

Risky Sexual Behavior and Associated Factors among High School and Preparatory School Students in Yaedwha, East Gojjam, Ethiopia, 2019.

Birhan Ermed

private hospital

Mekuanint Taddele

Debre Markos University

Belsity Temesgen

Debre Markos University

Tesfahun Tiruneh

private hospital

Natnael Atnafu

Wolaita Sodo University

Kelemu Abebe (✉ kelemuabebe2014@gmail.com)

Wolaita Sodo University

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Abstract

Background: Sexual and reproductive health problems are among the main causes of death, disability, and disease among young people in the world particularly in Africa. Young adults represent one of the groups at highest risk for HIV infection. Safe sexual behavior remains the most effective protection against HIV and other sexually transmitted infections (STIs) for sexually active young adults.

Objective: To assess the risk of sexual behaviors and associated factors among high school and preparatory school students in Yaedwha town, East Gojjam, Ethiopia, 2019.

Methods: Institution based cross-sectional study design with qualitative support was conducted among high school and preparatory school students from March 18-22, 2019. Data were collected using a pre-tested questionnaire from 435 students using Stratified sampling technique. Focus group discussions were used to supplement quantitative data. The data were analyzed using SPSS version 25 :

statistical software. Binary and multiple logistic regression analysis was used to ascertain the association between explanatory variables and the outcome. Variables with P value less than 0.25 in the bivariate analysis and P-value < 0.05 and corresponding 95% CI of odds ratio were considered to declare a result as statistically significant. Analysis of information obtained from FGDs was done manually using themes. **Results:** The overall risk sexual behaviors among sexually active students in the last 12 months were 25.8%. The variables, peer pressure, alcohol use, living arrangement and educational level statistically significant with p values< 0.05 [AOR=2.540(1.59, 4.05)], [AOR= 2.87(1.56, 5.28)], [AOR=2.29(1.41, 3.69)] and [AOR=1.68(1.02, 2.77)] respectively,

Conclusion: Considerable number of students had practiced risk sexual behaviors. The associated factors of risky sexual behaviors among students were peer pressure, alcohol use, educational status, and current living conditions were the most influencing factors for risky sexual behaviors . So school-based reproductive health interventions are mandatory to prevent risky sexual behaviors, negotiate condom use, youth-friendly sexual and reproductive health services. **Keywords:** Risk Sexual Behaviors, Associated factors, Students, Yaedwha, Ethiopia.

Background

Risky sexual behavior is a behavior that has to do with sexuality which increases the vulnerability of an individual to sexually transmitted diseases (STDs) and other various sexuality-related problems ranging from unwanted pregnancy, unwanted baby, abortion to emotional and psychological stress(1). Risky sexual behavior includes more than one sexual partner, early sexual initiation, inconsistent use of a condom, and having sex with commercial sex workers (1-3).

According to World Health Organization (WHO), an adolescent is a transitional period of life ranging from 10 to 19 years, youth includes the age group between 15-24 years and young people encompass both adolescents and youth which is the age group between 10-24

years. Around one in six-person in the world is an adolescent that is 1.2 billion population of the world is of adolescent groups of which about 85% live in developing countries(4). In Sub-Saharan Africa, youths constitute 20-30% of the population (5). In Ethiopia adolescents aged 10 to 24 years

Constitute 35% of the population (6). Young people are a significant part of the labor force and form the backbone of any country's economy (7).

High schools are institutions where many youths from different elementary schools joined and expand peer network which could affect sexual behavior either positively or negatively. Majority of students enrolled in high school are at the mid adolescent level where developmental period when many youths begin to define and clarify their sexual values and start to experiment with sexual behavior (8).

Adolescent engagement in sexual activity has become prevalent, adolescence is also a time of potentially risky sexual behavior because they do not have the information, skills, health services and support they need to go through sexual development during adolescent (9). Adolescent and youth sexual behavior is the core of sexuality matter for the fact that it affects adult life negatively (5).

Ethiopian demographic health survey (EDHS) of 2011 indicated HIV and STDs prevalence among the age group 15 to 24 was shown with risky sexual behaviors such as having multiple sexual partners, early initiation of sexual intercourse and low condom use(6).

