academicJournals

Vol. 10(1), pp. 6-15, January 2018 DOI: 10.5897/JPHE2016.0962 Article Number: 17E8A5966927 ISSN 2141-2316 Copyright © 2018 Author(s) retain the copyright of this article http://www.academicjournals.org/JPHE

Journal of Public Health and Epidemiology

Full Length Research Paper

Substance use and factors associated with risky sexual practice in school youth in Asella Town, South-East Ethiopia, 2017

Solomon Mariam W.¹, Nega Assefa², Solomon Tejineh^{3*} and Hiwot Zelalem³

¹Assela Town Health Office, Assella, Ethiopia.

²Department of Public Health, College of Health Science, Haramaya University, Ethiopia. ³Department of Public Health, College of Health Science, Arsi University, P. O. Box 396, Assela, Ethiopia.

Received 11 August, 2017; Accepted 18 September, 2017

Globally, risky sexual behavior accounts for large number of opportunities for sexually transmitted infection including human immunodeficiency virus and unintended pregnancy. The study is intended to describe substance use and factors associated with risky sexual practice among school youth. School based cross sectional study was conducted through self-administered questionnaire. Simple random sampling technique was used to select 614. Epi info Version 7 and SPSS version 21 were used. Descriptive statistics and binary multiple logistic regression analysis was done by including variables with p<0.2 in the crude analysis and P-value<0.05 was considered statistically significant. From study participants; 201(33.6%) respondents were sexually active. Among them, 120 (20.07%) had practiced risky sexual intercourse, during sexual intercourse 112 (18.7%) did not use condom consistently. Peer pressure influence to sexual intercourse were 4.4 times more likely having risky sexual practice compared to those who had no influenced by peers pressure [AOR: 4.4 ,95% CI (2.748,6.917)]. Students who drink alcohol were 1.98 more likely to have risky sexual practice than those who did not drink alcohol [AOR=1.98, 95% CI (1.224, 3.190)]. Students who did not discuss openly about sexual and reproductive health issues with parents were 1.86 times more likely to practice risky sexual intercourse compared to their counterparts (AOR:1.86, 95%CI (1.149, 3.009). Conclusively, risky sexual behavior and substance use related issues should be considered in school curriculum. Health authorities should implement youth friendly services in schools and government bodies should incise a strict and sustainable measurement against selling alcohol to under 18 years old.

Key words: Risky sexual behavior, substance use, school youth.

INTRODUCTION

Risky sexual practice is defined as any human sexual

contact which put individual's physical, social and

*Corresponding author. E-mail: Stejineh@yahoo.com.

Author(s) agree that this article remain permanently open access under the terms of the <u>Creative Commons Attribution</u> <u>License 4.0 International License</u> psychological health at risk (Malhotra, 2008). It include when unprotected sexual intercourse, early sexual debut and multiple sexual partners occur in a broader context (Blum et al., 2005). The intensity of involvement in sexual risk practice ranges from no sexual relationship to unprotected sexual intercourse with multiple partners and prostitution. Although risky sexual practice does not always indicate a high-risk lifestyle, it often clusters with other risky behaviors, including substance use, violence involvement and poor school performance (Rosenthal, 2012). There are four main types of risks that may arise from sexual activity: unwanted pregnancy, sexually transmitted infection (STI including HIV), physical and psychological injury (National Youth Policy, 2004).

Youth constitutes the population (15 to 24 years of age) and it is a stage in which young people are confronted with some models of major roles that they are supposed to emulate in adult life (National Youth Policy, 2004).. This segment of the population constitutes more than one billion of the world population; one-fifth of the world's population includes youth and young adults, with more than four-fifths in developing countries. Young people constitute one third of the total population in Ethiopia. During the transition from childhood to adulthood, youth establish patterns of behavior and make lifestyle choices that affect both their current and future health (WHO, UNAIDS, UNICEF, 2008).

Youth begin thinking about the future and places more emphasis on goal-setting and self-esteem. However, youth may begin to exhibit more risky sexual behaviors during these ages (McNeely, 2009). It may result from being easily influenced by peers, cultural taboos, inadequate sexual communication, limited support from parents and inappropriate parenting roles (Underwood et al., 2011). Risky sexual practice accounts for all sexually transmitted diseases including HIV/AIDS, psycho social problems such as emotional ability, altered self-esteem, depression, impaired ability to form long term relationship (Malhotra, 2008).

