

## Risky Sexual Practice and Associated Factors among High School Adolescent in Addis Ababa, Ethiopia, 2014

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### Abstract

**Background:** Risky sexual practice conceptualized as any practice associated with sexual contact that involves a likelihood of any negative consequence including HIV/AIDS or other sexually transmitted diseases, acquired due to number of sexual partners, inconsistent use of condom and sexual intercourse with risk partners.

**Objective:** The main aim of this study was to assess the risk sexual practice and associated factors among high school adolescent in Addis Ababa, Ethiopia.

**Method:** Institutional based cross sectional study was conducted on 836 students by selected multistage sampling technique. Data was collected by pretested questionnaire from April 17-25, 2014. The collected data were entered in to Epi info version 3.5.1 then exported to SPSS version 20.0 for analysis. Binary logistic regression was used to identify factors associated with risky sexual practice among school adolescent. The crude and adjusted odds ratio together with their corresponding 95% confidence intervals was computed. A P-value < 0.05 was considered to declare a result as statistically significant in this study.

**Result:** The prevalence of risk sexual behavior among responding students was 26.7%. Risky sexual practice was associated with using alcohol/chat with (AOR=3.38, 95% CI 1.55, 7.34), with cigarette smoking (AOR=3.44, 95% CI 1.58, 7.50), Self-efficacy (AOR=1.76, CI 1.10, 2.82) and those student whom their friends had not known by their family (AOR=1.82, 95% CI 1.28, 2.59), being male sex (AOR=2.28, 95% CI 1.05, 3.28) and educational status (AOR=3.69, 95% CI 2.23, 6.12).

**Conclusion:** Risky sexual practice was relatively high among school students. Educational status, sex, Self-efficacy, students whom their friends not know by their family, using alcohol/chat and cigarette smoking showed statistically significant association with risky sexual practice. Strengthening open discussion among family members in general and effective gender education should be introduced to them at an early age

**Keywords:** Risky sexual practice; High school students

### Introduction

Sexual activity amongst adolescents has been reported to be on the increase worldwide. Adolescents make up one-fifth of the world's population. From these, 84% of them live in Africa. However, viewing adolescents as a specific group with their own needs is a relatively recent practice, especially in developing countries [1]. Similarly, in Ethiopia, adolescents aged 10 to 20 years constitute 25% of the population. [2]. Young people are a significant part of the labor force and form the backbone of any country's economy. The health of young people is thus a key element for social and economic progress. Neglecting the sexual and reproductive health of young people can lead to high social and economic costs, both immediately and in the years ahead [3].

Risky sexual Practice, defined as any human sexual contact which put individual's physical, social and psychological health at risk. It accounts for all sexually transmitted diseases including HIV/AIDS and psycho social problems such as altered self-esteem, emotional instability, depression, impaired ability to form long term relationship [4]. Risky sexual practice, including early sexual debut, unprotected sexual intercourse, and multiple sexual partners occur in a broader context. 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 risk behaviors, including substance use, violence involvement and poor school performance [5].

The vast majority of sexual intercourse during adolescence period is unprotected and therefore the risk of unwanted pregnancy, unsafe abortion, and STIs including HIV/AIDS is very high. Lack of accurate information about reproductive health and sexuality, and vulnerability to sexual abuse put adolescent at highest risk [6]. Sexually active students also reported that they had sexual beginning with causal

partner, partner with multiple sexual partners and commercial sex workers (in 43.7%, 38.9%, and 20.5%) of the cases respectively [7].

Drug and alcohol use have potential roles in predisposing individuals to the practice of premarital as well as to unprotected sex. Because of urbanization, modernization and exposure to western life style and Viewing pornographic materials were other factors associated with early sexual initiation. Ethiopia's increased openness to Western culture has resulted in the influx of pornographic videos, books, and magazines, whose consumers are mostly young adolescent. Western pornography often preceded sexual initiation and helped the couple to "get into the mood" [8].

The overall prevalence of premarital sexual practice in West Wollega population was 21.5%. The proportion of male adolescents (70.3%) who were involved in premarital sex in the study area was more than twice the proportion of female adolescents (6.4%) in Gondar; it was 46.2% and 16.2% for males and females, respectively. The National finding of the prevalence of premarital sex among in-school adolescents was 19%. The finding of similar study done in Harar was 65% of males and 20% of females were sexually active. However in Sub-Saharan Africa, the figures are higher, which were 45%-52% for both sexes [9].