Early-onset of sexual intercourse is related with an increased lifetime prevalence of sexual partners, In addition, to increase in sexual partners and increased frequency of sexual intercourse, the consistency of condom use decreased across adolescence risk of exposure to sexually transmitted infections including HIV/AIDS and unwanted pregnancy(5, 10).

Risky sexual behaviors adversely affect the health of youth exposing them to sexually transmitted infections including HIV/AIDS and unwanted pregnancy that in turn lead to deleterious health, social and economic consequences (11). Sexual activities among the adolescent and youth especially secondary school are increasing which is now creating medical, social and economic problems in the society (12). They are also at high risk for unsafe sexual behaviors and problems like HIV/AIDS and other STIs, unwanted pregnancy, abortion, poor school performance, high school dropout rate, psychosocial problems, conduct disorder, divorcé and economic problems (8, 13).

A study from west Ethiopia showed that more than half 57.3% of the young people failed to use condoms consistently and about one-third of them experienced two or more lifetime sexual partners (15). Sex with commercial sex workers is considered one of the high-risk sexual behaviors. Individuals engaged in sex with CSWs are highly exposed to contracting

STIs including HIV/AIDS due to the tendency of the latter having multiple sexual partners (16).

Sexual initiation among youth is associated with divorced partners, less education, low income, dropping out of school, permissive attitudes, and lack of confidence to avoid sex, peer pressure, drinking, drug use, previous sexual abuse and exposure to sexual content of media(9). These findings made the study to focus in Amhara Region, Yaedwha high school and preparatory school students, to assess factors that predispose students to risky sexual behaviors which contribute to the transmission of HIV/AIDS and other STIs. The main aim of the study is to assess the prevalence of risky sexual behavior and association of risky sexual behavior is important to tackle most reproductive health problems in the area as well as the region, besides it assist HIV/AIDS prevention and other youth-related programs in the region.

Risky sexual behavior can significantly affect the lives of adolescent and youth. It is the underline cause for school drop, STI, unintended pregnancy, abortion, and early childbearing. Therefore it is essential that parents, teachers and other concerned bodies should aware of the prevalence and associated factors of risky sexual behaviors of the students and what can be done to prevent such risk. The result of this study will enable policymakers, program managers and other concerned bodies to design appropriate strategy that helps to bring down the challengers of students who undergo different risky sexual behaviors and to have responsible sexual behavior among adolescents and youth.

Methods

Study Area and Period

The study was conducted among high and preparatory schools in Yaedwha town, East Gojjam zone, Amhara Regional state, which is found 108 kilometers far from Debre Markos the capital city of East Gojjam zone, 240 kilometers from Bahir Dar which is the capital city of Amhara region and it is located 283 kilometers from Addis Ababa, the capital of Ethiopia.

When we see the town's health care facilitates, there is one governmental primary hospital and, 1 health centers and 1 clinic. Yaedwha town: having 1, elementary and 1, secondary and 1 preparatory school. This study was conducted by involving high school and preparatory school students in the town. There are 4734 total students from high school and preparatory school. The study was conducted from March 18, 2019, to March 22, 2019. An institutional-based cross-sectional study with qualitative support was conducted.

Source Population

All students who were studied in grade 9 -12 in Yaedwha town 2018/2019 academic years.

Study Population

Students who were studying in grade 9 -12 and attend class during the data collection and the key informants were: Students (Anti-HIV, women’s and without a club) high school and preparatory school in Yaedwha town.

Inclusion Criteria

All 9 -12-grade students were included in the study.

Sample Size Determination

For quantitative

Sample size(n) for the first specific objective was determined by using single population proportion formula by taking the prevalence of early sexual initiation before their 18 birthday which obtained from research conducted among Jiga high school Northwest Ethiopia in 2014 (3).

Applying the formula:

$$n = \frac{(Z_{\alpha/2})^2 p(1-p)}{d^2}$$

$$n = \frac{(1.96)^2 \cdot 0.563(1-0.563)}{(0.05)^2} = 378$$

n= the minimum sample size

z= the desired level of confidence interval 95% (1.96)

P= the proportion of early sexual initiation before their 18 birthday from Jiga high school (56.3%) (3).

d= margin of error 5% (0.05), and single proportion formula for sample size

k= anticipated rate of non-response, 15%

nr= final sample size

= 378 by adding non-response rate 15%

n = 435

Finally, by adding 15% non-response rate the estimated sample size was 435.