Drug and alcohol use have potential roles in predisposing youths to practice unprotected sex due to urbanization, modernization, exposure to western life style, viewing pornographic materials and other factors associated with early sexual initiation.

Western pornography often preceded sexual initiation and help couple "get into the mood" (Russell et al., 2007). Youths are assets of the society and change agents in filling the gap on whom the future of the country is based. It is 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 social and economic cost, both immediately and in the future. One of the most important commitments a country can make for future economic, social and political progress and stability is to address the sexual and reproductive health needs of this population group (Kilmarx, 2009).

The mission of the ministry of health of Ethiopia is "to

promote good health and reduce illness, ensure access to good and affordable health care and pursue medical excellence". Moreover, the vision of the Ministry Of Education is "building an education and training system which assures quality and equality of education by the year 2020 that aims at producing competent citizens" (Guttmacher, 2011; Sexual Risk Behavior, 2011). Therefore, this study is aimed to describe magnitude of substance use and identify factors associated with risky sexual behaviour in secondary school students which help to provide evidence based valuable information for the decision makers to achieve these mission and vision.

METHODS

Study area and design

School based quantitative cross-sectional study was done in February 2017 in Asella town which is located in Arsi zone of Oromia regional state about 175 km South east Addis Ababa, the capital city of Ethiopia (Table 1). The town has two preparatory, four Governments and four private secondary schools.

Population and sample size calculation

School youths in Asella town were the source population and according to Asella town education office, 9806 students were registered within nine to 12 grades in academic year 2016/2017 (Table 2). Sample size for the first objective was calculated using single population proportion formula by considering the assumptions: of total regular students 9806, proportion of risky sexual behavior 61.5% (Dekeke and Sandy, 2014) 95% confidence interval (CI), 5% margin of error, correction formula with 5% non-response rate gives 356 samples. For the second objective of taking substance use as factors for risky sexual practice which gives sample of 410, then the maximum sample was taken with a design effect of two makes final sample size 614.

Sampling procedures

The study was conducted in randomly selected (one preparatory and two secondary) schools in Assella town 2017 by lottery method. The first sample was proportionally allocated then representative samples were selected from each stratum through simple random sampling techniques by random table generation using SPSS.

Data collection tools and procedures

Structured self-administer questionnaire was prepared in English through reviewing literatures and translated to Amharic and Afanoromo then back to English to ensure consistency. Pre-test was done on 5% of the sample in Dosha secondary school and necessary modifications were made. Three diploma nurses were assigned for facilitation of data collection and training was given for supervisors and facilitators. Data was double-entered to assure data quality.

Data management and analysis

The collected data was reviewed and checked for completeness

	- (2)		
Variable (n=598)	Frequency (%)		
Age			
15-18	414(69.2)		
19-24	184(30.8)		
Sex			
Male	292(48.8)		
Female	306(51.2)		
Level of education			
Grade 9	166(27.8)		
Grade 10	156(26.1)		
Grade11	135(22.6)		
Grade 12	141(23.6)		
Religion			
Orthodox	356(59.5)		
Muslim	129(21.6)		
Protestant	89(14.9)		
Catholic	24(4)		
End of the			
Ethnicity	004/54.0		
Oromo	324(54.2)		
Amhara	149(24.9)		
ligray	27(4.5)		
Gurage	63(10.5)		
Others#	35(5.9)		
Paisad by			
Raised by	500(83.6)		
But and parent	500(65.0) 67(11.2)		
By one parent	07(11.2)		
Other *	31(5.2)		
Currently live with			
Both parents	404(67.6)		
Father	14(2.4)		
Mother	84(14)		
Alone	72(12)		
Others 🐥	24(4)		

 Table 1. Socio-demographic characteristics of school youth in Asella, South-East Ethiopia, 2017.

Others#; Hadiya, wolayita, Sidama, Adere, Kembata. Others*;grandmothers,grandfathers, aunt, uncle. Others*; aunt, uncle, Brothers, sisters.

before data entry then coded and entered into Epi info Version 7 finally exported to SPSS for cleaning and analysis. Descriptive statistics was done. Multivariate binary logistic regression analysis was estimated by taking all explanatory variables with p<0.2 in crude analysis (Table 4). The crude and adjusted odds ratio with 95% CI was computed and P-value<0.05 was considered statistically significant.

