J Basic Clin Reprod Sci 2020; 8(2): 137.

Journal of Basic and Clinical Reproductive Sciences

Research

Risky Sexual Behaviour and Associated Factors among Students in Robe Technical Vocational Educational Training College, Oromia Regional State, South East Ethiopia

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Received: 03 October 2019 • Accepted: 14 October 2019

ABSTRACT

Background: Risky sexual behavior is any behavior such as having multiple sexual partners, inconsistent use of condom, casual sex or sex with commercial sex worker, and substance use. Currently studying sexual behavior of youth is important to realize the existing gap as youth are at risk of contracting STI including HIV/AIDS and their related consequence.

Objective: To determine magnitude of risky sexual behavior and associated factors among Students in Robe Technical Vocational Educational Training College in Robe town, Bale zone, Oromia regional state, Ethiopia, 2018.

Methods: Institutional based cross-sectional study was conducted from March-April 2018. A total of 345 students were selected using stratified sampling technique. The data were collected using structured, pretested, and self-administered questionnaire. Data were entered using Epi data version 3.1 and analyzed by SPSS version 20 statistical software. Descriptive statistics, binary and multivariable regression analysis was used to determine the associated factors. Adjusted Odds ratio with 95% confidence interval was used to measure the strength of association and p-value<0.05 used to declare statistical significance.

Results: Three hundred twenty eight students participated in this study making a response rate at 95.1%. One hundred ninety (36.3%) of participants reported ever had sexual activity, from sexually active respondents those practice risky sexual behavior are 92 (28%). Variables significantly associated to risky sexual behavior recorded were; male sex (AOR=3.10; 95% CI: (1.32, 7.31), not drinking alcohol (AOR=0.62; 95% CI: 0.17, 0.77) and parental control AOR=0.59; 95% CI: 0.21, 0.81).

Conclusion and recommendations: Study indicated that significant segment of sexual risky behavior among students of the TVET (Technical Vocational Educational training) College Risky sexual practice, multiple sexual partners and inconsistent condom use. Therefore, the needs of youth reproductive health in the College through strengthening BCC on risk perception; life skill training, peer-education, availing services and working with stalk holders is recommended.

Keywords: Risky Sexual Behavior, Youth, HIV/AIDS.

INTRODUCTION

According to World health organization [1], youth are defined as people belonging to the age group of 15-24 years. One fifth of world population is youth and young adults with more than four fifth in developing countries [2].

Risky sexual behavior is any behavior which increases the probability of negative health consequences associated with sexual contact including Human Immunodeficiency Virus

(HIV)/Acquired Immune Deficiency Syndrome (AIDS) and other Sexually Transmitted Disease (STDs), abortion, unplanned pregnancy and others. Studies reported that globally more than half of all new HIV infections occur in people between the ages of 15 and 24 years. This health problem is worse in sub-Saharan Africa where condom is hardly used and many young people experience multiple sexual partnerships [3].

In Ethiopia youth represent 30% of the total population, and according to 2009 national antenatal care sentinel surveillance report HIV/AIDS prevalence among youth was 2.6%, which is higher than the general population. TVET schools are institutions where many youth from different High schools students joined and expand peer network which could affect sexual behavior either positively or negatively. Majority of students enrolled in TVET College are at mid youth level where sexual socialization, experimentation and identity building takes place; So that identifying risky sexual behaviors and associated factors among College youth is crucial to design need based intervention for youth at college [4].

Sexual health is an essential part of overall health and well-being of youths. Good sexual health implies not only the absence of

disease, but also the ability to understand and weigh the risks, responsibilities, and impacts of sexual actions. National and international literature, on youth sexual issues and parent-youth communication, more specifically on youth health problems resulting from risky sexual behavior, suggests a lack of factual information and guidance regarding the relationship between parent-youth communication on sexual issues [5-9].

Therefore, the findings of this study will try to contribute in filling the gap on this issue and identifying factors, which will help those who are working on youth health service [10]. Likewise, the result of this study can provide important information for program managers and other concerned bodies to enable them provide proper reproductive health services to these segments of the populations and the community at large [11].

OBJECTIVES

General objective

To determine the magnitude and factors associated with risky sexual behavior among Robe TVET College students in 2018.

Specific objectives

- To determine magnitude of risky sexual behavior among Robe TVET College students in 2018.
- To identify factors associated with risky sexual behaviors among Robe TVET College students in 2018.

MATERIALS AND METHODS

Study area and period

The study was conducted in Robe Town which is located in Bale Zone, one of the Oromia Zones and which is 430 km away from Addis Ababa, the capital city of Ethiopia. Robe town is surrounded by Sinja farmers association in South, Hawusho farmers association in South West, Horaboka farmers association in West, Sanbitu farmer association in North and Shallo farmers association in East, information from Robe municipality office [12,13].

The total land coverage of the town is 80,240,000 m^2. The estimated total population of the city in 2007 E.C, was 68,987 of which 35,231 are male and the rest 33,756 are females (According to Robe municipality office). The town is found on 2500 meter above sea level with mean annual temperature of 12.50 C and receive 12.5 mm amount of rain fall. The town has public health service like; Telecommunication, Postal service, five Elementary Schools, two High Schools, one Preparatory school, five private Colleges, two governmental Colleges and one public university. Health facility one government Hospital and one Health center [14]. According to Robe Town Cultural and Tourism office there are six bar, twelve hotels Money different Khat chewing House those not officially known, Robe town as being one of the fast-growing towns of the country which is warm in economic process attending different recreational area at Hotels being couple is clearly observed among University, College, Elementary and High School students [15].