For the qualitative:

Five focus group discussion was conducted each group contains 10 participants.

Sampling Procedure

For the quantitative:

There are 1 high school and 1 preparatory school in Yaedwha town. Both of them were included by stratified sampling technique and then proportionally allocated. The K value was determining ($K= 5$) Then the sample was picked each grade their own interval from the class register. The first cases were selected by lottery method.

For the Qualitative:

Five focus group discussions were undertaken among student's female (3 groups), and males (2 groups). Study participants were selected purposively after communicating the school director, anti-HIV/AIDS, women's clubs and without of clubs. They were briefed on the study objectives before selecting the participants. Homogeneity of participants based on sex within the group was maintained.

Dependent Variable

Risk sexual behaviors

Independent Variables

Socio-demographic characteristics: Sex, Age, religion, marital status, education level, and Ethnicity.

Individual factors: Alcohol use, Substance Use, Exposure to pornographic films, Knowledge of HIV/STD and Risk Perception.

Family And Peer Discussion On Sexuality: Communication on sexual behavior, with family, peer, teacher and partner, Peer pressure and Families Education, Families employment.

Operational and terms of definitions

Risky sexual behaviors: is defined as sexually active school students who have at least one of the following multiple sexual partners (having more than one sexual partner before the data collection period), sexual initiation before the age 18, inconsistent use of condom and sexual intercourse with commercial sex workers (3).

Sexually active: Study subjects who claimed to have engaged in a sexual act at least once prior to the study.

Inconsistent use of condom: Incorrect use of condom or failure to use a condom at least once during sexual intercourse (3).

Knowledge of HIV/STD: Respondents who answered/score more than the mean of correct answers for HIV/STD-related questions were categorized to have good knowledge, while those who responded below the mean of correct answer were classified as having poor knowledge towards HIV/STDs(3).

Risk perception: Students view the risk of sexual behavior.

Alcohol drinkers: Use of alcohol at least once a week among those who had ever drunk alcohol in the previous 12 months.

Data Collection Tools

A structured questionnaire was used to collect data from sample respondents regarding the extent of risky sexual behaviors and associated factors. The questionnaire had 44 items adapted from different literature (3, 7, 9, 14) was administered with the form of self-administered and focus group discussion guide was used for a qualitative study.

Data Collection Procedures

The questionnaire was first prepared in English language and then translated to Amharic and then retranslated to English by language experts for consistency. The pretest was done on 22 subjects in Bichena high school and preparatory school to check the consistency and appropriateness, and then necessary correction was taken before the actual data collection was started. The data was collected by four diploma Nurses and two BSc Nurses were selected as supervisors and were contacted and trained as to how to supervise.

An open-ended question was prepared to guide the focus group discussions which were conducted in a quiet and comfortable room. The discussion was moderated by one BSc and one journal who speak the Amharic language together with the principal investigator. Respondents discussed on various issues regarding risk sexual behaviors. The ideas raised by discussants were translated to the principal investigator by the immediate moderators at the same time being recorded for further transcription.

The principal investigator provided guidance by communicating with the discussants through the immediate moderators to further probe and steer through the discussion points. All focus group discussions were recorded after consent is sought from the participants. Then, tape-recorded version was transcribed, and translated into Amharic then to English.

Data Quality Assurance

Data collectors and supervisors were trained for one day before and after pretest on the content of the questionnaire, purpose of the study and how to approach and maintain the confidentiality of the interviewees. The way of questionnaire administration was taken during pretest that the respondents need a separate class. Data collectors were also supervised by two BSc Nurses and the principal investigator. During data collection, the questionnaire was daily checked for consistency and completeness by supervisors and principal investigator to maintain the quality of data.

The discussion was conducted using the local Amharic language to help them to express their feeling without any difficulties. All Focused Grouped Discussion (FGD) were written in note form, captured by radio cassette and careful attention was given for the expressions of

the ideas that the discussants used to describe their opinions to the specific discussion points. A decision to stop at four was based on the fact there was a repetition of emerging views. Every focus group discussion was also transcribed and translated on the same day of collection.