The model was built through stepwise logistic regression

technique. Confounders and interaction effect was checked by likelihood ratio test. Multicollinarity was checked by Variance Inflation Factors (VIF). Outliers were checked by standardized residual and influential observations were also checked by dfbeta statistics.

The overall model goodness of fit was checked by Hosmer-Lemeshow and the prediction power by Receiver-Operating Characteristic (ROC). Ethical clearance was obtained from Institutional Review Board (IRB) of Arsi University. Informed oral consent was taken from each participant and all the information gained during data collection was kept confidentially.

RESULTS

Demographic and socio-economic characteristics

Totally, 598 students participated which makes the response rate 97.4%. Majority respondents (414, 69.2%) were between the age 15 to 18 years old with mean age 17.9 \pm 1.7. About half, (306, 51.2%) were females and most of them (356, 59.5%) were orthodox Christian in religion. More than half (324, 54.2%) were Oromo ethnic group. Currently, 404 (67.6%) of the respondent were living with both parents. Nearly half (245, 45.1%) of student's father educational level were college and above, whereas 35 (6.5%) were unable to read and write. Related to mothers educational level about 135 (23.2%) of student's mothers' were collage level and above but 69 (12.1%) were unable to read and write.

Substance use and other behavioral characteristics

Substance abuse in the last 12 month among the respondents were 218 (36.45%) of those; 121 (55.5%) were males, half of them (119, 54.6%) were less than 18 years old. The most common substance abused was alcohol which accounts for 125 (20.9%). That was the second most abused substance which account for 67 (11.2%), mostly used by 34 (50.7%) male participants. Smoking cigarettes (16, 2.6%) and shisha (10, 1.6%) were also used. About 322 (53.8%) had exposure to sexual explicit media, of those, 214 (66.4%) were aged below 18 years old and 162 (50.35) were females. About 212 (35.5%) of their best friend's had sexual history and out of those, 25 (4.2%) practiced sexual intercourse urged with prostitutes.

Knowledge related with pregnancy and HIV

Two third (385, 64.4%) of the respondents believed that pregnancy could occur at 14th day of menstrual cycle, while 24 (4%) believed it can occur during menstrual period. About half (288, 48.2%) agreed that a girl could be pregnant before her first menstruation. Almost all (587, 98.2%) believed that HIV can be prevented by being faithful and 586 (98%) believed that it can be

Variable (n=598)	Frequency (%)
Father currently alive	
Yes	543(90.8)
No	55(9.2)
Father's educational status	
Can't read and write	35(6.5)
Read and write	92(16.9)
Elementary	55(10.1)
High school	116(21.4)
College and above	245(45.1)
Father's employment status	
Employed	497(91.5)
Unemployed	46(8.5)
Mother currently alive	
Yes	571(95.5)
No	27(4.5)
Mother's adjucational status	
Can't read and write	69(12.1)
Read and write	1/3(25)
Flementary	80(14)
	144(25.2)
College and above	135(23.7)
Mother's employment status	
Employed	336(58.8)
Unemployed	235(41.2)
Parents know where you are	540(00.0)
Yes	519(86.8)
NO	79(13.2)
Parents know who are with you	
Yes	365(61)
No	233()39
Discuss on SRH issues with parents	
Yes	217(36.3)
No	381(63.7)
Family monthly income(ETB)	
0-500	13(2.2)
500-1000	63(10.5)
1000-2000	114(19.1)
2000-3000	80(13.4)
3000-5000	135(22.6)
5000-10000	164(27.4)
>10000	29(4.8)

 Table 2. Parental characteristics of school youth in Asella, south-East Ethiopia, 2017.

avoided by avoiding sharing cutting materials. On the other hand, 100 (16.7%) respondents agreed that HIV transmission can be prevented by taking antibiotics prior to sexual intercourse. About 516 (86.3%) of the respondents perceived that HIV transmission can be prevented from mother to child. In this study, 336 (56.2%) believed that a person can have STI without knowing.

Sexual characteristics

From 598 respondents, 201 (33.6%) ever had sexual intercourse of which, 120 (59.7%) were less than 18 years of age; the mean age at first sexual intercourse was 16.052±0.804 for male and 15.742±0.905 years for female. Regarding first sexual partner, 177 (88%) was boy/girlfriends while only 12 (6%) was teachers. Concerning multiple sexual partner, 98 (48.7%) and 46 (22.9%) of sexual active participants had two or more life time and within the last 12 months, respectively. From every person who had sexual intercourse less than half 89 (44.3%) used condom in their first sexual intercourse, of those 49 (55.1%) used on their own interest while 15 (16.8%) argued with joint decision. In addition, inconsistent condom user were higher (112, 55.7%) of those, 47 (42%) used condom occasionally but 25 (22.3%) never used condom. Furthermore, 47 (23.4%) faced partner's objection for condom use.