Robe TVET college is found in Bale Zone, in Robe town. The Robe TVET College is providing trainings for students who participate in developmental progression of the country by fourteen different types of department skills starting from Level I to IV [16,17]. The numbers of students training in the college were 1726 of which 983 male and 743 female students receive training in the college during the survey. From TVET college registrar office from all students 778 registered in 2017/2018 or 1st year educational program, 592 students registered as 2nd years and 356 students registered as 3rd year's [18-21].

Study design

Institutional based cross-sectional study design was used.

Source population: All students attending their regular education program at the time of data collection at Bale Robe TVET College students of 1st up to 3rd year classes of 2017 or 2018.

Study population: All sampled students at the time of data collection in Robe TVET college students.

Inclusion and exclusion criteria

Inclusion criteria: All regular students, those who were registered during the current academic year irrespective of year of enrollment

Exclusion criteria: Students those are, on practice during data collection those out of College. Non-volunteer, sick and unable to respond students.

SAMPLE SIZE DETERMINATION TECHNIQUES

Sample size determination

The sample size was determined using the formula of sample size determination for single population proportion taking proportion of 51% from previous study [22]; with assumption of 95% confidence interval, a marginal error of 5% and additionally 10% allowance for absenteeism and refusal to participate in the study will be add to the total sample size.

$$n_o = \frac{z\alpha/_2{}^2 p(1-p)}{d^2}$$

=Where: -$z_{\alpha/2}$ confidence level

P=Proportion risk sexual behavior d=

Margin of error n_o=Sample size

$$n_0 = \frac{1.96^2 0.51(1-0.51)}{0.05^2} = 384$$

Since, the total students are less than 10,000 for this using correction formula to obtain a sample, which is

$$n = \frac{n_0}{1+\frac{n_0}{N}}$$

Where: -N=Population size

n=Sample size

$$n = \frac{384}{1+\frac{384}{1726}} = 314$$

Considering 10% of non-response rate, total sample size was 345 students.

Sampling procedures/techniques

The sampling technique was stratified random sampling. The list of all students will obtain from the TVET College's registrar

office and they were stratifying in to three groups as year I, II and III years. Then numbers of study participants for each stratum was allocated proportionally and samples was selected by simple random sampling by computer generating technique using the list of students as a sampling frame from 1st, 2nd and 3rd year's students in the college **(Figure 1)**.

DATA COLLECTION TOOLS/INSTRUMENTS

Data were collected using a self-administered questionnaire. The questionnaire was adopted and modified from the survey tools developed by EDHS 2011, study done in Jimmaa [23] from different literature. The questionnaire were structured questionnaire, prepared original in English and then translate to Afan Oromo language for better understanding for data collectors and respondents, then back to English in order to check its consistency. Three diploma holder nurses were participated in data Collection, two bachelor degree holders in health profession were used as supervisors and two teachers were facilitated the overall data collection process. The questionnaires were having five sections. The first section inquired about socio – demographic variable, the second and third part consists of Question on Risky Sexual Behaviors among Robe TVET School Students, and Factors associated with risky sexual behaviors.

Measurement of variables

Risky sexual behaviour: Measured as students practicing either one of the following during Survey (unprotected sex, multiple sexual partners, having sexual contact with commercial sex workers).

Parent child communication on sexual issues: Respondents were considered to have parental communication if he/she had communication with parents at least two of on abstinence, HIV/AIDS or condom, otherwise labeled as poor communication.

Parental monitoring: was determine using questions and respondents who select at least three of the six questions will regarded as had parental monitoring while the rest regarded as had no parental monitoring.

Multiple sexual partners: Respondents reported two or above sexual partner before the survey will considered as had multiple sexual partner.

TVET college students: Students enrolled in Year I, II and Years III 2017/2018.

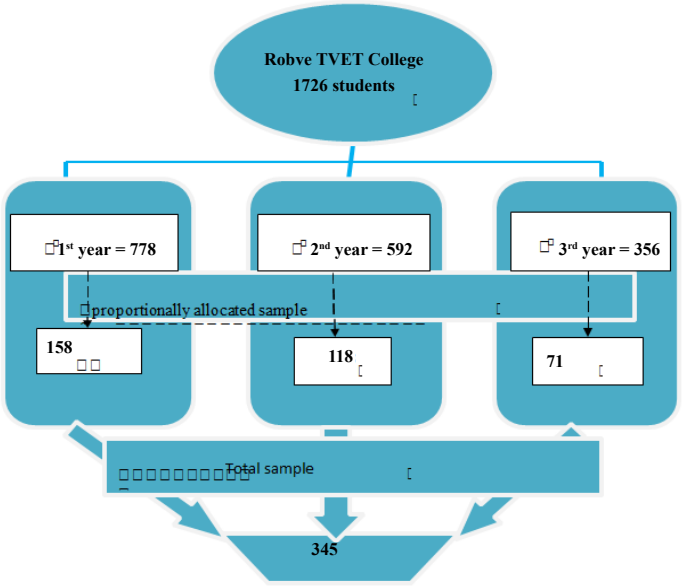

Figure 1: Schematic presentation of sampling procedure, Risky sexual behaviors and associated factors among youth College Students of Robe TVET College, Robe 2018.