Data Processing and Analysis

After data collection, filled questionnaires were coded. The data were entered using Epi data version 3.1 and analyzed using SPSS version 25 statistical software's. Binary and multiple logistic regression analysis was used to ascertain the association between explanatory variables and the outcome variable. Variables with the significant association in the bivariate analysis (variables which had p values less than 0.25) were entered into multivariate analysis to determine the independent associated factor of risky sexual behaviors. Variables with P value less than 0.05 were considered as statistically significant. Finally, the results were presented in texts, tables, and charts.

After the collection of qualitative data using the guidelines, the information obtained was analyzed manually using predetermined themes after recording, transcribing and translating all discussion points. This data was used to supplement the results obtained using the quantitative method.

Results

Socio-demographic characteristics

From the total of 435 students recruited, 422 completed the questionnaire adequately making the response rate of 97%. Out of the total respondents, 55.5% were male and one hundred seventy-one (40.5%) found in the age group 15 to 18. The mean ages were 19.07(± 1.4 SD) years. Majority of respondents 384(91.0%) were orthodox Christians. Three hundred fifty (82.9%) of the participants were never married. A nearly equal number of participants, 203(48.1%) and 219(51.9%) living with their parents and without parents respectively. Regard to the residence of the students, 311(73.7%) had rural (Table 1).

Regarding socio-demographic characteristics of the families majority of the father 147(34.8%) and 238(56.4%) of the mothers were unable to read and write (Table 2).

Sexual characteristics

From 422 respondents, 129(30.6%) reported that they were sexually active. In case of the age distribution of currently sexually active respondents, 9(7.0%) of the sexually experience participants had their first sexual activity at age less than 15 years, 110(85.3%) were sexually active by age 15 to 19 years and 10(7.8%) were at age 20-24 years.

The mean age at first sexual intercourse was 17.26(± 1.761 SD) years and the mean age of sexual Commencement for males and females were 17.13(± 1.692 SD) and 17.45(± 1.856 SD) respectively.

Grade 11 male 19 years old student's respondent with out of Anti-HIV and women's club within the group respond that, *"...Students who are in the adolescence period are more vulnerable to HIV because most of them are not corresponding one to one, they might have multiple sex partners. Adolescence period by its nature is the time when individuals expose to have unprotected intercourse without using a condom"*

The main reason for first sexual contact includes fell in love 40(31.0%), peer pressure 30(23.3%), got married 28(21.7%), sexual desire 24(18.6%), were drunk 4(3.1%) and rape 3(2.3%). The mean number of sexual partners was 1.46(± 0.576 SD) and 1.17(± 0.379) for males and females respectively.

Grade 12 female 20years old student respondent from Anit-HIV were professed that, *"... risky sexual behavior is sex that occurs when one of the sex makers are intoxicated and addicted to drugs and drinking. Because intoxicated and addicted persons are expected to make sex irresponsibly. For example, making sex before getting married might result in early initiation of sexual intercourse"*.

Out of sexually active male respondents, 23(17.8%) had practicing sex with commercial sex workers in their life and among those had sex with commercial sex workers, 13(56.5%) have had not used a condom. Twenty-two (17.1%) students reported a history of sign or symptoms of STIs. Nine (21.4%) sexually active females were reported ever had an unwanted pregnancy and 7(16.73%) had an abortion once in their lifetime. And the question asked when to use condom consistently most of sexually active respondents 49(38.0%) answered they were not used condom with their partner, 39(30.2%) they suspect their causal partner, 23(17.8%) when doing sex with boy/girlfriends and 18(14.0%) while doing sex with commercial sex workers. The overall prevalence of risky sexual behavior of study participants were 109(25.8%), among this 69(63.3%) were males and 40(36.7%) were females.

Grade 9 female 18 years old student respondent from out of Anit-HIV and women's club within the group Respond that, *"... experienced that students who are in adolescent period especially male were exposure to a night club, alcohol house (mesheta bate) and peer pressure as a result of this they are exposed to exploited life like contacted with commercial sex worker and street life. So they are extremely vulnerable with risky sexual behavior"* (Figure 1).