Proportion of risky sexual practice

Among the 598 secondary school youth that participated in this study, 120 (20.07%) respondents had practiced sexual intercourse less than 18 years of age with 95% CI (16.8, 23.3); among this, 62 (51.6%) were female. Regarding condom use, 112 (18.7%) did not use condom consistently with 95% CI (15.6, 21.7), more than half (66, 59%) were females. About 46 (7.7%) of sexually active participant had multiple sexual partners in the last 12 months with 95% CI (5.5, 9.8).

Factors associated with risky sexual practice

Students who had peer pressure were 4.4 times more likely to have practiced risk sexual behavior than those who had not had peer pressure [AOR: 4.36, 95%CI (2.748, 6.917)]. Students who drink alcohol were almost two times more likely to practice risky sexual behavior than those who did not drink alcohol [AOR=1.98, 95% CI (1.224, 3.190)]. Students who did not discuss openly about sexual and reproductive health issues with parents were 86% more and likely practiced risky sexual intercourse than their counterparts [AOR=1.86, 95% CI (1.149,3.009)]. Students who read/saw sexual explicit media/pornography were 60% [AOR=1.60, 95% CI

(1.010, 2.529)] more likely practiced risky sexual intercourse as compared to those who did not see or read pornography. Even though, it is not statistically significant in multivariate analysis, students who reside with one parent's were two times [AOR=2.03 (95% CI (1.165, 3.542)] more likely practiced risky sexual behavior.

DISCUSSION

Substance use and magnitude of risky sexual behavior

Even though it is possible to prevent STIs including HIV/AIDS and unplanned pregnancy through effective strategies; significant numbers of students acquire different problems due to risky sexual behavior which include: early sexual initiation. low contraceptive use rates, multiple sex partners and poor sexual negotiation skills on condom use (Malhotra, 2008; Blum et al., 2005; Rosenthal, 2012). Worldwide, young people begin sexual activity relatively earlier; similarly, one fifth of school youth in Assella town had practiced risky sexual behavior with age less than 18 years in line with study in Northwest Ethiopia (20.4%) (Bizu et al., 2015), but lower than studies conducted in Addis Ababa (26.7%) (Gizaw et al., 2014), Haramaya (25.3%) (Shore and Shunu, 2017) and Benishangul Gumuz (24.1%) (Agajie et al., 2017). On other hand higher than studies in southern Ethiopia (17.9%) (Daka and Shaweno, 2014), North West, Ethiopia (13.7%) (Dadi and Teklu, 2014) and Jiga (16%) (Kassa et al., 2016). This discrepancy might be due to biological, socio-cultural and behavioral difference between study areas that influences human sexuality (Table 3).

Having more than one sexual partner's is one of the risky sexual behaviors, which is common among youths. Among sexually active respondents 98 (49%) ever had sex with multiple sexual partners and about guarter 46 (22.9%) multiple sexual partners within the previous 12 months. The finding is in line with studies in Debre-Brehan, and Hosanna (53.4%, 47.6%) (Muluken and Maereg 2012; Likawunt and Mulugeta, 2013), but higher than other studies in Ugandan (35%) (Agardh et al., 2011), Addis Ababa (37.5%) (Nigatu and Seman (2011) and Gondar and Behar-Dar (37.5%) (Wasie et al., 2012). The disparity might be due to behavioral, cultural and socio-economical variation between settings that influence human sexuality. Beside this, knowledge and experience on related health issue might preserve them from risky practice

Even though consistent and correct use of condom is one of the effective strategies to prevent STIs including HIV/AIDS most youth did not practiced it properly. Similarly in this study less than half (44.3) of the sexually active participant had used condom consistently