STUDY VARIABLES

Dependent variable

Risky sexual behaviors

Independent variables

Socio-demographic: Variables such as (age, sex, year of study, religion, ethnicity, marital status, place of residence, living arrangement, pocket money, family income and educational status of the parents).

Parenting practices: Parent monitoring/support, parents-youth communication.

DATA QUALITY CONTROL

Data collectors were selected based on their ability to speak the local language Afan Oromo fluently and being health professionals i.e. diploma and above. Two days point by point training was given for three data collectors of diploma and above and two supervisors was recruited. On the objective, relevance, and benefits of the study, confidentiality of information, respondent's right, informed consent. Each data collector was practice on ways of approaching respondents before the actual date of data collection commencements. Pilot study conduct on 5% of sample size Battu Terera TVET college of Goba town. However, this not exclude in the analysis. Based on the pretest finding, some questions will be added, modified and questions that not easy to understand for interviewer and respondents will be written in an easy way to understand. Data was checked on the site and on daily basis for completeness, consistence, and reliability. Supervisors were check data at hands of data collectors and check for completeness, omissions, and inconsistency. In the meantime, supervisors were submitting the completed questionnaire to the investigator to be further checked on daily basis. Any format with a defect was rejected from the analysis. Ten percent of data was entered to check for data entry errors and correct. The investigator was responsible for coordination and supervision of the overall data collection process.

Data was coded, edited, cleaned and checked for normality (by histogram and Kolmogorov-Smirnov and Shapiro-Wilk) and using Epi-data version 3.02 and SPSS 20 statistical software.

DATA PROCESSING AND ANALYSIS

The data were coded and entered in to computer using EPI-data version 3.1 and checked for the consistency of data entry. Then exported to SPSS version 20.0, Frequency distributions were run to further clean the data and check for missing/errors values. Descriptive statistics was computed to determine the distribution of socio-demographics and substance use, reasons for sexual initiation, variables related to risky sexual behaviors. The Bivariate analysis was computed and comparisons of the proportion of College students those who were involved in risky sexual behaviors for each subset of the independent variables presented in tables and statistical significance were determined at

p-value level of 0.05. Odds ratios and 95% confidence intervals were computed using binary logistic regression. Multi logistic regression models were used to determine independent predictors of risky sexual behaviors. Adjusted Odds ratios and 95% confidence intervals were computed for each explanatory variable to determine the strength of association of independent predictors of risky sexual behaviors.

Dissemination Plan

Final reports submitted to MWU-GRH department of public health. The result of the study will be present to Robe TVET College and recommendation will be forwarded to Robe TVET College.

Ethical consideration

Ethical approval was secured from the Department of Public Health MWU-GRH. Information on the purpose of the study and the right not to participate were given to the participants. Informed verbal consent was obtained from all participants and the information from participants was kept confidential.

Limitation of the study

The findings of this study should be interpreted in the light of its limitations. The major limitation of this study was the nature of cross sectional study which may not explain the temporal relationship between the outcome variable and some explanatory variables. The study topic by itself assesses personnel and sensitive issues related to sexuality which might have caused social desirability bias. However, measures were taken to reduce this bias by granting confidentiality, maintaining privacy and explaining the purpose of the study to participants.

RESULTS

Socio demographic characteristics

Out of three hundred forty five students to participate in the study 328 responded to all questionnaires making a response rate of 95.1%. One hundred eighty four (56.1%) and hundred forty four (43.9%) were males and females, respectively. The mean age of participant 19.1(SD+1.8) 19.17 for males (SD+1.86) and 18.96(SD+1.77) for females. One hundred forty eight (45.1%) were in the year I, 1139(34.5)% were year II, and 20.4)% were year III. Among 328 of respondents Orthodox were Two hundred twenty nine (69.8%), Muslims were 82(25.0%), Protestant 14(4.3%), and others 4(0.9%). 300(91.5%), were Oromo, 27(8.2%) Amara and 1(0.3%) Gurage. One hundred seven (32.6%) were live alone, 107(32.6%) were live with their family 51(15.5%), were live with relatives, 51(15.5%) live with their friends and 2(0.6%) with husband **(Table 1).**

Sixty two (18.9%) of their fathers and 66(20.1%) of their mothers have no formal education. The majorities of the respondent parents (fathers and mothers) were farmers, 189(57.6%) and house wives 116(35.4%), respectively. Two hundred forty eights 248(75.5%) of the family earn greater or equal to three thousand Ethiopian birr and 51(15.5%) less than one thousand Ethiopian birr monthly **(Table 2).**

RISKY SEXUAL BEHAVIOUR

Sexual practice

Among all respondents, 119(36.3%) reported ever had sexual intercourse. The mean age at first sexual intercourse was 17.04 (SD ± 1.57) years (16.7(SD ± 2.2) years for males and 17.3

Table 1: Selected socio-demographic characteristics of respondents, Robe TVET College, South East Ethiopia, April, 2018; wakefata and Catholics.*