Condom utilization among sexually active respondents were about 51 (39.5%) used a condom at first sex, 49(38.0%) of respondents never used a condom during your sexual intercourse episodes.

Among those 129 respondents who ever had sex, about 88(68.2%) had one sexual partner, 41(31.8%) had more than one sexual partners throughout a lifetime. And the majority of the

students had started sex between 15- 19 years 110(85.3%). Reasons for not using a condom by the students were not available at time 34(26.4%), 22(17.1) love with their partners, 16(12.4%) dislike condom, didn't discuss with my sexual partner and partner didn't like condom 8(6.2%) of them reported.

Family and peer factors

More than half of students 232 (55.0%) of participants were discussed about sexual issues with their peers rather than their parents 164(38.9%). Thirty (23.3%) of the respondents engage in sexual activity pressurized by their peers.

Grade 11 female 18 years old student's respondent from women's club within the group, alleged that *"...students who are in adolescence period are exposed to risky sexual behavior, because*

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most of them are not under the control of their families, have not family love, and are exposed to peer pressure were more vulnerable to act in risky sex".

Alcohol use, chat chewing and watch pornographic films.

In the case of alcohol consumption of study participants, 247(58.5%) were reported they never drink alcohol, 31(7.3%) drunk once a week 117(27.7%) drunk sometimes, 18(4.3%) drunk more than once a week and 9 (2.1%) were drunk daily within the last 12 months. Almost all students never chat chewing 398(94.3%) and 156(37%) watched pornographic films (Table 3).

Knowledge of respondents towards HIV/AIDS

Most of students 405(96.0%) ever heard about HIV, and 17(4.0%) respondents told that they have never heard of HIV/AIDS. Respondents were also asked to list the modes of HIV transmission. The main mode of HIV transmission mentioned by respondents was sexual contact, mother to child transmission and injection with contaminated needles and blood transfusion each contains for 415(98.3%), 411(97.4%), 411(97.4%) and 366(86.7%) respectively. 19(4.5%) and 16(3.8%)of the respondents told that HIV can be transmitted by handshaking and by air. The knowledge score of respondents was 263(62.3%) good knowledge about HIV/AIDS, while 159(37.7%) had poor knowledge of HIV.

Risk perception

Most of the students regard the perception of HIV/STI, 382(90.8%) of the respondents were no chance of contracting HIV/STI. Out of those 236(61.6%) abstain from intercourse reasons for not risk and the reasons given by the respondents for being at risk was that 21(53.8%) have had used condom inconsistently (Table 4). A 19 years old male grade 11 student respondent from without of Anti-HIV and women's club within the group perceived that *"...risky sexual behavior is sex that primarily affects the health of the people who are in adolescence period negatively while they make practical interaction with opposite sexes accidentally"*. Similarly, an 18 year's old female grade 9 students without of Anti-HIV and women's club perceived that *"...risky sexual behavior is sex that makes individuals health exposed to risk like early sexual initiation"*.

Factors contributing to risky sexual behavior among students

Bivariate analysis of associated factors of risky sexual behavior among the students: sex of respondents, educational level, current living conditions, previous residence, watch pornographic films, peer pressure, alcohol drinking, chat chewing and sexual communication with boy/girlfriends was found to be $p < 0.25$ and entered in to the multivariate analysis. Alcohol drinkers, peer pressure, educational level, and current living conditions were found to be significantly associated with risky sexual behaviors. Alcohol use of respondents was found to be significantly associated factors of risky sexual behavior. Alcohol drinkers were 2.87 times more likely to have risky sexual behavior than nondrinkers [AOR= 2.87(1.56-5.28)]. Living without parents 2.29 times more likely to have risky sexual behavior than living with parents [AOR=2.29(1.41-3.69)]. Peer influence on sexual intercourse were 2.54times more likely to have risky sexual behavior [AOR=2.54(1.59-4.05)]. Educational level was found to be significantly associated factors of risky sexual behavior. Grade 9-10 were 1.68 times more likely to have risky sexual behavior than grade 11-12 students [AOR= 1.68(1.02-2.77)].