Variable	Frequency (%)
Peer pressure(n=598)	
Yes	259(43.3)
No	339(56.7)
Ever seen/read pornography	
Yes	322(53.8)
No	276(46.2)
Ever had sexual intercourse	
Yes	201(33.6)
No	397(66.4)
Age at first sex (n=201)	
< 18 years	120(59.7)
> = 18years	81(40.3)
Relationship of first sexual partner	
Boy/girlfriend	177(88)
Teacher	12(6)
Others	12(6)
Initiations of first sex	
Own will	178(88.5)
Forced	7(3.5)
For Money	3(1.5)
Materials/Gifts	13(6.5)
lifetime sexual partners	400/54.0)
One Two and Marc	103(51.2)
I wo and more	98(48.7)
Sexual partners in the last 12 month	>
	155(77.1)
I wo and more	46(22.9)
Ever had sex for cash or gift	/)
Yes	15(7.5)
NO	186(92.5)
Condom used for first sex	
Yes	89(44.3)
No	112(55.7)
Suggestion for condom	
Myself	49(55.1)
My partner	25(28.1)
Joint decision	15(16.8)
Use condom at last sexual intercourse	
Yes	139(69.2)
NO	62(30.8)

Table 3. Sexual and other behavioral characteristics of school youth in Asella, South-East, Ethiopia, 2017.

Consistence condom use	
Yes	89(44.3)
No	112(55.7)
Partner's objection on condom use	
Yes	47(23.4)
No	154(76.6)
Opinion for partner's objection	
Do sex not to miss partner	15(32)
Insist on using condom	5(10.6)
I will provide condom	11(23.4)
No sex without condom	16(34)

Table 3. Contd.

*Others persons: Relatives, married persons.

whereas; about 22.3% never used condom during sexual intercourse. The result is similar with the study done in Haramaya (20.4%) whereas, the finding is lower than for other studies in Nigeria, Ugandan, Debre-Brehan, Jimma, Addis Ababa, Hawassa and Hosanna (65, 35, 53.4 69.1, 71.5, 58, 80%) (Federal Democratic Republic of Ethiopia Population Census Commission, 2008; Muluken and Maereg, 2012; Likawunt and Mulugeta, 2013; Agardh et al., 2011; Nigatu and Seman, 2011; Wasie et al., 2012; Berhan et al., 2011; Daniyam et al., 2010; Tura et al., 2012), respectively.

This discrepancy might be due to difference in sociocultural and behavioral characteristics that influence condom use, in addition availability and accessibility of condom might vary across setting. About 4.2% of sexually active male participants had sex with prostitutes and 7.5% of sexually active participant had sex for the exchange of cash, favors or gift which is similar with the report of Central Statistical Agency [Ethiopia] and ICF International (2012), report that transaction sex among men for the exchange of money was 5% (Central Statistical Agency [Ethiopia] and ICF International, 2012), addition to demographic, socio-economic and in behavioral factors, service availability and cultural of the community might contribute for this variation. In this study, substance use in the last 12 months was 36.5% with alcohol been the most commonly used substance (20.9), and among alcohol user, 35.2% had risk sexual practice which is lower than the study in Pawe Benishangul Gumuz (38.7%) (Agajie et al., 2015) but higher than that of Haramaya 32.1% by Shore and Shunu (2017).

Factors associated with risky sexual practice

Decisions of sexual activity often occur simultaneously and substance use increases the probability to initiate sexual activities and had been globally associated with youth risky sexual behaviors (Bizu et al., 2015). In-line with other studies (Abosetugn et al., 2015; Gizaw et al., 2014), this study identify alcohol conception as factor for risky sexual behavior. This could be because risk perception ability decreases with alcohol consumption; those who use alcohol were more likely to practice risky sexual behaviors. Beside, this availability and accessibility of alcohol in local places for school youths might vary across setting.

Similar with studies conducted in Jimma, Addis Ababa, Haramaya and Humera (Tura et al., 2012; Nigatu and Seman, 2011; Shore and Shunu, 2017; Dadi and Teklu, 2014) exposure to sexual explicit media/pornographic was predictor that increases risky sexual practice. However other study in Addis Ababa fails to indicate statistical significant effect (Gizaw et al., 2014). Contradicting to these findings, other study in Haramaya indicate watching sex film as protective for risky sexual behavior Dingeta et al. (2012). The discrepancy might be due to positive and negative influence of watching sex film. Some of them may get experience on how to prevent risky sexual practice whereas other groups may be liable and need to enjoy what they observe in film.