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In order to tackle these problems, adolescents should learn to develop the life skill they need to survive in their environment. Life skill based education enables them to develop an ability in critical thinking, problem solving, self-management and interpersonal communication skills in order to adopt a healthy behavior. Because, when sexuality is discussed openly and when young people learn more about their bodies and their emotions, they are better able to cope with sexual maturations [10]. This implies that a sound education and information can help adolescents to delay sexual practice and avoid risky sexual practice [9].

Even though there was study conducted in the same study population and area, there was a time gap. Therefore, the aim of this study is to assess the risky sexual practice and associated factors in full filling the gap. The knowledge generated through this study will help for Policy makers, health program planners and, the stake holders (like parents, schools administrators, religious leaders and those working on adolescents) to design intervention strategies. Thus, this study will be believed to have significant role in further efforts to control and prevent HIV/STI in these settings. It may also serve as a baseline for other researchers to study such problems in depth in the study area besides filling the literature gap.

## Methods

### Study setting and period

The study was conducted in Addis Ababa, the capital city of Ethiopia, from April 7-25/ 2014. The city has a total population of 2,739,551. Out of which 1, 305,387 (48%) are males and 1,434,164 (52%) are female. Considering adolescent (10-19) age group is 635,903. From these, 262,171 are males whereas 373,732 are females [11]. Regarding to the distribution of health infrastructure report of Addis Ababa City Government Health Bureau of 2013, there are 49 hospitals in the city of Addis Ababa of which 5 are owned by Federal Ministry of Health (FMOH), 1 by Addis Ababa University (AAU), 6 by Addis Ababa City Government Health Bureau and the rest are owned by missionaries, non-governmental and by private sectors [12]. The population of the city as well as different institutions like schools and health facilities are not evenly distributed over the ten sub-cities. Based on Education Statistics Annual Report of 2013, there are 157 secondary schools out of these 54 are Governmental and 103 are Non-Governmental which 67 secondary schools train preparatory students. The total number of students in 2013 academic year is 132,902. Out of which 45,842 are preparatory students of government and the rest 22,642 are nongovernmental [13].

### Study design and populations

An institutional based cross-sectional study was employed using quantitative data collection method on high school students in Addis Ababa. The source population was all secondary high school students in Addis Ababa enrolled during 2014 academic year. Study population of the study was those selected secondary high school students attending the class during the study period. All regular students 9-12 grade were included in the study. Night shift students, students who will not be able to complete the questionnaire without assistance (having visual, hearing impairments and seriously ill) were excluded from the study for the data quality.

### Sample Size and sampling technique

The required sample size was determined using single population proportion formula by taking 60.84% proportion of the Multiple sexual partner from the previous study conducted on the related topic using similar population group [14], Margin of error 5%, a 5% level

of significance (two sided). Based on the above assumptions, with an additional 15% estimated non-response and using design effect of 2, total sample size of the study was 842. Multistage sampling technique was used to select study participants from each selected schools in Addis Ababa city. Among a total of 54 governmental and 103 non-governmental schools available in Addis Ababa town, 7 schools (2 from private and 5 from non-governmental schools) was selected by random sampling technique. The sample sizes to each school was allocated according to proportional to their population size. The sample size was also stratified for male and female based on their sample size, then the study participant were selected using simple random technique.

### Variables and measurements

The dependent variable of the study was risk sexual practice whereas the independent variables were socio demographic variables (Age, Sex, Educational status of the students and their family, Family income and Occupation, Ethnicity, Religion, Marital status. Knowledge of HIV/STD; Risk perception towards HIV/AIDS; Exposure to explicit media, Peer influence, Parent child connectedness and monitoring, Substance use, like Alcohol, khat, cigarette, and shisha; and Self efficacy), Risky sexual practice (Sexually active school students who have sexual contact with risk partner, multiple sexual partners, inconsistent condom use and sex at early age. It measure when they have one of this practice), High school Adolescents (Those students from grade 9-12), Substance use (Refer use of materials like alcohol, cigarette, chat, shisha to create excessive sensibility that led to sexual activities and related consequences), Consistent Condom use (use Always) (a non-interrupted condom utilization during all episodes of Penetrative sexual act with all form of sexual partners in noon married students), Family-child connectedness (The degree of closeness warmth experiences in the relationship that adolescents have with their parents), Self – efficacy (Refers to one's self confidence in being able to carry out a specific practice. It is measured based on answers one able to refuse sex if did not want to have intercourse and/or not doing sex without condom use).