Grade 12 male 20 years old student respondent expressed that *"... Absence of family control, acting activities irresponsibly, lack of appropriate income-generating activities and attracted by material goods and being in able to be decision-maker can be considered as the reason why they become vulnerable. Just as a single prisoner who releases from the prison, students are vulnerable to risky sexual behavior, because they freely make everything out of their family"* (Table 5).

Discussion

This study tried to look into the prevalence of risky sexual behaviors and its associated factors. The study revealed that 25.8% of the study participants were engaged in at least one of the risky sexual behaviors. The common risk sexual behaviors include 53.5% have early sexual initiation (<18), 31.8% multiple partners, 77.5% of students used condom inconsistently and 17.8% have had sex with commercial sex workers. From our study, early

sexual initiation is in line with research done among Jiga high school students that revealed 56.3% have had early sexual initiation(3). This is due to geographical as well as cultural closeness between the two study areas, as a result, the population attitude for having sex and taking safety measures would be equally affected. But it is not in line when compared with the result among Shashmene high school students which was 64.8% of the students have early sexual initiation (13). This might be because of Shashmene is a big town and students had access to pornographic films and internet access and also the time gap may be the reason.

Having multiple sexual partners is one of the risky sexual behaviors that increase peoples exposure to infectious diseases. In this study is multiple partners (31.8%) which were lower than when compared with the study among governmental higher institution students in Debre Markos town, Northwest Ethiopia (33.2%) (14). This shows that more young people in higher institutions are getting sexual activity and often take advantage of freedom from direct parental supervision and guidance and high level of personal freedom and social interactions which offers an opportunity for a high level of sexual networking for them. And also which is lower than the study conducted in shashemene (55.9%) and Gonder (53.5%) high school students (13, 17). This might be because both are a big town and students had exposure to different people. This leads them to have a different sexual partner. The finding of this study is consistent with similar studies conducted among high school students in Ethiopia (Jiga(29.2%), AA(24.7%) and Benshangul Gumez(35.1%)(3, 7, 9). This is due to that the study participants were in similar age group and which have similar awareness on risky sexual behavior. But it is higher than the study conducted in Mizan Aman Health Science College which is 16.3 %(18). The higher result might be due to the knowledge gap related to sexual issues including risk of multiple sexual partners.

Regarding condom utilization in this study was 77.5% never had used condom which was in line with the study among high school students in Jiga town which is 83.3% never had used condom consistently(3). This might be due to the same study participate and narrow knowledge gap.

But it is higher when compared with the result obtained from Governmental Higher Institution Students in Debre Markos Town, North West Ethiopia (39.1%) (14). The higher result might be the knowledge gaps to utilize condom among the youths in this study area and the other reason might be a misunderstanding of condom among school youths, that is, condom itself transmit diseases and it prevents satisfaction during sex. And also which is lower than the study conducted in Mizan Aman College of Health Science students(18) which is (86.9%) might be due to knowledge gap related to sexual issues including condom use and reproductive health problems between the subjects of the study area. The other reason might be a widespread notion that having a sexual partner seen is a sign of modernizing.

This finding is also consistent with the FGD conducted in this study, which indicates that *“risky sexual behavior is a kind of risky sex that the society and human beings make intentionally or unintentionally. Primarily risk sexual behavior might also happen by peer pressure. When the persons use condom inconsistently and improperly high school adolescent and youth would be exposed to risky sexual intercourse.*

Alcohol use was significantly associated with risky sexual behaviors. Students those who drank alcohol were 2.87 times more likely to have risky sexual behaviors as compared to those who don't drink alcohol [AOR: 2.87(1.56, 5.28)] and peer pressure was also positively associated with risky sexual behavior. Those students who have peer pressure were 2.54 times more likely to have risky sexual behaviors [AOR: 2.540(1.59, 4.05)]. This was supported by different studies in Ethiopia; among Benshangul Gumz and Gonder high school and preparatory school students (9, 17). A possible reason could be due to their social dependency on their peers and the difference might be due to improved peer education/communication.