Decision-making for sexuality in adolescent is a dynamic process that can be underestimated or overestimated by external force in which peer pressure is considered to have a significant influence on youth's sexual practices (McNeely and Blanchard, 2009). Survey conducted in Asia and Africa indicated that, young women and men are under strong social and peer pressures to engaged in risky sexual behavior (Blum et al., 2005) which is the same with studies conducted in Ghana and different parts of Ethiopia (Bizu et al., 2015; Dadi and Teklu, 2014; Dekeke and Sandy, 2014; Oluwatoyin and Oyetunde, 2014; UNAIDS, UNICEF, 2007; Cherie and Berhane, 2012; Shore and Shunu, 2017). This study revealed peer pressure as predictors
 Table 4. Bivariate and multiple logistic regression analyses for risky sexual practice among school youth in Asella, South-East, Ethiopia, 2017.

Variable (n=598)	Risky p	oractice	COR (95%CI)	AOR(95%CI)	P- value
i	Yes	No			
Sex					
Male	58	234	1	1	
Female	62	244	1.025(0.687,1.530)	1.060(0.700,1.581)	0.809
Level of education					
Grade 9	31	135	0.695(0.403,1.201)	0.722(0.415,1.256)	0.249
Grade 10	27	129	0.634(0.361,1.114)	0.648(0.365,1.149)	0.137
Grade 11	27	108	0.757(0.429,1.338)	0.774(0.434,1.381)	0.386
Grade 12	35	106	1	1	
Raised with					
Both parents	97	403	1	1	
By one parent	22	45	2.031(1.165,3.542)*	1.613(0.880,2.956)	0.122
Other peoples	1	30	0.138(0.019,1.028)	0.118(0.015,1.001)	0.052
Currently living with					
Both parents	85	317	1	1	
By one parents	18	82	0.819(0.466,1.438)	0.857(0.484,1.516)	0.596
Alone	16	56	1.066(0.582,1.951)	1.066(0.548,2.077)	0.850
Others	1	24	0.162(0.022,1.218)	0.167(0.022,1.274)	0.084
Family discussion on SRH					
Yes	31	186	1		
No	89	292	1.829(1.168,2.863)*	1.859(1.149,3.009)**	0.012
Parents know where and when you are					
Yes	74	291	1.034(0.685,1.560)	1.003(0.629,1.599)	0.989
No	46	187	1		
Ever seen/read pornographic					
Yes	82	240	2.14(1.400,3.271)*	1.599(1.010,2.529)**	0.032
No	38	238	1	1	
Peer pressure to had sexual intercourse					
Yes	89	170	5.202(3.318,8.154)*	4.360(2.748,6.917)**	0.0001
No	31	308	1	1	
Alcohol drinking					
Yes	44	81	2.838(1.825,4.413)*	1.976(1.224,3.190)**	0.005
No	76	397	1	1	

for risky sexual practice. This might be due to the fact that youths are eager to share their day to day life experience and they take majority of their time with their friends. However, study in Addis Ababa revealed that peer pressure had no statistical significant effect on risky sexual practice (Gizaw et al., 2014). This discrepancy might be due to negative and positive influence of peer pressure as well as self efficacy of the study subject to ward external force.

A wide range of studies carried out across the world indicate that strict parental monitoring and open discussion with their child's on sexual issues is positively associated with reduced adolescent health risk, delayed sexual intercourse, fewer sexual partners and safe sexual intercourse (Agajie et al., 2015).

Similarly, in this study, the odds of risky sexual practice were almost two times higher in those who did not discuss openly about SRH issues with parents compared to their counterparts which is supported by different researches elsewhere (Abosetugn et.al. 2015; Biddlecom et al., 2009; Shore and Shunu, 2017; Agajie et al., 2015; Kassa et.al., 2016; Ameh, 2013).

Therefore, parental control and monitoring helps to decrease probability of risky practice among youth through a protective influence and by educating their children about sexuality.

Strengths and limitations of the study

The study utilized primary data from real life of students that gave insight about risky sexual practice in school youth. The response rate of the study was high that decrease non response bias. The study was based on self-report, which is subject to errors and social desirability biases. In addition, the study arise very sensitive and private issues so possibility of underestimation cannot be ruled out. Since the study was on high school youth the results may not represent out of school youth. Due to cross-sectional nature of the study design it is impossible to determine the causal effect relationship.

CONCLUSION AND RECOMMENDATIONS

Considerable proportion of school youths were involved in risky sexual practice like early sexual initiation, having multiple sexual partners and inconsistence condom use which predispose them to sexual related health (SRH) problems. Peer pressure, alcohol drinking, no discussion about SRH issues and exposed to sexual explicit media/pornographic were identified as factors that increase the odds of practicing risky sexual practice. Ministry of education (MOE) should consider risky sexual behavior and substance use related issues in school curriculum. Health authorities including Ministry of Health (MOH) should implement youth friendly services in schools and government bodies should incise a strict and sustainable measurement against selling alcohol less than 18 years old.