### Data collection instruments and methods

Structured self- administered questionnaire was used for data collection which was adapted from different literature [7,14,15] in English then translated in to Amharic and back translated to English to ensure the consistency of two versions. Pre-test was done on 5% of the sample in another high school which wasn't included in the study area. Necessary corrections were made based on the finding of pre-test before actual data collection. Two diploma nurses and two Health officers was assigned for data collection. Two days training was given for data collectors on confidentiality of the information maintained how to obtain informed consent and the contents of the questionnaire in detail. Data collection was done at a selected school on a separate class of male and female for their privacy and quality of data. To assure the quality of the data, pretest was done and two days training was given to the data collectors. Before distributing the questionnaire, respondents were briefed about the purpose of the study by enumerators after getting their informed consents. Each and every filled questionnaire was checked for completeness, consistency and any appropriate feedback were given to the data collectors. The overall data collection process was controlled by the principal investigator.

### Data processing and analysis

The collected data were entered in to Epi info Version 3.5.1 software then exported to SPSS version 20 for analysis. Descriptive analysis was used to describe the percentages and number distributions of the

respondents by socio-demographic characteristics and other relevant variables in the study. Logistic regression was used to fit data in order to identify factors associated with risk sexual practice. All explanatory variables that were associated with the outcome variable in bivariate analysis were included in the multivariable analysis. The crude and adjusted odds ratio together with their corresponding 95% confidence intervals was computed. A P-value < 0.05 will be considered to declare a result as statistically significant in this study.

### Ethical consideration

Ethical clearance was obtained from Institutional Review committee of Debre Markos University College of medicine and health Science. After securing clearance, Debre Markos University College of medicine and health science wrote a letter of support to concerned bodies to help in running of the data collection. The purposes and the importance of the study were explained and verbal informed consent was obtained from student selected for the study. Participation in the study was on voluntary basis; participants who are unwilling to participate in the study and those who wish to stop their participation in the meantime have the right to withdraw. Confidentiality of the response was declared to the respondents by the anonymity of the self-administered questionnaire, and no school community member was allowed observe questionnaire administration, and finally confidentiality at all level was maintained. Detail explanation about the objective (purpose) and benefit of the study was described to the study population to ensure their full cooperation.

### Results

#### Adolescent's socio-demographic characteristics

A total of 836 students participated in this study with the overall response rate of 99.3%. The majority of respondents 688 (82.3%) were belong to the age group of 15-18 years. The rest 148 (17.7%) of them were belong to the age group 19-24 years. The mean age was 17.3. About 329 (39.4%) were males and 507 (60.6%) were females. Orthodox Christianity was the dominant religion consisting of 639 (76.4%). The majority of the students were Amhara which accounts of 341 (40.3%). Only 3 (0.4%) of the respondents were currently married. Among the respondents 618 (73.9%) were raised by both parents. Generally, 474 (56.7%) students were living with both parents (Table 1).

#### Parental characteristics

Among the total respondents, 137 (16.4%) of them were currently their father were not alive whereas 61 (7.3%) were currently their mother were not alive. Six hundred forty three (76.9%) of respondents were perceived their family economic status as medium. Regarding educational level of parents, 309 (44.2%) fathers of the respondents had educational level of college and above; 2 (0.3%) fathers of the respondents can't read and write and 632 (90.4%) of fathers were employed. One hundred ninety six (25.3%) mothers of the students had educational level of college and above. Eighty seven (11.2%) can't read and write (Table 2).

#### Parent-child connectedness and communication

From the students, 385 (46.1%) were discussed sexual issue with parents but 451 (53.9%) were not. The majority 196 (43.5%) said their reason not to discussed were culturally not accepted (Table 3).

#### Knowledge about HIV/AIDS and sexual partner communication

The majority of the respondents 806 (96.4%) were aware of HIV or

the disease AIDS. The main mode of transmission of HIV known by the students were sexual intercourse 782 (93.5%) and Contaminated injection needles 655 (78.3%). While mosquito bite 91 (10.9), by kissing 59 (7.1%) and shaking hand 30 (3.6%) were the major misconceptions reported by the students (Table 4).