Variables		Sex		Total (n=328) n(%)
		Male (n=184) n (%)	Female (n=144) n(%)	
Year of study	1st Year	91(49.5)	57(39.6)	148(45.1)
	2nd Year	61(33.2)	52(36.1)	113(34.5)
	3rd Year	32(17.4)	35(24.3)	67(20.4)
Family residence area	Rural	88(47.8%)	71(49.3)	159(48.5)
	Urban	96(52.2%)	73(50.7%)	169(51.5)
Religion	Orthodox	132(71.7)	97(67.4)	229(69.8)
	Muslim	44(23.9)	38(26.4)	82(25.0)
	Protestant	6(3.3)	8(5.6)	14(4.3)
	Others*	2(1.1)	1(0.7)	3(0.9)
Ethnicity	Oromo	171(92.9)	130(90.3)	301(91.8)
	Amara	13(7.1)	14(9.7)	27(8.2)
Age	15-19	104(56.5)	103(71.5)	207(63.1)
	20-24	80(43.5)	41(28.5)	121(36.9)
Living arrangements	Alone	71(53.8)	36(55.7)	107(33.6)
	With parents	46(25.8)	61(43.6)	107(33.6)
	With relatives	24(13.5)	27(19.3)	51(16.0)
	With friend's	35(19.70)	16(11.4)	51(16.0)
	others	8(4.3)	4(2.8)	12(3.7)
Marriage	Married	2(1.1)	0(0)	2(0.6)
	Unmarried	182(98.9)	144(100)	326(99.4)
Religion attendance	At least once in a week	88(48.4)	50(34.7	138(42.1)
	At least once in a month	13(7.1)	5(3.5)	18(5.5)
	At least once in a year	3(1.6)	0(0.0)	3(0.9)
	Never attendance	4(2.2)	1(0.7)	5(1.5)

(SD ± 1.9) years for females). Among those had practice sexual intercourse students are with risky sexual behavior is 92(28.0%) **(Table 3).**

Condom use: Among those were sexually active respondents, 94(79.0%) have ever used condom. Eighty three (79.0%) males used condom and eleven (78.6%) females used condom. Among condom user, 58(48.7%) and 69(58.0) had used during first and last sexual intercourse respectively **(Table 4).**

BEHAVIOUR FACTOR

The Substance used by youth people was assessed with respect to smoking cigarette, drinking alcohol, chewing khat and using shisha. Out of all respondent, 112(34.1%) reported they had used at least one type of substance. And it was revealed that about 34.1% of the respondents they had experienced to use any substance, 24.1% drinking alcohol, 37.5% chewing khat, 37.2% smoking cigarette and 2.7% using shisha.Out of three hundred twenty eight, 43(13.1%) and 104(31.4%) of respondents were attending night club and watching pornographic video in the last 12 months respectively **(Table 5).**

Knowledge of respondents to words risky sexual behavior

Among the total 328 respondents, 179 (54.6%) ever heard about Sexual Transmission Infection including HIV. The most common source of information mentioned by respondents was schools (54.7%), health institutions (40.2%), mass media (40.2%), and parents (21.4%). One hundred sixty six (50.6%) of respondents ever heard about risky sexual behaviors. The vast majority 149 (46.0%) responded they knew having multiple sexual partners, 95(29.3%) having sex with commercial sex worker, 71 (21.9%) sex for exchanging money or gift and 104(32.1%) inconsistent condom use. Generally among the total 328 respondents, 301(91.8%) ever heard about HIV/AIDS prevention methods and 193(58.8%) ever heard about any methods of contraceptive **(Table 6).**

BIVARIATE ANALYSIS ON SEXUAL BEHAVIOURS

During bivariate logistic regression analysis the potential variables that significantly associated with risky sexual behavior are proven as practice of risky sexual behaviors; Living arrangement, father education, mother education mother job, male sex, drinking alcohol, Observing pornography, Having boy/girlfriend, attending night club, age at first sex less than 18 years, and peer pressure were significantly associated with risky sexual behavior significance level of p value<0.25 **(Table 7).**

However, ethnicity, family income and Pocket money of students, has no significant association with risky sexual behavior on binary logistic regression analysis.

MULTIVARIABLE ANALYSIS ON SEXUAL BEHAVIOURS

Bivariate analysis was carried out to identify predictors of risky

Table 2: Selected socio-demographic characteristics of participant parents of Robe TVET College, South East Ethiopia and April 2018.

Variables	Total (n=328)	n (%)
Educational status of father	No Formal Education	62(18.9)
	Formal Education	266(81.1)
Educational status of mother	No Formal Education	66(20.1)
	Formal Education	262(79.9)
Job of the father	Farmer	189(57.6)
	Employer	81(24.7)
	Has private business	58(17.7)
Job of the mother	Farmer	88(26.8)
	Employer	46(14.0)
	Has private business	78(23.8)
	House wife	116(35.4)
Family average monthly income	<1000	51(15.5)
	1000-1999	6(1.8)
	2000-2999	23(7.0)
	≥ 3000	248(75.5)

Table 3: Sexual history among respondents of Robe TVET College students, April, 2018

Variables		Total n (%)
Ever had sexual activity (n=32)	Yes	119(36.3)
	No	209(63.7)
Age at firs t sex (n=119)	<18	103(86.6)
	>18	16(13.4)
Starting time of sexual intercourse (n=19)	Elementary	41(34.5)
	High/preparatory school	62(52.1)
	In College	16(13.4)
With whom 1st Sex was made (n=19)	Boy/girl friend	100(84.0)
	With person don't know	12(10.1)
	Other	7(5.9)
Number of sexual partners over life time (n=19)	One only	50(42.0)
	Two and above	69(58.0)
Sex with commercial sex worker (for male) (n15)	Yes	9(8.4)
	No	96(91.6)
Risky sexual behavior	Yes	92(28.0)
	No	236(72.0)
Sexual intercourse in the last 12 months (n=19)	Yes	79(66.4)
	No	40(33.6)
Number of sexual partners in the last 12 months (n=19)	One only	66(55.5)
	Two and above	28(23.5)
	Three or more	25(21.0)