Living arrangement was significantly associated with risky sexual behaviors. Those students who live without family were 2.28 times more likely to have risky sexual behaviors as compared to those students who live with their family. This was supported by a study among governmental Higher Institution Students in Debre Markos Town and Benshangul Gumz high school preparatory school students not living with their Parents which is lower than this study (9, 14). The possible logical reasons might be parental control have a protective effect on the behavior of the students. In this study educational status was found to have significantly associated with the risky sexual practice. It showed that grade 9-10 1.68 times more likely report to have risk sexual practice as compared with grade 11-12 counterpart. This was supported by a study among Addis Ababa high school students grade 9 more likely to have risky sexual behaviors when compared with grade 11 and 12 students(7). This may be due to the difference in educational level, as their educational level increase in grade 11 and 12 they have more awareness about risk sexual behaviors and they have future goals they have to be reached.

The FGDs participants also confirmed that, *“... substance use like alcohol, khat and cigarette smoking were among the factors that exposed school adolescents to early sexual initiation, unprotected sexual intercourse and sex with commercial sex workers and reasons why youth do not perceive themselves at risk of HIV/STI are due to over pleasure in alcohol and khat which make them not to think of risk”.*

The FGDs participants respond towards ways of protecting self from risky sexual behavior. Suggested that, “concentrating on determined goals be able to control emotion before and during sex having single-sex partner, using condoms properly and by ignoring peer pressure are the possible results to protect self from the sex which faces risk. In addition be able to respect the law of God, intrinsically religious person, confident and perceptive can help individuals to save self from risky sexual communication”

Conclusions

A considerable number of students of high school and preparatory school students in Yaeduha town had practiced risk sexual behavior. The Major associated factors for sexual risk behaviors among the students were peer pressure, alcohol use, educational status, and current living conditions. Schools should encourage the existing health institutions to provide youth friendly services, negotiate condom utilization and also encouraging peer education related to sexual behaviors.

Abbreviations

AIDS:Acquired Immune Deficiency Syndrome;CDC:Center of Communicable Center;DMU:Debre Markose Univeristy;EDHS:Ethiopian Demographic Health Survey;FGD:Focused Group Discusion.

Declarations

Ethics approval and consent to participant

Ethical approval was obtained from Debre Markos University Research Review approval committee. Then permission was secured from the shebel berenta woreda educational office and submitted to secondary and preparatory schools. The confidentiality and anonymity of the respondents wase protected. Verbal informed consent and ansent form was obtained to make sure their willingness.Written consent was taken from parents for less than 16 years old participants.

Consent for publication

Not applicable.

Availability of data and materials

The data that support the findings of this study are available but some restrictions may apply to the availability of these data as there are some sensitive issues. However, data are available from the corresponding authors upon reasonable request.

Competing interests

The authors declare that they have no competing interests.

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manuscript. The views presented in this study are not necessarily those of the Debre Markose University.

Authors' contributions

BE and MT were involved in the conception, design, analysis, interpretation, report, manuscript writing, the design, analysis, interpretation and report writing. BT, TT and KA was involved design, analysis and interpretation of the data. All authors read and approved the final manuscript.

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Tables

Table 1: Socio-demographic distributions of students in Yaedwha town, East Gojjam Ethiopia, March 2019(n=422)

<u>Variables</u>	<u>Number</u>	<u>Percent (%)</u>
Sex		
Male	234	55.5
Female	188	44.5
Age group		
15-18	171	40.5
19-24	251	59.5
Religion		
Orthodox	384	91.0
Muslim	33	7.8
Protestant	5	1.2
Marital status		
Single	350	82.9
Married	67	15.9
Divorced	5	1.2
Residence		
Rural	311	73.7
Urban	111	26.3
Education level		
Grade 9	161	38.2
Grade 10	113	26.8
Grade 11	64	15.1
Grade 12	84	19.9
Current living condition		
Live with parent	203	48.1
Live without parent	219	51.9

Table 2: Distribution of parents/families by their socio-demographic characteristics in Yaedwha town, East Gojjam Ethiopia, March 2019(n=422)