#### Sexual explicit media and condom use

Regarding knowledge on the availability of sexual explicit media (SEM), the majority of the students 684 (81.8%) reported that they do have awareness on the availability of sexual explicit media; among this 479 (70%) were females and 205 (30%) males. Regarding condom use during the first sexual intercourse, from 174 sexually active respondents 99 (56.9%) was not use condom. Regarding condom use at last time, among 174 sexually active students, 78 (44.6%) of students were did not used condom (Table 5).

#### Sexual risk taking, related practice and peer influence of among school adolescent

Concerning sexual risk taking, 304 (36.4%) of respondents had partner. Moreover, 174 (20.8%) of them ever had practiced sexual intercourse. The median age at first sex was 16. Thirteen (7.4%), 65 (37.3%) and the majority 96 (55.4%) of students were within 5-10, 11-15 and 16-21 years of age at first sex respectively. The majority, 97 (55.1%) of the relationship to their first sexual partner were with boyfriends. Regarding the age different of first partner the majority 104 (59.8%) was with the same age. But 31 (17.8%) of the age different of first partner were with 10 and above year. More than a quarter 65 (37.4%) had three and more number of sexual partner. The majority of students, 60 (34.5%) had one number of sexual partners in the last 12 months. Nearly a quarter, 43 (24.7%) of students had three and more number of sexual partners in the last 12 months (Table 6).

#### Risk sexual practice

From the total of 836 high school students participated in this study, 223 (26.7%) of students had risk sexual practice as shown in Figure 1. With the corresponding 95% confidence interval was (21.7, 31.7).

#### Factors associated with risky sexual Practice

In order to investigate the association of independent variables with exclusive breastfeeding both univariate and multivariate analysis were used. A total of fifteen variables (age, sex, level of education, religion, ethnicity, whom you raised, currently living with, Perception on family's economic status, Family members know your friends, Peer pressure to have sexual intercourse, Seen/read sexual explicit media/materials, self efficacy, knowledge of contraceptives encourages having sex with many people, Alcohol/ Chewing chatt, Smoking cigarettes/shisha) were considered for the bivariate analysis. However only ten variables (sex, level of education, currently living with, Family members know your friends, Peer pressure to have sexual intercourse, Seen/read sexual explicit media/materials, self-efficacy, the knowledge of contraceptives encourages having sex with many people, alcohol/ Chew chatt, Smoking cigarettes/shisha) were associated with risk sexual practice on the bivariate analysis and were selected as candidate variables for multivariable logistic regression analysis. The multivariable logistic regression analysis was used by taking all the ten factors into account simultaneously and only seven of the most contributing factors remained to be significantly and independently associated with risk sexual practice (sex, level of education, family members know your friends, self-efficacy, alcohol/Chew chat and Smoking cigarettes/shisha). Educational level had showed statically significant association

Variables (n= 836)	Frequency	Percentage (%)
<b>Age</b>		
15-18	688	82.3%
19-24	148	17.7%
<b>Sex</b>		
Male	329	39.4%
Female	507	60.6%
<b>Level of education</b>		
Grade 9	152	18.2%
Grade10	199	23.8%
Grade11	246	29.4%
Grade12	239	28.6%
<b>Religion</b>		
Orthodox	639	76.4%
Muslim	97	11.6%
Protestant	77	9.2%
Catholic	13	1.6%
Other	10	1.2%
<b>Ethnicity</b>		
Amhara	341	40.8%
Oromo	208	24.9%
Gurage	164	19.6%
Other	123	14.7%
<b>Marital status</b>		
Married	3	0.4%
Single	833	99.6%
<b>By whom you raised?</b>		
Both parents	618	73.9%
Mother Only	134	16%
Father Only	42	5%
Other people	42	5%
<b>Currently living with</b>		
Both parents	474	56.7%
Father	54	6.5%
Mother	148	17.7%
Alone	36	4.3%
Other	124	14.8%