Table 4: Condom usage of respondents of Robe TVET College, South East Ethiopia, and April, 2018

Variables		Total n (%)
Condom use (n=19)	Yes	94(79.0)
	No	25(21.0)
Frequency of condom use (n=19)	Consistently	58(48.7)
	Inconsistently	37(31.1)
	Never use	24(20.2)
Use condom during 1st sexual intercourse (n=19)	Yes	58(48.7)
	No	61(51.3)
Use condom during last sexual intercourse(n=19)	Yes	69(58.0)
	No	50(42.0)

Table 5: Percentage distribution of Substance use of respondents of Robe TVET College, South East Ethiopia, and April, 2018

Variables	Total (n=328)	n (%)
Use of Substance	Users	112(34.1)
	Non users	216(65.9)
Drinking alcohol	Yes	79(24.1)
	No	249(75.9)
Chewing khat	Yes	123(37.5)
	No	205(62.5)
Smoking cigarette	Yes	122(37.2)
	No	206(62.8)
Using shisha	Yes	9(2.7)
	No	319(97.3)
Attend nightclub in the last 12 months	Yes	43(13.1)
	No	285(86.9)
Watch Pornography video in the last 12 months	Yes	104(31.7)
	No	224(68.3)

Table 6: Knowledge assessment of respondents of Robe TVET College, South East Ethiopia, and April, 2018

Variables		Total (n=328)	(%)
Ever heard about STI/HIV infection	Yes No	179 149	-54.6 -41.4
Source of information	Parents peer Health institution School Radio or/and TV	59 40 72 98 72	-21.4 -22.3 -40.2 -54.7 -40.2
Heard about risky sexual behavior	Yes No	166 162	-50.6 -49.4
Know about risky sexual behavior	Multiple sexual partners Inconsistent condom use Sex with CSW	149 104 131	-46 -42.4 -39.9
Ever heard about HIV/AIDS prevention methods	Yes No	301 27	-91.8 -8.2

Table 7: Bivariate analysis for multiple sexual partners among Robe TVET College students, South East Ethiopia, April, 2018

Variables		Risky sexual behavior		Crude OR 95% CI
		No n (%)	Yes (%)	
Sex	Female Male	133(92.4) 103(56.0)	11(7.6) 81(44.0)	1 9.1(4.82- 18.77)**
Living arrangement	Alone With Family With Relative With boy/girl friend	77(72.0) 88(82.2) 35(68.6) 29(56.9)	30(28.0) 19(17.8) 16(31.4) 22(43.1)	0.51(0.26-1.03) 0.29(0.14-0.60)** 0.60(0.268-1.36) 1
Drinking Alcohol	No Yes	198(79.5) 38(48.1)	51(20.5) 41(51.9)	0.24(0.14-0.41)**
Observing pornography	No Yes	179(79.9) 57(54.8)	45(20.1) 47(45.2)	1 3.30(2.0-5.44)**
Attend night club	No Yes	218(74.1) 18(52.9)	76(25.90) 16(47.1)	2.55(1.24-5.25)**
Parental com - munication	No Yes	113(68.5) 123(75.5)	52(31.5) 40(24.5)	0.71(0.44-1.15)
Age of first sex	>18 <18	134(65.0) 102(83.6)	72(35.0) 20(16.4)	1 0.4(0,23-0.64)**
Peer pressure	No Yes	226(74.3) 10(41.7)	78(25.7) 14(58.3)	1 4.06(1.73-9.50)*

Note: ***=p<0.001, **=p<0.01, *=p<0.05

sexual behavior and all variables with P<0.25 were selected to be included in multivariate logistic regression. Multivariable logistic regression analysis was done to identify the effect of independent factors after controlling other confounding variables. The overall model to predict the probability of risky sexual behavior was statistically significant (p<0.05). In each multivariate logistic regression analysis Enter method logistic regression analysis was used and the Hosmer-Lemeshow test indicates a p>0.05 which signifies that the overall model fit is good. After Controlling for effect of potential confounding Variable students those have parental Communication were nearly 41% less likely to have risky sexual behavior as compared to non-communication. Watching pornography is 3 times more likely to have risky sexual behavior as compared to non-observer of porn **(Table 8).**

DISCUSSION

This study assessed the prevalence of risky sexual behavior among Robe TVET College students. Moreover, the study attempted to see the prevalence of risky sexual behavior and

Table 8: Multivariable analysis for factors associated with multiple sexual partners among Robe TVET College students, South East Ethiopia, April, 2018

