth year Nursing Students were the data collector who were principal investigators they were responsible to lead the whole situation of the data collection process to check the data consistency and completeness.

Data quality assurance

The quality of data was assured by properly designed and pre-tested of the questionnaire, proper supervision of data consistency and completeness throughout the data collection and analysis. The data collectors were discussed on methods of data collection and the questionnaire was checked on a daily basis for completeness during data collection. The data was checked in the field to ensure that all the information will properly collect.

Data processing and analysis

Data was entered by SPSS version 20 and after data cleaning for its completeness, analysis was done. Frequency and percent were used to summarize and

present major findings to all variables of the study population by using tables, charts and graphs.

RESULTS

Socio-demographic characteristics of the respondent

A total of 308 study subjects were participated in this study with 100% response rate and of which 167 (64%) were females and 141 (46%) were males. The mean age of the respondents was 18. From the total population of 308 students, 204 (66%) of them were between the age of 16-18 years. Most of the respondents, 126 (40%) were protestants. Of the total respondents, 211 (69%) of them were living in urban areas. Of the total participants, 290 (94%) of respondents were living with both their parents. Among the total participants, 261 (82%) of them were SNNRP (Table 1).

Table 1: Socio-demographic characteristics of the respondents (n=308) in Mizan High School and Preparatory School, 2015/16.

Variables	Frequency N=308	Percent (%)
Age	16-18	66
	19-21	21
	22-24	12
Sex	Female	64
	Male	46
Religion	Protestant	40
	Orthodox	33
	Muslim	25
With whom do you live now	Both my parents	94
	My mother only	3
	My father only	1.5
	With friends	1.5
Ethnicity	SNNRP	82
	Amhara	9
	Oromo	6
	Tigre	3
Place of residence	Rural area	31
	Urban area	69
Educational status of the family	Uneducated	18
	Read and write	34.4
	Elementary	14.3
	Secondary school	5.7
	Tertiary school	27.6
Parents' income Per month	<750 birr	24
	>750 birr	76

Preference of sex education and awareness about risk sexual behavior

Of the total participants about 247 (80%) of them prefers/wants sex education. Regarding to participants source of information about sexual matters, about 298 (96.7%), 201 (65), 41 (13.4) of the participant have heard

about sexuality from school, peers and home respectively (Table 2).

Reasons for risk sexual behavior

About 266 (86.3%), 172 (55.8%), 289 (93.8%) of the participants replied that having multiple sexual partner, watch pornography & erotic regularity, sex with a

prostitute is taken as of high risk for STIs and HIV respectively. About 107 (34.74), 56 (18.18), 81 (26.30) of the participants commonly drink alcohol, smoke cigarette, and chew chat respectively (Table 3).

Practice of risky sexual behavior

The overall risk sexual behaviors of the respondents, more than half of which were about 158 (51.3%) were replied that they were practicing risky sexual behavior. Of the total participants who ever had sexual experience, most 54 (50.94%) of them had multiple sexual partner. Most of the participants, 77 (72.64%) didn't use any form of contraceptive and or barriers during their first sexual exposure. Regarding to their sexual partner, about 20 (18.87%) of them were had sex with commercial sex workers (Table 4).

Concerning to the participants initiation of sex, from the total participants, about 32 (30.19%), 26 (24.53%), 17

(16.04%) of them were start sex due to personal desire, peer pressure and economic problem (Figure 1).

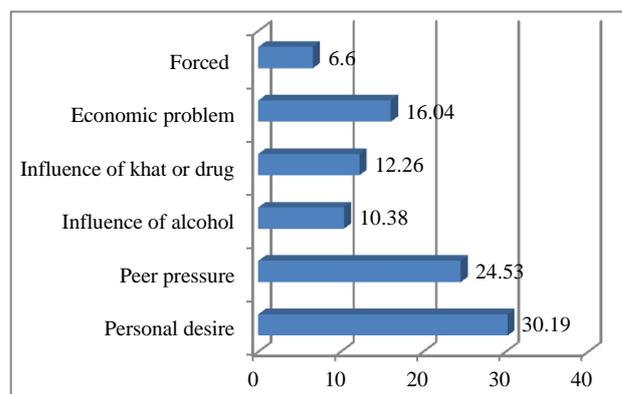


Figure 1: Respondent's reasons mentioned for their fist sexual exposure in Mizan High School and Preparatory School, 2015/16.

Table 2: Respondent's awareness about risk sexual behavior in Mizan High School and Preparatory School, 2015/16.