Asella town health office should introduce effective education on SRH issues like substance use and risky sexual behaviors including sex at early age, unprotected sexual intercourse and multiple sexual partners in collaboration with Asella town education office. Parents should be encouraged to discuss openly about SRH issues with their children including risky sexual behavior, sexual explicit media and substance use. Since it assesses individual behavior other researcher should conducted a study with mixed study design.

CONFLICT OF INTERESTS

The authors have not declared any conflict of interests.

ACKNOWLEDGMENTS

The authors would like to thank Arsi University, College of Health Science, Assella Town education office supervisors, data collectors and study participants.

REFERENCES

- Abosetugn AE, Zergaw A, Tadesse H, Addisu Y (2015). Correlations between Risky Sexual Behavior and Parental Communication among Youth in Dilla Town, Gedeo Zone, South Ethiopia. Biol. Med. 7(5):1.
- Agajie M, Belachew T, Tilahun T, Amentie M (2015). Risky Sexual Behavior and Associated Factors Among High School Youth in Pawe Woreda Benishangul Gumuz Region. Sci. J. Clin. Med. 4(4):67-75.
- Agardh A, Tumwine G, Östergren PO (2011). Impact of Socio-Demographic and Religious Factors upon Sexual behavior among Ugandan University. PLoS one 6(8):e23670.
- Ameh EO (2013). Determinants of risky sexual behavior among senior high school students, in la dade-kotopon municipality. Available at: http://ugspace.ug.edu.gh/bitstream/handle/123456789/5505/Ameh%2 0Emmanuel%20Ogbada_Determinants%20of%20Risky%20Sexual% 20Behaviour%20Among%20Senior%20High%20School%20Students %2C%20in%20La%20Dade-

Kotopon%20Municipality_2013.pdf?sequence=1&isAllowed=y

- Berhan Y, Hailu D, Alano A (2011). Predictors of sexual-risk behaviour and HIV-preventive practices among University students in Ethiopia. Afr. J. Aids Res. 10(3):225-234.
- Biddlecom A, Awusabo-Asare K, Bankole A (2009). Role of parents in adolescent sexual activity and contraceptive use in four African countries. Int. Perspect. Sex Reprod. Health 35:72-81.
- Bizu D, Aderaw Z, Kassa GM (2015). Assessment of Early Sexual Initiation and Associated Factors among Preparatory School Students of Faggeta Lekoma District, Awi Zone, Northwest Ethiopia. Int. J. Clin. Med. 6(8):521-529.
- Blum RW, Mmari KN, World Health Organization (2005). Risk and Protective Factors Affecting Adolescent Reproductive Health in Developing Countries.
- Central Statistical Agency [Ethiopia] and ICF International (2012). Ethiopia Demographic and Health Survey 2011. Addis Ababa, Ethiopia and Calverton, Maryland, USA: Central Statistical Agency and ICF International. Available at: https://www.unicef.org/ethiopia/ET_2011_EDHS.pdf.
- Cherie A, Berhane Y (2012). Peer Pressure Is the Prime Driver of Risky Sexual Behaviors among School Adolescents in Addis Ababa, Ethiopia. World J. Aids. 2(3):159-164.
- Dadi FA, Teklu GF (2014). Risky Sexual Behavior and Associated Factors among Grade 9-12 Students in Humera Secondary School, Western Zone of Tigray, NW Ethiopia, 2014. Sci. J. Public Health 2(5):410-416.
- Daka D, Shaweno D (2014). Magnitude of Risky sexual Behaviors among high school adolescents in Ethiopia. J. Public Health Epidemiol. 6(7):211-215.
- Daniyam CA, Agaba PA, Agaba EI (2010). Sexual behavior of medical students: Afr. Health Sci. 10(2).
- Dekeke GD, Sandy PT (2014). Factors influencing Sexual Risk Behaviors among Senior Secondary School Students in Enemay District and East Gojam Zone in Ethiopia. Int. J. Sci. Res. Publ. 4(8):205.
- Dingeta T, Oljira L, Assefa N (2012). Patterns of sexual risk behavior among undergraduate university students in Ethiopia: a crosssectional study. Pan Afr. Med. J. 12(1).
- sectional study. Pan Afr. Med. J. 12(1). Federal Democratic Republic of Ethiopia Population Census Commission (2008). Results for Oromia Region Summary and

statistical report of 2007 population and housing census; 2008. Available at:

http://www.scirp.org/(S(Iz5mqp453edsnp55rrgjct55))/reference/ReferencesPapers.aspx?ReferenceID=1831573