Variables		Risky Sexual behavior		Crude OR (95 %CI)	Adjusted OR 95.0% CI
		No	Yes		
Sex	Female Male	133(92.4) 103(56.0)	11(7.6) 81(44.0)	1 9.1(4.82-18.77)**	1 3.10(1.32 - 7.31)**
Observing pornography	No Yes	179(79.9) 57(54.8)	45(20.1) 47(45.2)	1 3.52(2.0-5.44)**	1 3.2(1.62-7.63)**
Parental communica - tion	No Yes	113(68.5) 123(75.5)	52(31.5) 40(24.5)	1 0.71(0.44-1.15)*	1 0.41(0.21-0.81) *
Drink alcohol	No Yes	198(79.5) 38(48.1)	51(20.5) 41(51.9)	4.2(0.14-0.41)*	1 2.6(0.18-0.77)*

association factors. Sexual activities among youth have reported to be increasing worldwide. Studies in Sub- Saharan Africa have documented high and increasing premarital sexual activities among youth [24]. This study revealed that 119(36.3%) of TVET college students ever had sexual activity. This finding is higher than the findings conducted in Jimma [25] and slightly similar with Bahir Dar University [26] which stated prevalence as (28 and (36.4%) respectively, However, lower than in MaddaWalabu University [22] (54.6%), of students ever had sexual intercourse, respectively. The possible explanation for the disparity in the proportion of sexual active among students of different studies could be due to different in traditional cultural background, socio demographic characteristics, as well as difference in knowledge, attitude and practice towards STI including HIV/AIDS.

In this study, the prevalence of risky sexual behavior is 28.0%. This is higher than similar study conducted in Amahara region during 2016 among high school and preparatory school students found (14.7%) risky sexual practices [27]. The difference might be attributed to the time of the study, and the sample size. Moreover, it is less than the findings of the study by Abebe et al., found 42.9% [1] and by Agardh et al. [28]47.5%. The discrepancy is attributed to the study population, design and differences in time. To this end, the effect of risky sexual practices on health and economic has been reported extensively in the literature [29]. Despite this the practice has been still continuing costing lives.

Age at first sexual practice is an important indicator of exposure to the risk of unwanted pregnancy and STIs. More than half, 103(86.6%) started first sex before the age 18 years and the mean age at first sexual intercourse was 17.04 (SD ± 1.57) years. Moreover, male students were found to start sexual intercourse at early age compared to their counter parts (16.7 (SD ± 2.1) years for males, 17.3 (SD ± 1.9) years for females. It was slightly lower than the study conducted in Bahir Dar 18.6 [9] and Jimma University students 17.4 [8]. These might indicate that the issue of early sexual activity is a problem and how quickly sexual activity builds up among males.

In this study, males were about three times more likely to have multiple sexual partners compared to the female students. This is in line with the findings of all the above mentioned studies [25,26].

Respondents who ever had parental discussion on sexual and reproductive health issues were less likely to involve in risky sexual behaviors? This is supported by other studies in South

Africa and other parts of Ethiopia [30]. This could be due to parent child discussion equips youth with skill and information to remain safe towards risky sexual behavior.

Students (Respondents) who never drink alcohol were 62% less likely at higher risk to involve in risky sexual behavior. This is as a result of myopic effect of alcohol to make rational decision by considering the consequence of sexual practices. Individuals with alcohol influence make decision without analyzing consequences to be followed after having sex. This finding is in line with findings from national level study in Ethiopia and northwest Ethiopia. Similarly alcohol is associated with risky sexual behavior in Bolivia and Kenya [31].

Respondents who ever watched pornographic film were at higher risk to involve in risky sexual behavior three times more likely involve in risky sexual practice. This finding is in line with studies in Saudi Arabia [32] and other parts of Ethiopia from Jimma [33] and Humera [34] This may be due to access of enhanced mobile technology, internet and wide spread porn video media portrayals across every corner of the world which fuels the problem of risky sexual behavior among youth, further more adolescents are sensitive to experiment what they hear and look as a result of natural transition stage to adult and hence they are prone to be driven by porn video they watch to experiment risky sex.

However national level study in Ethiopia indicates pornographic film is not associated with sexual behavior [35]. This is due to national study includes youth from rural areas to represent national youth where internet access and mobile technology are hardly accessed.

Condom use is an important tool in the fighting against the spread of sexual transmission infection including HIV/AIDS; a truly effective protection usefully requires condom use at every sexual encounter [36,37]. This study shows that the prevalence of inconsistent condom use was 37(31.1) which can expose them to STIs and HIV infections for both sexes. This is lower than with finding from Madda Walbabu University (70.9%), and Bahir Dar University (62%) [38].

The leading reason for having sexual intercourse without condom were don't like it and not available which are among the reasons identified by most literatures. Moreover, the level of consistently use of condom 40.6% among sexually active students was lower than studies conducted in Jimma University (69.1%). This this difference might be due to dynamicity of behavior, difference in knowledge on risky sexual behaviors, reproductive health issues, and skills of condom use [39].

In summary, from this we can observe that many sexually active students were risky sexual behaviors. Due to different associated factors [40]. The reasons given by these students were not convincing and vital to protect themselves from the negative consequences of unsafe sexual practice such as: STIS including HIV, unwanted pregnancy, unsafe abortion and its negative consequences [41]. This is reflection of the attention given in addressing this very important segment of the population other with many students exposed for rang of risky sexual behaviours [42].

CONCLUSION AND RECOMMENDATIONS

Conclusion

In conclusion, this study revealed that there is a risky sexual behavior among Robe TVET College that evidenced by the existence of multiple sexual partners and sexual practice without condom sexual with commercial sex worker. Watching pornography, not communication on issue of reproductive health. Substance use like drinking alcohol and chewing Khat exposed as predisposing factors for the existence of risky sexual behaviors.