Variables		Frequency	Percentage (%)	
Participants who prefer/want sex education	Yes	247	80	
	No	61	20	
Participant preference for sex education to be Given/delivered	School	Yes	239	96.7
		No	8	3.3
	Home	Yes	86	35
		No	161	65
	Peers	Yes	240	97
		No	7	3
	Church/Mosque	Yes	46	18.7
		No	201	81.3
	Health institution	Yes	230	93
		No	17	7
Participant source of information about sexual matters	School	Yes	298	96.7
		No	10	3.3
	Home	Yes	41	13.4
		No	267	86.6
	Media	Yes	234	76
		No	74	24
	Peers	Yes	201	65
		No	107	35
	Health institution	Yes	89	28.8
		No	219	71.8
Participant ever heard about STIs	Yes	304	98.70	
	No	4	1.30	
Types of STI that participant know	Syphilis	Yes	237	77
		No	71	33
	HIV	Yes	304	98.7
		No	4	1.3
	Cancroids	Yes	256	83
		No	52	17
	Gonorrhea	Yes	237	77
		No	71	33

Table 3: Respondent’s reasons mentioned and practiced risk behaviors in Mizan High School and Preparatory School, 2015/16.

Variables		Frequency	Percentage (%)	
Reasons of high risk for STIs and HIV mentioned by participants	Have multiple sexual partner	Yes	266	86.3
		No	42	13.7
	Practice that chewing, smoking cigarette and drinking alcohol	Yes	193	62.6
		No	115	37.4
	Attending night club	Yes	274	89
		No	34	11
	Watch pornography & erotic regularity	Yes	172	55.8
		No	136	44.2
	Sex with prostitute/commercial sex workers/without condom	Yes	289	93.8
		No	19	6.2
Factor /s/ for initiation of sexual desire	Watch pornography & erotic regularity	Yes	237	77
		No	71	23
	Sex providing type of dressings	Yes	203	67
		No	105	33
	Attending night club	Yes	284	92.2
		No	24	7.8
	Practice of substances like chat	Yes	268	87
		No	40	13
	Peer pressure	Yes	212	68.8
		No	96	31.2
Activities/ behaviors that commonly/ regularly used/ performed by participants	Chewing chat	Yes	107	34.74
		No	201	65.26
	Smoking cigarette	Yes	56	18.18
		No	252	81.82
	Using Shisha	Yes	7	2.27
		No	301	97.73
Drinking alcohol	Yes	81	26.30	
	No	227	73.70	

Table 4: Respondent’s practice of risk sexual behaviors in Mizan High School and Preparatory School, 2015/16.

Variables		Frequency	Percentage (%)
Practice of risky sexual behavior	Yes	158	51.3
	No	150	48.7
Participants ever had sexual experience	Yes	106	34.42
	No	202	65.58
Participants who had sex with person other than regular partner	Yes	49	46.23
	No	57	53.77
Participants when they start sex	14-16	18	16.98
	17-19	36	33.96
	20-22	52	49.06
Participants reason for initiation of sex (n=106)	Personal desire	32	30.19
	Peer pressure	26	24.53
	Influence of alcohol	11	10.38
	Influence of khat or drug	13	12.26
	Economic problem	17	16.04
	Forced	7	6.60
Participants who use contraceptives and or barrier methods when they had first sex	Yes	29	27.36
	No	77	72.64
Methods used by participants during first sexual intercourse (n=29)	Condom	13	44.83
	Pills	7	24.14
	Withdrawal	3	10.34
	Rhythm	6	20.69

Variables	Frequency	Percentage (%)	
Participants first sexual partner (n=106)	Boy/girl friend	73	68.87
	Relatives	9	8.49
	Stranger/unknown person	4	3.77
	Sex worker	20	18.87
Number of sex partners	One	52	49.06
	Multiple	54	50.94

DISCUSSION

A descriptive cross-sectional study was carried out to determine the participants' magnitude for risky sexual behavior. Accordingly, the participant's magnitude of risk sexual behavior was identified.

In this study, the overall risk sexual behaviors of the respondents were about 158 (51.3%). This result is higher compared to study done in Boditi, Humera and Benishangul which showed that the prevalence of risky behaviors were 17.9%, 13.7% and 24%, respectively.^{12,14,15} This disparity might be due to the difference in the study period.

In this study, among the total students, 50.94% had multiple sexual partners. A study conducted in Wolayta Sodo University indicated that 26% of the students who had multiple sexual partners and study conducted in New York on college aged students investigated that those who had multiple sexual partners were 65.6%.^{16,17} This discrepancy of findings in different study area may be due to the difference in the socio-demographic characteristics.

In this study, about 34.42% of the total respondents had ever practiced sexual intercourse. But this finding is low compared to study done from Brazil which showed that 79% of the students had ever practiced sexual intercourse.¹⁸ This difference might be due to socio-cultural variation of the study areas.