- Gizaw A, Jara D, Ketema K (2014). Risky sexual practice and associated factors among high school adolescent in Addis Ababa, Ethiopia. Fam. Med. Med. Sci. Res. 3:141.
- Guttmacher Institute (2011). Facts on American Youths. Sexual and Reproductive Health. Available at: http://www.guttmacher.org/pubs/USTPtrends.pdf.
- Joint United Nations Programme on HIV/AIDS (UNAIDS), United Nations Children's Fund (UNICEF) (2007). Ministry of Health: Health and Health related indicators. Addis Ababa, Ethiopia.
- Kassa G, Degu G, Yitayew M, Misganaw W, Muche M, Demelash T, Mesele M, Ayehu M (2016). Risky Sexual Behaviors and Associated Factors among Jiga High School and Preparatory School Students, Amhara Region, Ethiopia. Int. Scholarly Res. Notices Volume 2016, Article ID 4315729.
- Kilmarx PH (2009). Division of HIV/AIDS Prevention, Centers for Disease Control and Prevention, Atlanta, Georgia, USA.
- Malhotra S (2008). Impact of sexual revolution: Consequences of risky sexual behavior. J. Am. Phys. Surg. 13(3):88.
- McNeely C, Blanchard J (2009). The Teen Years Explained. Baltimore, MD: Johns Hopkins University, USA.
- Muluken D, Maereg W (2012). Predictors of consistent condom use among University students Debre Berhan, Ethiopia. GJMEDPH. 1(4):23-28.
- National Youth Policy (2004). Federal Democratic Republic of Demographic Ethiopia. Ministry of Youth, Sports and Culture 12 March 2004, Addis Ababa. Available at: http://www.youthpolicy.org/national/Ethiopia_2004_National_Youth_P olicy.pdf
- Nigatu R, Seman K (2011). Attitudes and practices on HIV preventions among students of higher education institutions in Ethiopia. 2(2):828-840.
- Oluwatoyin FE, Oyetunde MO (2014). Risky sexual behavior among secondary school adolescents in Ibadan North Local Government Area, Nigeria. J. Nurs. Health Sci. 3:34-44.
- Rosenthal M (2012). Human Sexuality: From Cells to Society. Nelson Education. 974:134-135.
- Russell TV, Setik E, Sullivan PS, Rayle VD (2007). Sexual Risk Behaviors for HIV/AIDS in Chuuk State, Micronesia: The Case for HIV Prevention in Vulnerable Remote Populations. PLOS ONE 2(12):e1283.
- Sexual Risk Behavior (2011). HIV, STD, Youths Pregnancy Prevention in USA. Available at: http://www.cdc.gov/.
- Shore H, Shunu A (2017). Risky sexual behavior and associated factors among youth in Haramaya Secondary and Preparatory School, East Ethiopia, 2015. J. Public Health Epidemiol. 9(4):84-91.

- Tura G, Alemseged F, Dejene S (2012). Risky sexual behavior and predisposing factors among students of Jimma University, Ethiopia. Ethiop. J. Health Sci. 22(3).
- United Nations Programme on HIV/AIDS (UNAIDS) (2007). AIDS Epidemic Update. Available at: www.unaids.org/en/Regions_Countries/Countries/ghana.asp.
- Underwood CSJ, Osman N, Schwandt H (2011). Structural Determinants of Adolescent Girls' Vulnerability to HIV: Views from Community Members in Botswana, Malawi, and Mozambique. Soc. Sci. Med. 7(3):343-350.
- Wasie B, Belyhun Y, Moges B, Amare B (2012). Effect of emergency oral contraceptive on condom utilization and sexual risk taking behaviors among University students, Northwest Ethiopia. BMC Res. Notes 5(1):501.
- World Health Organization (WHO), Joint United Nations Programme on HIV/AIDS (UNAIDS), United Nations Children's Fund (UNICEF) (2008). Global HIV AIDS Response - Epidemic update and health sector progress towards Universal Access - Progress report 2011. Geneva, Switzerland. WHO,