**Table 1:** Socio-demographic characteristics of high school adolescent in Addis Ababa, 2014

with outcome variable. Grade nine student were 3.69 times more likely to have risk sexual practice as compared with those student who were grade 12 (AOR=3.69 : 95%CI(2.23, 6.12)). Sex of the students was found to have significant association with risk sexual practice. Males were 2.28 times more likely to experience risky sexual practice as compared to females counterpart (AOR=2.28:95%CI (1.59, 3.28)). Furthermore, those students whose family members do not know their friends were 1.82 times more likely to have risky sexual practice as compared to those whom their family members know their friends(AOR=1.82:95%CI (1.28, 2.59)). The students who practically apply what their best friend told them to do/only guided by their best friends were 1.76 times more likely to have risky sexual practice as compared to those who didn't (AOR=1.76:95%CI (1.10, 2.82)). Yet again, the students who Chew chat or drink alcohol were 3.38 more likely to have risky sexual practice than those who didn't Chew chat or drink alcohol (AOR=3.38, 95%CI (1.55, 7.34)). Moreover, those students who smoke cigarettes/shisha were 3.44 times more likely to have risky sexual practice as compared to those students who didn't smoke cigarette/ shisha (AOR=3.44: 95%CI (1.58, 7.50) (Table 7).

## Discussion

In the sub-Saharan African, as in many countries in the

industrialized world and elsewhere, people embark on sexual activity when they are in their teens-often around mid-teens. Initiating sexual activity is a natural transition, made nearly by all humans. Nevertheless, it is not the occurrence of this transition but its timing and the circumstances under which it occurs that has significant implications as a major public health concern all over the world [16].

These study revealed that 223 (26.7%) of students had risk sexual practice. With the corresponding 95% confidence interval was (21.7, 31.7). The finding the study lower than previously studied in Bahir Dar City, Northwest Ethiopia which is about 40.6% of sexually active respondents had risky sexual practice [17]. This could be because of socio behavioral change of the current students.

In this study sex was found to have significantly associated with risk sexual practice. It showed that male were more likely report to have risk sexual practice as compared with female counterpart. The

Variables	Frequency	Percentage (%)
<b>Father currently alive</b>		
Yes	699	83.6%
No	137	16.4%
<b>Father's educational status</b>		
Can't read and write	2	0.3%
Read and write	136	19.5%
Elementary	79	11.3%
High school	173	24.7%
Collage and above	309	44.2%
<b>Father's employment status</b>		
Employed	632	90.4%
Unemployed	67	9.6%
<b>Mother currently alive</b>		
Yes	775	92.7%
No	61	7.3%
<b>Mother's educational status</b>		
Can't read and write	87	11.2%
Read and write	178	23%
Elementary	110	14.2%
High school	204	26.3%
Collage and above	196	25.3%
<b>Mother's employment status</b>		
Employed	472	60.9%
Unemployed	303	39.1%
<b>Perception on family's economic status</b>		
Poor	128	15.3%
Medium	643	76.9%
Rich	65	7.8%

**Table 2:** Parental Characteristics of high school adolescent in Addis Ababa, 2014

Variables	Frequency	Percentage (%)
<b>Discuss sexual issues with parents</b>		
Yes	385	46.1%
No	451	53.9%
<b>Reason for not discuss on sexual issues with partner</b>		
Culturally unacceptable	196	43.5%
Shame	86	41.2%
Lack of knowledge	177	39.2%
Parents are not a good listener	124	27.5%
Others	16	3.5%

**Table 3:** Parent-Child Connectedness and Communication among high school adolescent in Addis Ababa, 2014

Variables	Frequency	Percentage (%)
<b>Heard about HIV</b>		
Yes	806	96.4%
No	30	3.6%
<b>Get the information from</b>		
Friends	148	17.7%
Boy/Girlfriend/peers	73	8.7%
Health worker	205	24.5%
School	477	57.1%
Religious leaders	113	13.5%
Media (Radio, TV)	465	55.6%
<b>Perception of possible mode of transmission</b>		
Sexual intercourse	782	93.5%
Mosquito/insect bite	91	10.9%
Mother to child	602	72%
Sharing needle	655	78.3%
Shaking a person's hand	30	3.6%
By kissing	59	7.1%
Blood transfusion	515	61.6%

**Table 4:** Knowledge about HIV/AIDS and Sexual parterre communication among high school adolescent in Addis Ababa, 2014