Variables	Number	Percent (%)
Paternal education		
Illiterate	147	34.8
Read and write	86	20.4
1-4	65	15.4
5-8	71	16.8
9-12	16	3.8
Above 12	37	8.8
Paternal employment		
Private	346	82.0
Government employer	43	10.2
Unemployed	33	7.8
Maternal education		
Illiterate	238	56.4
Read and write	53	12.6
1-4	60	14.2
5-8	32	7.6
9-12	18	4.2
Above 12	21	5.0
Maternal employment		
Housewife	287	68.0
Private	112	26.5
Government employer	23	5.5

Figures

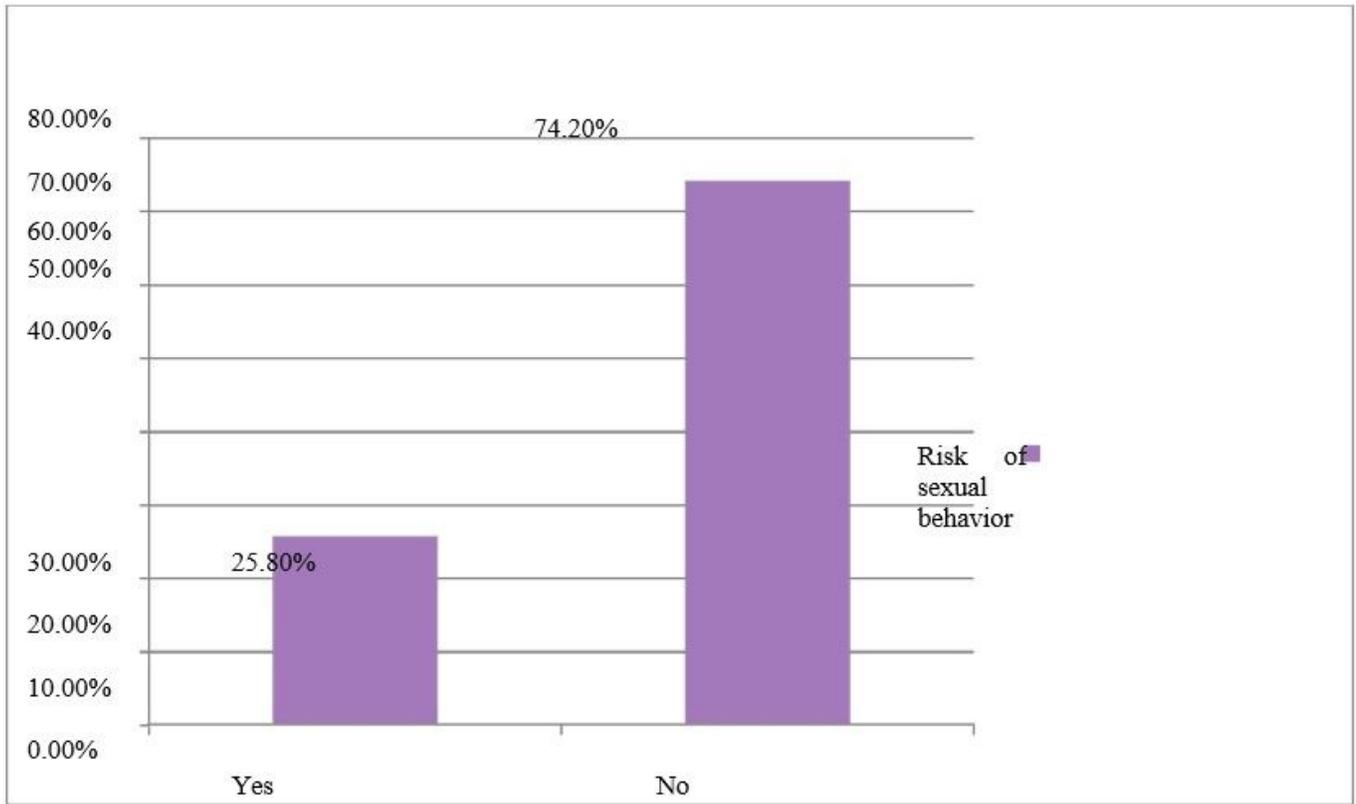


Figure 1

Prevalence of risky sexual behaviors among sexually active students with in the last 12 months high school and preparatory school in Yaedwha town, East Gojjam Ethiopia, March 2019

Supplementary Files

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