Recommendations

***For Robe Technical Vocational Educational Training College*:** College should integrate with Robe Town Health office to strengthening behavioral change communication (BCC) on risk perception; life skill training and peer education. Which capacitate students to say no for early sexual intercourse or negotiate for safe sex practice?

There is a need to equip parents with appropriate information education communication (IEC) material on communication skill and sexual health issues.

Teachers and school administers better be alert and responsive for any deviant behavior like watching pornographic video in mobile among students. To minimize watching pornography video, alcohol and other substance abuse the College should increase the awareness about the effect of pornography and drugs.

College should establish youth health club; so that youth able to obtain necessary and adequate information and services they need. Furthermore, college should be strengthening the existing mini-media services.

For Robe Town Health Office: Town Health Office integrating with College should advocate on correct and consistent safer sex among sexually active students. To minimize alcohol and other substance abuse the Health Office should provide awareness creation about the effect of drugs and carry out close follow up and discussion to the nearby bars and substance market houses.

DECLARATIONS

Ethics approval and consent to participate

Ethical approval was secured from the Department of Public Health MWU-GRH. Information on the purpose of the study and the right not to participate were given to the participants. Informed verbal consent was obtained from all participants and the information from participants was kept confidential.

For participant less 18 years parental informed verbal consent was taken in addition to consent from individual participant.

Consent for publication

It is not applicable.

Availability of data and materials:

The dataset analyzed during the current study available from the corresponding author on reasonable request.

Competing interests

We have no competing interests.

Authors' contribution

Daniel Atlaw and Getahun Mekonin wrote the proposal, facilitated data collection, analysis, and data interpretation,

drafted the final report write up and prepared manuscript. Kebon Seyoum, Mohammed Oumer and Sisay Degno, participated in developing the tools and data collection process, data analysis and involved in report write up. All authors read and approved the final manuscript.

Funding

There is funding organization for data collection, analysis, and interpretation of data and in writing the manuscript.

ACKNOWLEDGEMENTS

We thanks data collectors and study participants for their cooperation and support during the study period.

REFERENCES

1. Abebe M, Tsion A, Netsanet F. Living with parents and risky sexual behaviors among preparatory school students in Jimma zone, South west Ethiopia. Afr Health Sci. 2013; 13(2): 498–506.
2. Fentahun N, Mamo A. Risky sexual behaviors and associated factors among male and female students in jimma zone preparatory schools, south west Ethiopia: Comparative study. Ethiop J Health Sci. 2014; 24(1):59-68.
3. Meskerem A, Worku A. Utilization of Youth Reproductive Health Services and AssociatedFactors among High School Students in Bahir Dar, Amhara Regional State, Ethiopia. Open J Epidemiology. 2014; 4(2):69-75.
4. Kasahun AW, Yitayal M, Girum T, Mohammed B. Risky sexual behavior and associated factors among high school students in Gondar City, Northwest Ethiopia. Int J Public Health Sci. 2017; 6(3):257-65.
5. Alamrew A, Bedimo M, Azage M. Risky sexual practices and associated factors for HIV/AIDS infection among private college students in Bahir Dar City, Northwest Ethiopia. ISRN Public Health. 2013; 9.
6. Ahmadian M, Hamsan HH, Abdullah H, Samah AA, Noor AM. Risky sexual behavior among rural female adolescents in Malaysia: A limited role of protective factors. Glob J Health Sci. 2014; 6(3):165-74.
7. African Union African Youth Charter. Retrieved November 7, 2012.
8. Catherine M, Catherine C. Condom use coming adolescents and young people in a southern African township. Social Sci Med. 2001; 1613-27.
9. Chick CF, Reyna VF. A fuzzy trace theory of adolescent risk taking; beyond self-control and sensation seeking. The Adolescent Brain American Psychological Association. 2012; 379-428.
10. Chandra MV, McCarraher DR, Phillips SJ, Williamson NE, Hainsworth G. Contraception of adolescents in low and middle income countries: Needs, barriers, and access. Reprod Health. 2014;11(1).
11. Daka D, Shaweno D. Magnitude of risky sexual behavior among high school adolescents in Ethiopia: A cross sectional study. J Public Health and Epidemiology. 2014; 6(7):211-215.
12. Woreda B, Gumuz B. Region, North West Ethiopia: Ethiop J. Health Dev. Central Statistics Authority (CSA), Ethiopia Demographic and Health Survey. Ethiopia and Calverton, Maryland, USA: Addis Ababa. 2012; 24(2).
13. Dessalew B, Zewdie A, Getachew MK. Assessment of early sexual initiation and associated factors among preparatory school students of Faggeta Lekoma District, AwiZone, Northwest Ethiopia. Int J Clin Med. 2015; 6: 521-29.
14. Exavery A, Lutambi AM, Mubyazi GM, Kweka K, Mbaruku G, Masanja H, et al. Multiple sexual partners and condom use among 10–19 year-olds in four districts in Tanzania: What do we learn? BMC Public Health. 2011; 11:490.
15. Fitaw Y, Worku A. High-risk sexual behavior and pattern of condom utilization of the Gondar College of Medical Science students, North-west Ethiopia. Ethiopia J Health dev. 2002; 16(3): 335-39.
16. Gelibo T, Belachew T, Tilahun T. Predictors of sexual abstinence among WolaitaSodo University Students, South Ethiopia. Reprod Health. (2013);10(18):2-6.
17. Henok A, Kassa A, Lenda A, Nibret A, Lamaro T. Knowledge, attitude and practice of risky sexual behavior and condom utilization among regular students of Mizan- Tepi University, South West Ethiopia. J Child Adolesc Behav. 2015;3(5):244.
18. Joyce W, Angela F, Mark U, Basia Z, William S. Parental control and monitoring of young people's sexual behaviour in rural North-Western Tanzania: Implications for sexual and reproductive health interventions. BMC Public Health. 2011; 11: 106.
19. Kahsay T, Jejaw A, Mulatu K. Risky sexual behaviors and associated factors among Mizan, Bonga and Tepi preparatory school students, Southwestern, Ethiopia, A Cross Sectional Study. J AIDS Clin Res Sex Transm. 2017.
20. Najjumba MI, Ntozi J, Ahimbisibwe EF, Odwee J, Natal A. Risk perception and condom use in Uganda. African Population Studies. 2003; 18(1): 67-80.
21. NCTPE/EC Project Fund. Major Harmful Traditional Practice National Committee on Traditional practice: In Ethiopia (NCTPE). 1999; 64.
22. Mengistu TS, Melku AT, Bedada ND, Eticha BT. Risks for STIs/HIV infection among MadaWalabu University students, Southeast Ethiopia. Reprod Health. 2013; 10(38): 2-7.
23. Agardh A, Cantor GE, Ostergren PO. Youth sexual risk taking behavior, and mental health: A Study of University Students in Uganda. Int J Behav Med. 2012; 19(2): 8-1.
24. Ikamba L, Ovedraogo B. High-risk sexual behavior: knowledge, attitudes, and practice among youth at kichangan ward, Tanga, Tanzania, Action Researchreports. 2003; 4(4):67-75.
25. Tura G, Alemseged F, Dejene S. Risky sexual behavior and predisposing factors among students of Jimma University. Ethiopia J health sci.(2012); 22(3): 170-80.
26. Mulu W, Yimer M, Abera B. Sexual behaviors and associated factors among students at Bahir Dar University. Reprod Health. 2014;11:84.
27. Mullu GK, Degu G, Yitayew M, Misganaw W, Muche M, Demelash T, et al. Risky sexual behaviors and associated factors among Jiga high school and preparatory school students, Amhara region, Ethiopia. 2016; 3:1-7.
28. Yesus DG, Fantahun M. Assessing communication on sexual and reproductive health issues among high school students with their parents. 2010; 24(2):89-95.
29. Hallman K. Socioeconomic Disadvantage and Unsafe Sexual Behaviour Among Young Women and Men in South Africa. New York: Research Associate, Policy Research Division, Population 33 Council. 2004.
30. Negeri EL. Assessment of risky sexual behaviors and risk perception among youths in Western Ethiopia: the influences of family and peers: A comparative cross-sectional study. BMC Public Health. 2014; 14:301.
31. Ministry of Health: (2006–2015). Federal Democratic Republic of Ethiopia. National reproductive health strategy In MOH; (2006) MOH. Epidemiology and AIDS control department AIDS/STD