Variables	Frequency	Percentage (%)
<b>Ever seen/read sexual explicit media/materials.</b>		
Yes	684	81.8%
No	152	18.2%
<b>Consistency of condom usage</b>		
Very seldom	14	1.7%
Sometimes	35	4.2%
Always	84	10%
Never used	42	5%
Never done sexual intercourse	661	79.1%
<b>Use condom last time when you had sex</b>		
Yes	102	12.2%
No	76	9.1%
Never done sex	658	78.7%
<b>Respondent Opinion on Partner's Objection on Condom Uses</b>		
Do sex not to miss partner	40	4.8%
Insist on using condom	204	24.4%
I will provide condom	27	3.2%
No sex without condom	565	67.6%

**Table 5:** Sexual-explicit media/materials and Condom use of high school adolescent in Addis Ababa, 2014

same finding reported from the study conducted in Bahir Dar City Northwest Ethiopia and Nekemte town, East wollega [9,17]. Similar finding found in study conducted Ethiopia [18]. But study conducted in Mojo Town Oromia Region female students more likely to have risk sexual practice than male [19]. The significant association with sex in this study could be due to cultural norms that encourage and approve sexual experimentation of boys and the value given to virginity for girls.

In this study, student's grade was found to have statically significant association with risk sexual practice. Those students who were grade nine were more likely to have risky sexual practice as compared with grade 12 students. This figure is consistence with study conducted in Dessie Town, Amhara Regional State. On educational level of high school student indicated that the likelihood of have risky

sexual practice reduces as the educational attainment increased. Thus, the likelihood of 11<sup>th</sup> and 12<sup>th</sup> grade students to involve in premarital sexual intercourse reduces by a factor of 0.061 and 0.094 as compared to 9<sup>th</sup> grade students respectively [20]. But study conducted Bahir Dar, there is strong positive association between year of study and having multiple sexual partners; it was found that year two and three students were more likely to have higher risky sexual practice compared to year one students [17]. Involvement of more ninth grade students in premarital sex may also be explained by the fact that they are new to the high school environment as most of them come from rural settings and eight grade may have difficulties of refusing an offer to have sex from their seniors. And it could be as there grade level increase their maturity also increases.

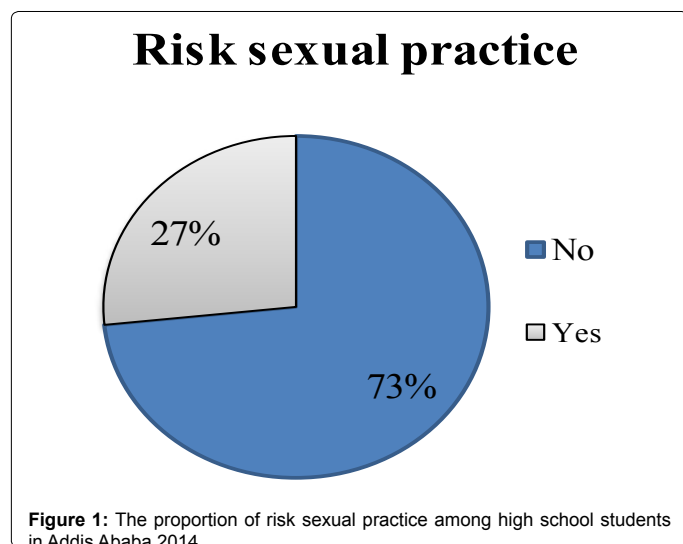
The finding of this study revealed that those students whose family members do not know their friends more risky sexual behavior than those who their family members know their friends. The same had been reported in Bahir Dar town, Northwest Ethiopia [21]. But negative association was reported in study conducted Mojo town,

Variables	Frequency	Percentage (%)
<b>Do you have boy/girlfriend</b>		
Yes	304	36.4%
No	532	63.6%
<b>Ever had sexual intercourse</b>		
Yes	174	20.8%
No	662	79.2%
<b>you had sex</b>		
Yes	75	43.1%
No	99	56.9%
5-10	13	7.4%
11-15	65	37.3%
16-21	96	55.4%
<b>sexual partner</b>		
Boy friend	97	55.1%
Relative	18	10.3%
Others	56	32.6%
Married	3	2.1%
<b>partner</b>		
10 and above year	31	17.8%
5 year	39	5%
Same age	104	59.8%
<b>Number of sexual partner so far</b>		
One	70	40.2%
Two	39	22.4%
Three and more	65	37.4%
<b>Number of sexual partners in the last 12 months</b>		
Three and more	43	24.7%
Two	37	21.3%
One	60	34.5%
With no one	34	19.5%
<b>Peer Pressure to have sexual Intercourse</b>		
Yes	144	17.2%
No	692	82.8%