In this study personal desire (30.19%), peer pressure (24.53%), forced (6.60%), chat influence (12.26%) and economic problem (16.04%) were the causes reported since the beginning of sexual practice. Likewise, a study finding from Bahir Dar, Oromia and Benishangul regions found that personal desire (46,39%, 27%) and peer pressure (27, 23%, 16%) were the reasons reported for initiation of sexual intercourse respectively.^{12,13,19} This signifies that the influence of adolescents' action in their sexual relationship depends on many factors that lead them to practice risky behavior.

CONCLUSION

Based on the above findings a considerable number of students have practiced risky sexual behavior that might predispose them to different sexual and reproductive health problems. Risky sexual behaviors were proven by

having sex under the influence of alcohol and khat, having multiple sexual partners, having sexual intercourse with commercial sex workers and low practice of utilization of condoms.

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Conflict of interest: None declared

Ethical approval: The study was approved by the institutional ethics committee of Mizan Tepi University, collage of health science, department of nursing

REFERENCES

1. Rowley J, Toskin I, Ndowa F. Global incidence and prevalence of selected curable sexually transmitted infections: 2008. Global incidence and prevalence of selected curable sexually transmitted infections; 2012: 20.
2. Nicholson J. Risky Sexual Behaviour among Adolescents and Young Adults. University of North Carolina Chapel Hill. 2012.
3. Berhanu L, Haidar J. Does exposure to sexually explicit films predict sexual activity of the in-school youth? Evidence from Addis Ababa High Schools. EJHD. 2016;23(3):183-9.
4. Tura G, Alemseged F, Dejene S. Risky sexual behavior and predisposing factors among students of Jimma University, Ethiopia. Ethiop J Health Sci. 2012 Nov;22(3):170-80.
5. Mitike G, Lemma W, Frehiwot B, Ayele R, Assefa T, G/Michaek T, Enqusellassie F, Alem A, Yigeremu A, Kebede D: HIV/AIDS Behavioral Surveillance Survey, Round One. Federal Ministry of Health, Ethiopia. 2002.
6. Demographic E. Health survey 2011 central statistical agency Addis Ababa. Ethiopia ICF International Calverton, Maryland, USA. 2012.
7. Yohannes B, Gelibo T, Tarekegn M. Prevalence and associated factors of sexually transmitted infections among students of Wolaita Sodo University,

- Southern Ethiopia. *Int J Sci Technol Res.* 2013;2(2):86-94.
8. Mulu W, Yimer M, Abera B. Sexual behaviours and associated factors among students at Bahir Dar University: a cross sectional study. *Reproductive Health.* 2014;11(1):84.
 9. Lewis JE, Malow RM, Ireland SJ. HIV/AIDS risk in heterosexual college students: A review of a decade of literature. *J Am College Health.* 1997;45(4):147-58.
 10. Duncan C, Miller DM, Borskey EJ, Fomby B, Dawson P, Davis L. Barriers to safer sex practices among African American college students. *J National Med Assoc.* 2002;94(11):944.
 11. Nakornkhet N, Crowe J, Torabi M, Ding K, editors. Sexual behaviours and alcohol use among college students [Abstract 60047]. *International Conference on AIDS Abstracts;* 1998.
 12. Agajie M, Belachew T, Tilahun T, Amentie M. Risky Sexual Behavior and Associated Factors Among High School Youth in Pawe Woreda Benishangul Gumuz Region. *Sci J Clin Med.* 2015;4(4):67-75.
 13. Amare H, Azage M, Negash M, Getachew A, Desale A, Abebe N. Risky Sexual Behavior and Associated Factors Among Adolescent Students in Tana Haik High School, Bahir Dar, Northern Ethiopia. *Int J HIV/AIDS Prevention, Education Behavioural Sci.* 2017;3(4):41-7.
 14. Daka D, Shaweno D. Magnitude of risky sexual behavior among high school adolescents in Ethiopia: A cross-sectional study. *J Public Health Epidemiol.* 2014;6(7):211-5.
 15. Dadi AF, Teklu FG. Risky sexual behavior and associated factors among grade 9–12 students in Humera secondary school, western zone of Tigray, NW Ethiopia, 2014. *Science J Public Health.* 2014;2(5):410-6.
 16. Adinew YM, Hagos MA. Sexual violence against female university students in Ethiopia. *BMC Int Health Human Rights.* 2017;17(1):19.
 17. Caico C. Sexually risky behavior in college-aged students. *Open J Preventive Med.* 2014;4(5):354.
 18. Sanchez ZM, Martins SS, Opaleye ES, Moura YG, Locatelli DP, Noto AR. Social factors associated to binge drinking: a cross-sectional survey among Brazilian students in private high schools. *BMC Public Health.* 2011;11(1):201.
 19. Nassir I. Factors That Influences School Adolescents Exposure To HIV/STD In Bale, Oromia Region. 2004.

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