control Programme. Guideline on counseling for persons with HIV infection and AIDS Addis Ababa, Ethiopia. pp:24–27.

32. Pharo H, Sim C, Graham M, Gross J, Hayne H. Risky business executive function, personality, and reckless behavior during adolescence and emerging adulthood. BehavNeurosci. 2011; 125(6).

33. Shiferaw K, Frehiwot G, Asres G. Assessment of adolescent's communication on sexual and reproductive health matters with parents and associated factors among secondary and preparatory schools' students in Debremarkos town, North west Ethiopia. ReprodHealth. 2014;11(1):2.

34. Dadi AF, Teklu FG. Risky sexual behavior and associated factors among grade 9-12 students in Humera secondary school, western zone of Tigray, NW Ethiopia. Science Journal of Public Health. 2014; 2(5):410-416.

35. United Nations. Frequently Asked Questions. Youth: Social Policy and Development Division. 2011.

36. Tony B. Alan W. Guidelines for studies of social and Economic impact of HIV/AIDS UNAIDS, Geneva, Switzerland. 2000; 7-60.

37. UNAIDS. Technical update population mobility and AIDS. 2001; 4.

38. Maria W. Sexual behaviour, knowledge and awareness of related reproductive health issues among single youth in Ethiopia: African J Repro Health. 2007;11(1):14-21.

39. Yi S, Poudel KC, Yasuoka J, Palmer PH, Jimba M. Role of risk and protective factors in risky sexual behavior among high school students in Cambodia. BMC Public Health. 2010: 10:477.

40. Sun X, Liu X, Shi Y, Wang Y, Wang P, Chang C. Determinants of risky sexual behavior and condom use among college students in China. AIDS Care. 2013;25(6):775-83.

41. Tadesse G, Yakob B. Risky Sexual Behaviors among Female Youth in Tiss Abay, a Semi-Urban Area of the Amhara Region, Ethiopia. PLoS ONE. 2015;10(3).

42. Teklu A. Knowledge, Attitude and Practice Study on Sexual Practices Related to HIV transmission and prevention among male residents of Arbamich town, South West Ethiopia. MPH thesis, Department of Community Health, Addis Ababa University. 1991;1-78.