**Table 6:** Sexual risk taking, related practice and Peer influence of high school adolescent in Addis Ababa, 2014

Variables	Risk sexual practice		COR (95%CI)	AOR(95%CI)
	Yes	No		
<b>Sex</b>				
Male	127	202	2.69 (1.97, 3.68)*	2.28 (1.59, 3.28)**
Female	96	411	1	1
<b>Level of education</b>				
Grade 9	61	91	2.47 (1.58, 3.87)*	3.69 (2.23, 6.12)**
Grade10	57	142	1.48 (0.96, 2.29)	1.55 (0.95, 2.55)
Grade11	54	192	1.04 (0.67, 1.60)	0.97 (0.59, 1.58)
Grade12	51	188	1	1
<b>Currently living with</b>				
Both parents	115	359	1	1
Father	15	39	1.20 (0.64, 2.26)	0.99 (0.48, 2.03)
Mother	41	107	1.20 (0.79, 1.82)	1.28 (0.80, 2.05)
Alone	15	21	2.23 (1.11, 4.47)*	1.64 (0.73, 3.70)
Other	37	87	1.33 (0.86, 2.06)	1.60 (0.98, 2.59)
<b>Family members know your friends?</b>				
Yes	91	317	1	1
No	132	296	1.55 (1.14, 2.12)*	1.82 (1.28, 2.59)**
<b>Peer pressure to have sexual intercourse</b>				
Yes	51	93	1.66 (1.13, 2.43)*	1.13 (0.72, 1.79)
No	172	520	1	1
<b>Seen/read sexual explicit media/materials?</b>				
Yes	193	491	1.60 (1.04, 2.46)*	1.06 (0.66, 1.72)
No	30	122	1	1
<b>Practically apply what your best Friends tells you to do</b>				
Yes	54	68	2.56 (1.72, 3.81)*	1.76 (1.10, 2.82)**
No	169	545	1	1
<b>The knowledge of contraceptives encourages having sex with many people.</b>				
Yes	106	233	1.48(1.08, 2.01)*	1.21 (0.85, 1.71)
No	117	380	1	1
<b>Chew chatt/Alcohol</b>				
Yes	54	20	9.47 (5.52, 16.27)*	3.38 (1.55, 7.34)**
No	169	593	1	1
<b>Smoking cigarets/ shisha</b>				
Yes	51	22	7.97 (4.60, 13.50)*	3.44 (1.58, 7.50)**
No	172	591	1	1

**Table 7:** Analysis of factors associated with Risk sexual practice among high school students in Addis Ababa, 2014 (\*-show association on bivariate analysis \*\*-statistical significant)



East Shewa, Oromia Region Adolescents who reported to have parent - child communication were more likely to practice early sex than their counter part [19]. The reason they give were that most parents do not have the knowledge and skill further more culturally, it is inappropriate and shameful to discuss with their adolescent children even if it is discussed, parents assume that, such discussions encourage and facilitate sexual risk practices on the part of their children. And if parents know their child friends they get access to discuss some important and harmful things for also parents select which is good friend for them.

The students who practically apply what their best friends told them to do were more likely to have risky sexual practice than those who didn't. This finding is in line with another study conducted Dessie town, Amhara Region [20]. Self-efficacy to resist what their best friends told them to do were another predictor that shows significant association with risky sexual behavior.

This indicates that the students are not only sharing their knowledge on their education with each other but also their risky sexual behaviors.

Besides, especially students which are not living with their family, rather they live in rented houses with their intimate friend from whom they share both good and bad behaviors.

The students who use substance like alcohol, khat and cigarette/shisha were more likely to have risky sexual practice than those who didn't. This is in-line with other study conducted Addis Ababa and Dessie town, Amhara Region [14,20]. Similarly study conducted in Bahir Dar [17]. This could be because risk perception ability decreases with alcohol/khat and cigarette consumption, indicating that individuals who use such substance were more likely to get experience with risky sexual practice pushed them to sexual debut in an early age. Uncooperativeness of private schools and being complex and personality nature of issue, the possibility of obtaining accurate and honest response may affected by social desirability bias.

In conclusion, the study revealed that risk sexual practice of the study area was relatively high among the respondents. Being male, grade nine, substance use like chewing kchat, alcohol/smoking cigarette, students whose friends didn't know by their family members and those students who had no self-efficacy were more likely exposed them to risk sexual practice.

Therefore; based on the findings the following recommendations were forwarded:

- Ministry of education should introduce effective sex education at early age as possible.
- MOH should focus on reproductive health services (condom provision, treatment on sexually transmitted disease and voluntary counseling and tasting) made available nearby or at schools.
- Addis city health bureau should focus on reproductive health services provision
- The government bodies should incised it's strict and sustainable measurement against a "chat chewing houses" and "cigarette smoking" on public area.
- The media should encourage the community to open discussion among family members in general and between parent and children in particular.

### Authors' contributions

AG wrote the proposal, participated in data collection, analyzed the data and drafted the paper. DJ and KK approved the proposal with some revisions, participated in data collection and analysis, commented on the analysis and improved the first draft. All authors revised subsequent drafts of the paper.

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### References

1. Okonkwo P I, Fatusi AO, and Ilika A.L. (2005) Perception of peers' behavior regarding sexual health decision making among female undergraduates in Anambra State, Nigeria *African Health Sciences* 5: 107-113.
2. Department of Family Health (2011) Five-year action for adolescent's reproductive health in Ethiopia, MOH 2.
3. WHO (2002) Research on Reproductive Health: Biennial Reports. Geneva: WHO 2000-2001.

4. Malhotra S (2008) Impact of sexual revolution: Consequences of risky sexual behavior. *Journal of American Physicians and Surgeons* 14: 101-117.
5. Blum RW, Mmari K N (2005) Risk and Protective Factors Affecting Adolescent Reproductive Health in Developing Countries: Geneva: World Health Organization.
6. MOH (2000) Rapid assessment on knowledge, Attitude and practices related to reproductive health in Ethiopia, Health education center (MOH) and National office of population, Addis Ababa.
7. Ibrahim N (2004) Factor that influences school adolescent exposure to HIV/AIDS in Bale, Oromia Region, DCH, FM, AAU.
8. Ministry of Health (2006) Assessment of Reproductive Health Needs and Youth Friendliness of Public Health Facilities in Selected Urban Areas of the Oromia, Amhara, Southern People and Tigray Regional States.
9. Wirtu D (2006) An assessment of premarital sexual practice and factors contributing to premarital sex among High school adolescents in Nekemte Town, E/Wollega zone, oromia regional state.
10. UNDO/UNFPA/WHO (2003) Special Program of Research Development and Research Training in Human Reproductive Health (HRP): Progress in Reproductive Health Research. World Bank; No 64.
11. CSA (2011) Ethiopia Demographic and Health Survey. Addis Ababa, Ethiopia: Central Statistics Agency.
12. FMO (2013) Federal Ministry of Health Report 2013. Addis Ababa: Ethiopia.
13. MOE (2013) Educational Statistic Annual Report of 2013. Addis Ababa: Ethiopia.
14. Dessie A (2009) Risk factor for unsafe sexual behavior among preparatory youth student of Addis Ababa.
15. Yesus D G, Fantahun M (2010) Assessing communication on sexual and reproductive health issues among high school students with their parents, Bullen Woreda, Benishangul Gumuz Region, North West Ethiopia: *Ethiop. J. Health Dev* 24: 89-95.
16. Centers for Disease Control and Prevention (CDC) Ethiopia.
17. Zelalem A, Melkamu B, Mulken A (2013) Risky Sexual Practices and Associated Factors for HIV/AIDS Infection among Private College Students in Bahir Dar City, Northwest Ethiopia. *International Scholarly Research Notices* 2013: 1-9.
18. Derege D, Ataly A, Mitike G, Enquselassie F, Berhane F, et al. (2005) Khat and alcohol use and risky sex behavior among in-school and out-of-school youth in Ethiopia. *BMC public health* 14: 109.
19. Anteneh AA (2008) Reproductive health risk and sexual behavior among school adolescents: in mojo preparatory and high school, East shewa Oromia region.
20. H abdulhakim (2008) factors promoting risky sexual behavior of high school adolescents in dessie town, amhara regional state.
21. Hibret A, Mariam D H, Belay K A, Davey G (2004) Factors predisposing out of school youth to high risk sexual practice with respect to HIV infection in bahir dar town, northwest Ethiopia. *J Health Popul Nutr* 25: 344-350.